



**Central Asia
Regional Economic
Cooperation**

Central Asia Regional Economic Cooperation: Comprehensive Action Plan

The views expressed in this paper are the views of the author and do not necessarily reflect the views or policies of the Asian Development Bank (ADB) or its Board of Directors, or the governments they represent. ADB does not guarantee the accuracy of the data included in this paper and accepts no responsibility for any consequences of their use. Terminology used may not necessarily be consistent with ADB official terms.

**Endorsed by the
Fifth Ministerial Conference
on Central Asia Regional Economic Cooperation
18-20 October 2006
Urumqi, XUAR, People's Republic of China**

The Benefits of Regional Cooperation

—and the Costs of Non-cooperation

Increased cooperation will produce big gains for the people of Central Asia and neighboring countries. Bringing down trade barriers, more efficient development and use of water and energy resources, and other forms of regional cooperation could result in doubling of per capita incomes over the next decade.

The price of non-cooperation could also be large. Lost economic opportunities and difficult access to markets would mean poor employment prospects, and slow progress in reducing poverty. A heavy toll would also be extracted from the spread of disease, lack of joint preparedness against natural disasters and environmental destruction, as well as conflict and insecurity.

Central Asia and neighboring countries are strategically located, rich in natural resources and at the cross-roads of commerce between some of the most dynamic of the world's economies. New avenues for trade and access to world markets and knowledge are opening up, reenergizing the enterprise of Silk Road legend. Regional organizations have been created and are gaining in strength, reflecting the shared conviction that borders that divide are borders lacking a human face.

Paraphrased from United Nations Development Programme, *Central Asia Human Development Report: Bringing Down Barriers: Regional Cooperation for Human Development and Human Security*, 2005

Increased regional cooperation in transport and customs transit would help the Central Asian Republics reduce transport costs and make transport times shorter and more predictable for international shipments. This would help the CARs expand trade, especially with distant countries; take more active part in global production networks and related trade in manufactured products; and diversify trade in terms of geographical distribution and commodity composition.

Paraphrased from Asian Development Bank, *Central Asia: Increasing Gains from Trade Through Regional Cooperation in Trade Policy, Transport, and Customs Transit*, 2006.

CAREC Comprehensive Action Plan

Components

	Page
The Strategic Framework.....	1
Appendixes	
Appendix 1: Sector Strategies (under preparation)	16
Transport Connectivity	
Trade Expansion	
Energy Development	
Appendix 2: Pipeline Loan Projects/Grants/TAs 2006-2008.....	82
Interim CAREC Results Framework	
Development Matrix	
Appendix 3: Special Initiatives	101
Appendix 4: Summary of In-Country Workshops.....	120

Note: The Strategic Framework outlines the main elements of the Comprehensive Action Plan (CAP), including the four pillars of activity as medium-term guidelines for the CAREC Program, a two-tier system for broadening and deepening the Program, and measures for ensuring strategic direction and management. Other elements of the CAP are appended.

Appendix 1 outlines sector strategies, which are a work in progress. Work plans are being expanded to full-fledged strategies, as illustrated by the Transport Sector Coordinating Committee which will undertake a comprehensive strategy study in early 2007. Sector strategies will also be developed for trade expansion and energy development. In this and other ways, the CAP will continue to deepen and improve.

Appendix 2 provides details about the pipeline of loan projects, grants and technical assistance of CAREC's multilateral institutions scheduled in support of regional cooperation for the period 2006-2008. The information is in two formats: the CAREC Results Framework provides details about the objectives, expected outputs and outcomes, and performance indicators for each of the projects or activities; the Development Matrix provides additional information concerning financing, implementation schedule, and contact points. Appendix 3 of the CAP provides outlines of proposed "second tier" activities, broadening the CAREC Program to include new sectors but in a manner that will not compromise focus on the core priorities of transport, trade and energy. Appendix 4 provides a summary of the main concerns and interests expressed during in-country workshops held to discuss formulation of the CAP.

CENTRAL ASIA REGIONAL ECONOMIC COOPERATION



- ⊗ National Capital
 - City/Town
 - Border Town
 - Provincial Boundary
 - - - International Boundary
- Boundaries are not necessarily authoritative.

STRATEGIC FRAMEWORK

CONTENTS

A.	The Mandate	1
B.	Mission Statement	1
C.	Guiding Principles	1
D.	Main Features of the Strategic Framework:	2
E.	Development for Management Results	9
F.	Mainstreaming Regional Development	12
G.	Strategic Management/Direction of the CAREC Program	13
H.	Geographic Scope of the CAREC Program	14
I.	Coordination with Other Regional Cooperation Initiatives	14

STRATEGIC FRAMEWORK

A. The Mandate

“Ministers agreed that the way forward for Central Asia is ‘development through cooperation’... Ministers called for sweeping measures to overcome trade and other impediments to development, and for the creation of transport corridors and the interconnection of energy markets. Ministers expressed interest in cooperative initiatives in a wide range of areas, including the environment, agriculture, tourism, human resource development, telecommunications, disaster management and avian flu preparedness... Ministers agreed that a strategic framework for regional cooperation is essential for charting the course ahead.”

Joint Ministerial Statement, November 2005

B. Mission Statement

1. The Central Asia Regional Economic Cooperation (CAREC) Program’s mission is development through cooperation. By promoting and facilitating regional cooperation in transport, trade, energy and other key areas of mutual interest, the CAREC Program helps Central Asian and neighboring countries realize their immense potential in an increasingly integrated Eurasia. By partnership with multilateral and other international agencies, the CAREC Program is a proactive facilitator of practical, results-based regional projects and policy initiatives critical to trade expansion, sustainable development and meeting new challenges.

Participating Countries

Afghanistan	Azerbaijan
Kazakhstan	Kyrgyz Republic
Mongolia	Peoples Republic of China
Tajikistan	Uzbekistan

Supporting Multilateral International (MI) Agencies

Asian Development Bank
European Bank for Reconstruction and Development
International Monetary Fund
Islamic Development Bank
United Nations Development Programme
World Bank

C. Guiding Principles

2. The guiding principles for the CAREC Program reflect operations to date, notably the emphasis on pragmatism and results. With these principles now well established, the Strategic Framework for the Comprehensive Action Plan seeks to strengthen other principles of the CAREC Program, including ownership by the CAREC countries and partnership with the business community and regional organizations (such as the Shanghai Cooperation Organization and Eurasian Economic Community).

- Pragmatic, results-based program designed to facilitate trade and business development
- County ownership, consensus-based and mutually-beneficial cooperation
- Two plus principle (regional projects entail two or more countries)
- Partnership with the business sector and regional organizations

D. Main Features of the Strategic Framework

Clarity and Simplicity of Goals/Objectives

3. CAREC's overarching goal is development through cooperation, leading to accelerated economic growth and poverty reduction.

CAREC's Long-term Vision: "Good Neighbors, Good Partners, and Good Prospects."

4. As summed up in the three G's, it is not enough to be good neighbors in order to secure good prospects. Good neighbors must also be good partners in responding to common challenges and shared development opportunities.

Key Themes

5. The Strategic Framework incorporates the following themes:

- **Strategic direction and ownership**, by the participating countries
- **Mainstreaming of regional cooperation**, by CAREC countries and MI partners
- **Connectivity**, enabling business enterprises to access regional and global markets
- **Knowledge and capacity-building**, facilitating consensus and deal-making
- **New approaches to development through cooperation**, to include greater emphasis on policy initiatives, new sectors, and new concepts (e.g., economic corridors)

6. As part of the emphasis on strategic direction, over the next year each of CAREC's transport, trade (facilitation and policy) and energy coordinating committees will develop medium-term sector strategies. Further, regional cooperation will be mainstreamed into country national development plans and MI programming. Knowledge and capacity-building activities will be intensified in support of strategic direction, ownership and mainstreaming.

7. Connectivity reflects the need of CAREC countries to turn their landlocked status into a land link for Eurasia, and to enable business enterprises to more readily access regional and global markets. CAREC must succeed in helping to overcome barriers and impediments to trade in the region.

8. New approaches to development through cooperation will contribute to momentum and gaining a wider appreciation of the benefits of regional cooperation.

Four "Action" Pillars

9. Development through cooperation will be based on four "action" pillars:

10. The **knowledge/capacity building pillar** will combine the research/analysis strengths of the region and the six MIs, greatly increasing the capacity for designing and implementing mutually beneficial regional initiatives. Further, training for middle and senior level officials will be initiated, to form a cadre of officials skilled in regional cooperation processes. Outreach activities and business forums will broaden the inclusiveness of the CAREC Program. To coordinate these research, training and dialogue activities, steps will be taken towards formation of an independent CAREC Institute, with advisory supervision by eminent persons from the region and internationally. In point form, Pillar 1 activities will include:

- Research networks combining expertise in the region and the six MIs
- Initiatives toward formation of the CAREC Institute
- Regional dialogue, outreach activities, and in-country workshops
- Policy research briefs, CAREC newsletter, and web site
- Business development forums and new business concepts (global value chains)
- Capacity building, advisory positions, training, and “best practices” workshops
- Third-party, honest broker role of MIs, eminent persons

11. The **regional infrastructure networks pillar** will mainstream country and MI support for transport corridors, energy markets, and trade-related infrastructure projects integrating the region. Connectivity is a unifying theme of the CAP, reflecting the desire to reinforce the region’s strategic location as a land link for Eurasia. The focus will increasingly shift to regionally-based programming and public/private sector partnerships, complementing country-based programming. In point form, Pillar 2 activities will include:

- Logistics systems building on transport, trade and energy networks
- Transport infrastructure networks
 - transport sector strategy
 - multi-modal east-west and north-south corridors
 - harmonization of transport regulations/cross-border transport agreement
- Trade infrastructure networks
 - trade sector strategy
 - border crossing infrastructure facilities
 - infrastructure in support of border area free trade zones
- Energy networks
 - energy sector strategy
 - energy generation infrastructure
 - energy transmission/distribution infrastructure
 - energy efficiency measures (policy/regulatory/institutional)

12. The **trade, investment and business development pillar** will provide a more integrated framework for improving the investment climate in Central Asia, and access of business enterprises to markets. The needs of the business community will be more clearly defined, including logistical requirements so as to enable participation in global value chains and other trade opportunities. In point form, Pillar 3 activities will include

- Trade, investment and business development strategy
- Trade facilitation
 - customs modernization/harmonization/streamlining
 - information platform
 - knowledge forums

- Trade policy
 - transit and border trade measures
 - trade taxes
 - WTO accession
- Investment and business development
 - investment forums
 - business logistics services
 - global value chains; economic corridors

13. The **regional public goods pillar** will expand the CAREC Program on project-specific basis to address trans-boundary issues, such as protection of the environment and management of natural resources. In point form, Pillar 4 activities will include:

- special projects to address priority regional public goods (environmental information systems, measures against desertification)
- special projects to address priority regional public “bads” (the avian flu threat, disaster management, corruption)

Broadening and Deepening of the CAREC Program

14. The Strategic Framework provides for broadening and deepening the Program, while continuing to focus on regional initiatives in support of transport, trade and energy linkages. A two-tiered approach to CAREC activities will be followed.

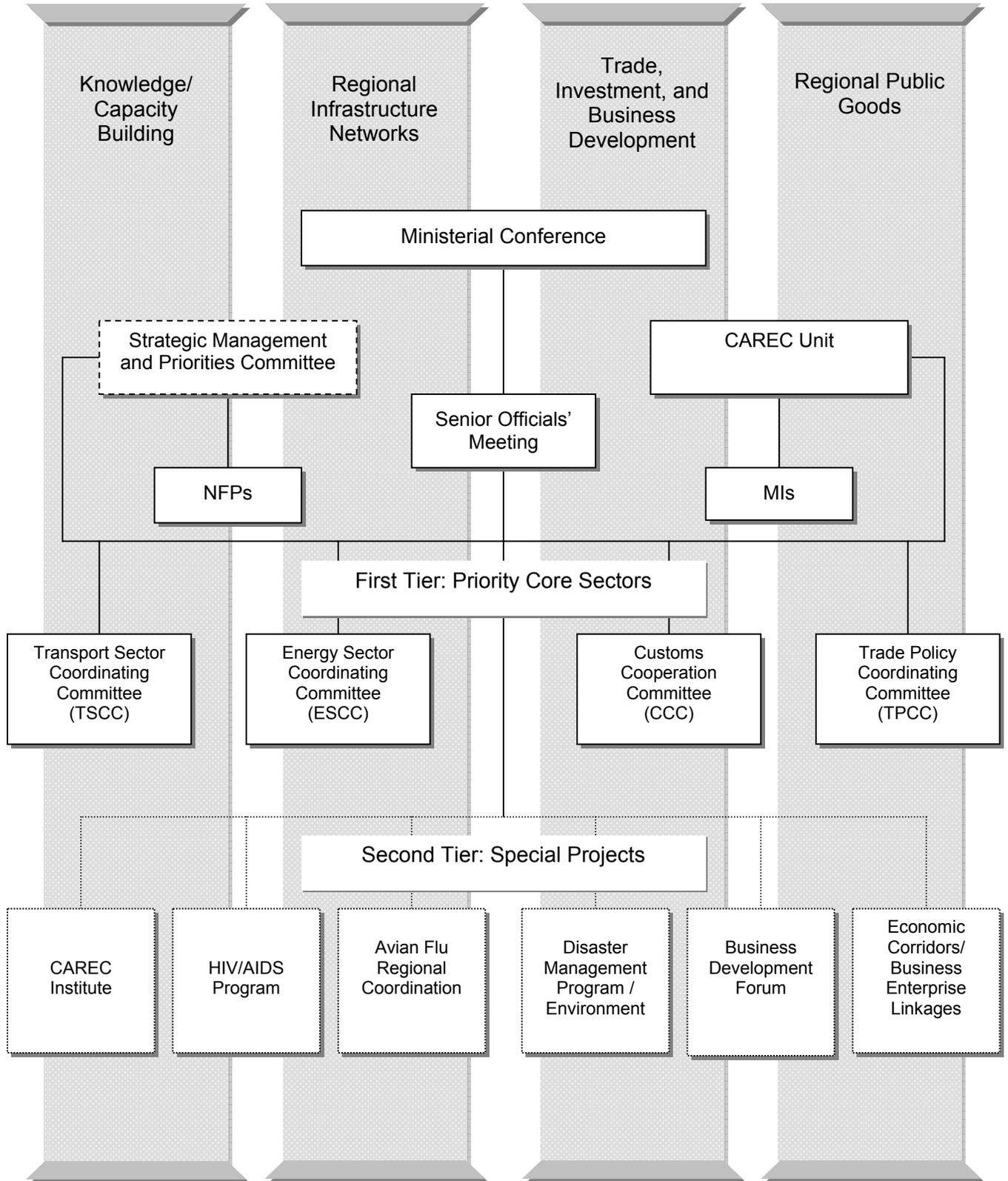
15. The first tier of activities will be those on a sector-wide basis related to transport, trade and energy. The second tier of activities will be in new sectors, such as human development, agriculture, environment, and tourism, but limited to highly focused projects, such as training for government officials involved in regional cooperation. Projects (including regional public goods) in the second tier will not require CAREC coordinating committees, as sector-wide issues are not involved (e.g., HIV/AIDS versus the health sector as a whole). Second-tier special projects will be managed as provided for in the project-preparation/implementation provisions agreed on with participating countries. The CAREC Secretariat will monitor and report on activities under this second tier. Projects in this second tier may include those supported by international assistance agencies additional to the current “MI six”. Information and coordination advantages will accrue from this approach.

16. Deepening the Program will include greater attention to the policy dimension, complementing regional investment projects. Also, new approaches will be undertaken, including economic corridors and integrated transport/trade/transit initiatives.

The Overall Institutional Framework

17. These features of the Strategic Framework are reflected in the revised Overall Institutional Framework for the Program, shown in Figure 1. A subsequent section of the Strategic Framework more fully details the institutional mechanisms designed to strengthen strategic direction of the Program. A new Strategic Management and Priorities Subcommittee of the SOM is shown in broken lines, denoting that it will be employed on an “as needed” basis. Appendix 3 provides brief outlines of illustrative second-tier activities.

Figure 1: CAREC: Strategic Direction and Overall Institutional Framework



Sharply Increasing Financial Support for Regional Cooperation

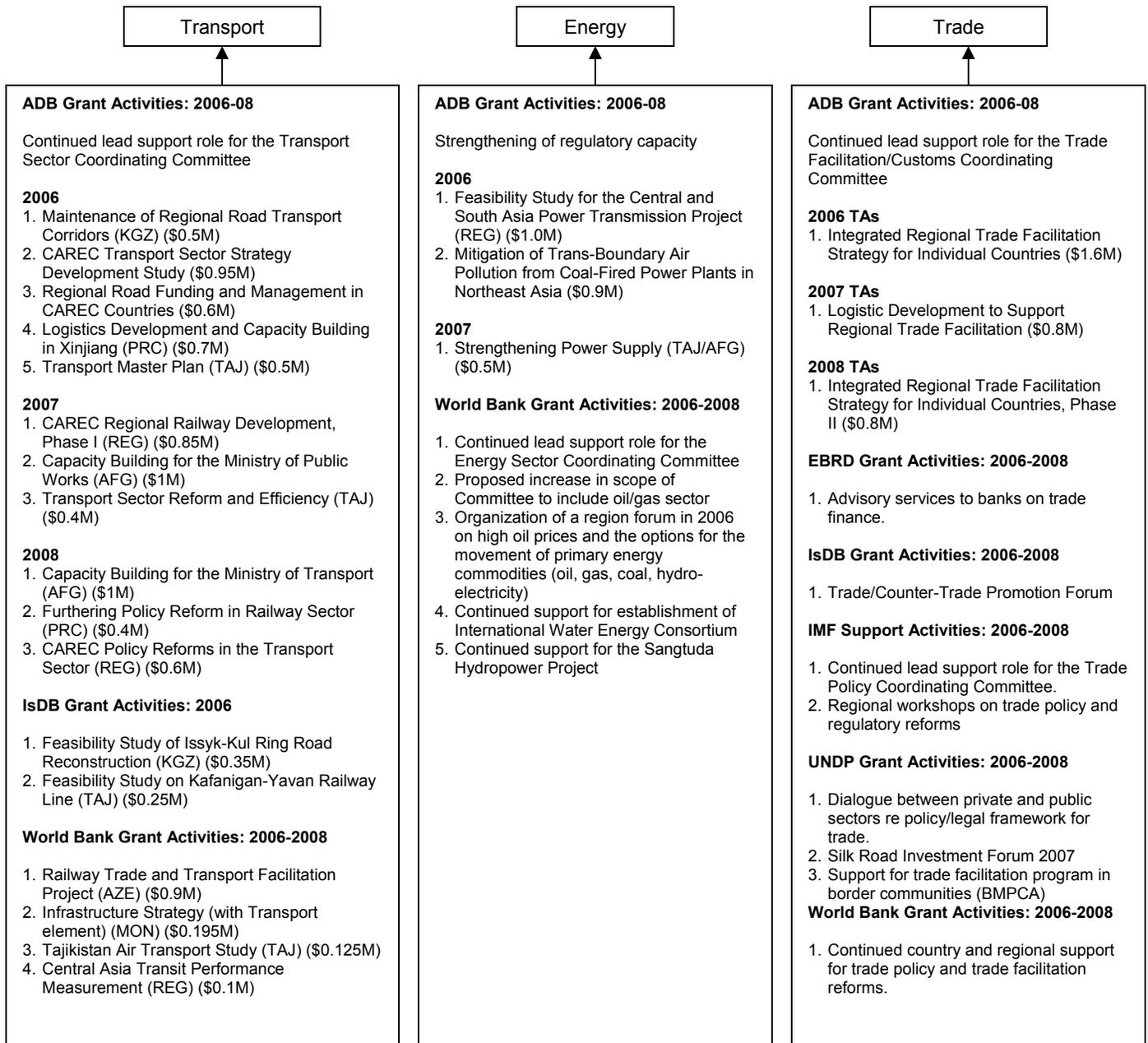
18. Another feature of the Strategic Framework is sharply increasing financial support for regional cooperation. In addition to bilateral support by the People's Republic of China, Russian Federation and other countries, the CAREC Program will sharply increase its level of support for regional cooperation projects:

- for the three-year period 2006-2008, the six MI partners of the CAREC Program plan to provide approximately 42 loans in support of regional investments in transport, energy and trade-related infrastructure (Table 1); the 42 loans total more than \$2.3 billion, including \$191 million in co-financing; the costs of some loan projects remain to be determined;
- 26 of the loans are for transport infrastructure, for a total of about \$1.4 billion; of these loans, 4 are for upgrading of railways and rolling stock (\$159 million) and one is for upgrading an air fleet upgrade (\$4.9 million); the balance of about \$1.2 billion is for road construction and upgrading;
- 13 of the loans are for the energy sector, for a total exceeding \$860 million (the costs of several are yet to be determined); of these loans, 1 is for a gas transmission line (\$300 million) and the balance for power interconnections, transmission lines and a small hydropower project; possible involvement in the financing of the Sangtuda 1 Hydropower project and other similar projects would considerably increase MI resource mobilization for the energy sector ;
- 3 of the loans are for trade facilitation, for a total of \$38 million;
- more loans for each sector are expected as planning of the MIs and CAREC countries for the 2006-08 period becomes firmer;
- over the three-year period 2006-2008, the six MI partners to the CAREC Program plan to provide approximately 23 grants/TAs for a total of about \$15 million in support of regional transport, energy and trade initiatives; this excludes Project Preparatory TAs and the umbrella Regional TA's of ADB in support of the CAREC Secretariat and CAREC Program generally (e.g., Ministerial Conferences, SOMs, and sector workshops) (Table 2)

Table 1: Synthesis of CAREC Investments 2006-2008

Transport	Energy	Trade
<p>ADB Loan Activities: 2006-2008</p> <p>2006</p> <ol style="list-style-type: none"> 1. North-South Corridor (AFG) (\$140M) <p>2007</p> <ol style="list-style-type: none"> 1. Ring Road and road Network (AFG) (\$110M) 2. Southern Road Corridor Improvement (Masally-Astara) (AZE) (\$100M) 3. Maintenance of Regional Road Transport Corridors Project (KGZ) (\$20M) 4. Western Regional Road Development (MON) (\$32M) 5. Xinjiang Regional Road Development (PRC) (\$150M) 6. Dushanbe–Kyrgyz Border Road Rehabilitation Project, Phase III (TAJ) (\$25M) 7. Regional Infrastructure (Roads) (UZB) (\$20M) <p>2008</p> <ol style="list-style-type: none"> 1. Regional Transport (MON) (\$32M) 2. Regional Railway (UZB) (\$20M) 3. Road Network 1 (AFG) (\$50M) 4. Bishkek-Torughart Road Rehabilitation (KGZ) (\$20M) 5. Secondary Roads Improvement (AZE) (\$75M) <p>EBRD Loan Activities: 2006</p> <ol style="list-style-type: none"> 1. TSA Air Fleet Upgrade (TAJ) (\$4.9M) - approved 2. Locomotive and Track Renewal (AZE) (\$30M) <p>IsDB Loan Activities: 2006-08</p> <p>2006</p> <ol style="list-style-type: none"> 1. Osh-Irkeshtam Road Rehabilitation, Phase I (KGZ) (\$10.5M) 2. Shagon-Zigar Road Phase III (TAJ) (\$10M) 3. Rehabilitation of Railway Network (Termez-Galaba Bridge) (UZB) (\$9M) <p>2007</p> <ol style="list-style-type: none"> 1. Reconstruction of the Taraz-Talas-Suusamyrd Road, Phase II (KGZ) (\$10M) <p>2008</p> <ol style="list-style-type: none"> 1. Issyk-Kul Ring Road Reconstruction (KGZ) (\$10M) <p>World Bank Loan Activities: 2006-08</p> <p>2006</p> <ol style="list-style-type: none"> 1. Highway II (Alat-Masally; Baki-Shamakhi) (AZE) (\$200M) – approved <p>2007</p> <ol style="list-style-type: none"> 1. Osh-Batken-Isfana (KGZ) (\$20M) 2. Highway III (AZE) (\$150M) 3. Rail Trade and Transport Facilitation (AZE) (\$100M) 4. Urban Infrastructure in Ulaanbaatar (MON) (\$15M) 5. Western Trade Corridor Road Rehabilitation (KAZ) (\$TBD) 	<p>ADB Loan Activities: 2006-2008</p> <p>2006 Loans</p> <ol style="list-style-type: none"> 1. Regional Power Interconnection (AFG/TAJ) (\$56.5M) <p>2008 Loans</p> <ol style="list-style-type: none"> 1. Central-South Asia Transmission (TAJ/AFG/PAK) (\$100M) 2. Power Transmission Reinforcement and Interconnection Project in West Kazakhstan (KAZ) (\$100M) 3. Rehabilitation of the Central Asia-Central Europe Gas Pipeline (KAZ) (\$300M) 4. 500kV North-South Power Interconnection Project (KAZ) (\$100M) 5. Reinforcement of Power Interconnection Between AZE and Iran (AZE) (\$50M) <p>EBRD Loan Activities: 2006-08</p> <ol style="list-style-type: none"> 1. Non-sovereign loans for the second and third phases of the North-South Transmission Line Project in Kazakhstan (\$87.8 M) 2. Possible financing for the Sangtuda 1 Hydropower Project, TAJ. <p>IsDB Loan Activities:2006-08</p> <p>2006</p> <ol style="list-style-type: none"> 1. Construction 110-kV Transmission Line Project (KGZ) (\$10M) <p>2007</p> <ol style="list-style-type: none"> 1. Derbend-Yashma Transmission Line (AZE) (\$30M) 2. 400kV Balkanabat-Iranian border Transmission Line (TKM) (\$25M) 3. Mingerchaur Hydropower (AZE) 4. 500KV South-North Transmission Line (TAJ) <p>2008</p> <ol style="list-style-type: none"> 1. 500 KV Sogdiana-Talimarjan Transmission Line (UZB) <p>World Bank Loan Activities: 2006-08</p> <ol style="list-style-type: none"> 1. Continued country-based loans for energy developments 2. Pamir 2 project in Gorno Badakhshan Tajikistan, 3. Public/private financing option; promotion of Sangtuda Project 	<p>ADB Loan Activities: 2006-2008</p> <p>2006 Loans</p> <ol style="list-style-type: none"> 1. Customs Modernization Project (MON) (\$5M) <p>2008 Loans</p> <ol style="list-style-type: none"> 1. Regional Customs Modernization and Infrastructure Development Phase II (TAJ) (\$8M) <p>EBRD Loan Activities: 2006-2008</p> <ol style="list-style-type: none"> 1. Guarantees for trade finance. <p>World Bank Loan Activities 2006-08</p> <ol style="list-style-type: none"> 1. Customs modernization (KAZ) (\$25M)

AFG = Afghanistan, CARs = Central Asia Regions, KAZ = Kazakhstan, KGZ = Kyrgyz, MON = Mongolia, PRC = People's Republic of China, TAJ = Tajikistan, TKM = Turkmenistan, UZB = Uzbekistan

Table 2: Synthesis of CAREC Grants/TA 2006-2008*

* Note: Excludes ADB project preparatory TAs.

E. Development for Management Results

19. The Strategic Framework includes a development for management results format, setting out a more detailed description of the goals, objectives, and expected outputs and outcomes of the CAREC Program, together with performance indicators for monitoring progress.

20. Shown below are the main components and steps:

Goals/objectives → Expected outputs/outcomes → Priority investments/policy, institutional and business related capacity building initiatives → Performance indicators



Identification of gaps → Resource mobilization/prioritization process



CAREC medium-term project pipeline + Country-based public investment programs + Bilateral and multilateral initiatives/agreements

21. The format has been streamlined so as to highlight the most salient features.

CAREC Goals/Objectives

22. Goals of an economic union or free trade area, as championed by the Shanghai Cooperation Organization and the Eurasia Economic Cooperation, provide political direction for region cooperation in Central Asia. CAREC's goals and objectives, however, must reflect what is achievable under the Program and the emphasis participating countries place on practicality.

23. As stated earlier, CAREC's primary mission and goal is development through cooperation, leading to accelerated economic growth and poverty reduction. Regional cooperation is vital to facilitating trade and helping business enterprises to access markets and to respond to new development opportunities. Other goals include improved development, management and sharing of the region's natural resources, and strengthened commitment to regional cooperation by all stakeholders. In terms of objectives, the most important are reduced trade barriers, efficient multi-modal transport systems networking the region, energy security, and cooperation in addressing regional public goods (e.g., protection of the environment). Promotion of the region for investment, tourism and international recognition is another objective.

Goals

- Development through cooperation, leading to accelerated economic growth and poverty reduction
- Improved trade and development opportunities
- Improved development, management and sharing of the region's natural resources
- Strengthened commitment by participating countries to regional cooperation/integration

Objectives

- Trade barriers and impediments greatly reduced
- Efficient multi-modal transport systems networking the region
- Integrated electricity markets, securing reliable low cost services throughout the region
- Cooperation in addressing regional public goods
- Promotion of CAREC region

CAREC Outputs/Outcomes

24. Expected outcomes for the CAREC Program include poverty reduction and increased economic growth, reflecting CAREC's growing effectiveness in promoting and facilitating regional cooperation and integration.

25. Other expected outcomes include trade expansion and new development options for the region. Also, CAREC will help strengthen the commitment to regional cooperation and the capacity to identify and undertake priority projects and initiatives for integrating the region.

26. Related to these outcomes, CAREC outputs are expected to include improved competitiveness of CAREC enterprises, improved natural resource management, and greater cooperation in addressing regional public goods and in coordinating with regional organizations such as the SCO and EurAsEC.

Outcomes

- Poverty reduction and increased economic growth
- Increase and diversified trade
- Capacity for regional cooperation/integration strengthened

Outputs

- Improved competitiveness of CAREC enterprises and better access to markets
- Customs harmonization and other trade facilitating measures
- Reduction of tariff and non-tariff barriers to trade
- More effective and efficient development and use of natural resources
- Efficient energy trading arrangements
- Cooperation in addressing regional public goods (or bads such as avian flu)
- Greater coordination with other regional initiatives
- Improved recognition of CAREC region

Priority Investments/Initiatives re Regional Cooperation

27. Given the preceding goals, objectives, and expected outputs and outcomes, CAREC countries and supporting MIs must determine the priority investments and initiatives needed to achieve these results. The MI pipeline of regional projects for 2006-2008 summarized earlier, and detailed in Appendix 2 of the Comprehensive Action Plan, reflects priorities identified to date. The Strategic Framework provides for ongoing attention to the identification and prioritization of regional investments and initiatives.

28. By the end of 2007, medium- to long-term strategies will have been prepared for each of the core sectors of the CAREC Program: transport, trade and energy. These will incorporate the priorities identified by CAREC countries, based on region-wide needs for integration.

29. More generally, the following areas will receive priority attention:

- Sector strategies for strategic investment decisions
- Transport corridors
- Trade infrastructure/policy reforms
- Business networking initiatives
- Energy development and efficiency initiatives
- Business development forums/economic corridors/trade logistics
- Third-party solutions to regional issues (water/energy nexus)
- Knowledge/capacity-building initiatives

30. Particular attention will be given to transport corridors, trade infrastructure and policy reforms, and energy efficiency measures – including country clusters to form electricity markets. CAREC, with the support of the MIs, will play a more proactive role in deal making, so as to facilitate win-win solutions to regional issues. CAREC will also ensure integrated approaches to transport, transit and trade in support of business development. New approaches will be undertaken to strengthen competitiveness, including the development of economic corridors and improved trade logistics. Further, CAREC will intensify its research and analysis activities, so as to strengthen the knowledge basis for regional cooperation. Capacity building in the form of training and other measures will strengthen the ability to engage regional cooperation effectively.

CAREC Performance Indicators (illustrative)

31. Performance indicators for the CAREC Program will help monitor progress and provide targets for achievement. The performance indicators will be simple, limited in number, and operational. They will be developed by the sector coordinating committees and endorsed during the Sixth Ministerial Conference.

32. Possible indicators for consideration include:

- Time and cost of shipping goods between major centers
- Rate of trade expansion and quality of trade (share of manufactured goods)
- Industry index: participation of CAREC business enterprises in international product markets
- Proportion of households in rural areas with secure electricity services

33. Indicators relating to the time and cost of shipping goods between major centers and the rate of trade expansion and the quality of that trade are expected to receive priority attention. Other indicators relate to the percentage of households in the region with secure electricity services and the degree to which CAREC business enterprises participate in international product markets. Milestones, such as accession to the WTO and formulation of a cross-border transport agreement, will be another form of performance indicator.

34. The CAREC Program will establish the baseline data and follow-up surveys necessary for making performance indicators operational.

F. Mainstreaming Regional Development

35. CAREC countries and MI partners will cooperate extensively to ensure mainstreaming of regional cooperation.

36. The development plans and public investment programs of CAREC countries will be reviewed, drawing out for comparison those sections and elements relevant to regional cooperation in areas included under the CAREC Program. Where the references are limited, the sector coordinating committees will work with country counterparts to determine priority projects contributing importantly to CAREC's goals and objectives. Comparisons of the development plans and public investment programs will provide the basis for determining complementarities and possible disconnects among CAREC countries, and gaps in programming.

37. MI programming will also be reviewed on a regular basis. The MIs strongly endorse the importance of regionally-based programming and initiatives. In concert with CAREC countries, they will gradually strengthen regionally-based programming and initiatives, ensuring that projects included in the CAREC pipeline are truly regional in intent.

38. Mainstreaming of regional cooperation will include the following measures:

- **the knowledge, capacity-building pillar**, contributing to strengthening understanding of what is at stake in regional cooperation and the benefits from more effective transport, trade and energy systems; further, the institutional capacity for identifying, designing and implementing regional initiatives will be strengthened, and country and MI resources coordinated in support of these initiatives;
- **special project initiatives** that address emerging interests or concerns of CAREC countries and that contribute to broadening and deepening regional cooperation; in addition to building confidence in regional cooperation, successful implementation of special projects will lead to gradual expansion of regional activity in new sectors;
- **sector strategies to guide regional transport, trade and energy initiatives**; sector-specific Ministerial Conferences will be held following completion of these strategies, contributing to mobilizing the necessary technical and financial resources for their implementation;
- **business development** by assisting CAREC business enterprises to participate in international product markets; a more integrated approach to regional cooperation will be followed, involving training, transport, trade, logistical support systems and other initiatives;
- **a strategic management process by Ministers and Senior Officials**, possibly requiring modifications to the Overall Institutional Framework for the CAREC Program.

39. A strategic management process for the CAREC Program is pivotal, as outlined below.

G. Strategic Management/Direction of the CAREC Program

40. The Comprehensive Action Plan provides strategic direction for the CAREC Program for the medium to long term, setting out the goals, objectives, and expected outputs and outcomes in a results-based format. To operationalize the CAP will require strategic management by Ministers and Senior Officials, in consultation with the MIs. The CAP must be flexible, updated annually to reflect developments in the region, and new interests and changing priorities. Strategic management in this context may require some modification and strengthening of the Overall Institutional Framework (OIF) for the CAREC Program.

41. While the OIF has been effective in identifying regional projects and initiatives, the preparation of transport, trade and energy sector strategies will elevate the overall regional perspective of the Program. Further, the CAP broadens and deepens the Program, calling for a more integrated approach regarding the core sectors and for the ability to address new challenges and opportunities beyond the core sectors.

42. The SOM must be prepared to play a key role in helping to prioritize and sequence regional projects and initiatives, and in ensuring that country development plans and public investment programs complement these projects and initiatives. In turn, Ministers must be prepared to consider, on behalf of their respective governments, options for regional development and resource use.

43. Accordingly, a **Strategic Management and Priorities Subcommittee** of the SOM is recommended, to be convened on an “as needed” basis:

- (i) **Scope of Work:** Responsibilities of the proposed Strategic Management and Priorities Subcommittee will include:
 - Identification of key regional needs/opportunities and potential gaps in the CAREC Program
 - Initiation and structuring of processes for addressing cross-cutting issues (economic corridors, global value chains)
 - Review of MI pipeline, country development plans in order ensure consistency
 - Notional budget resource envelopes/resource prioritization, including requirements for additional resource mobilization
 - Options for Ministerial consideration
- (ii) **Role Within OIF:** The Subcommittee will work under the guidance of and report to the SOM on the above responsibilities. It will also report to the MC on particular issues as directed by the SOM. The Subcommittee will interact with the sector committees as required to conduct its scope of work. Sector committees will continue to report directly to the SOM.
- (iii) **Composition of the Subcommittee:** The National Focal Points will comprise the permanent and core members of the Subcommittee. They will be joined by senior planning officials and other experts as required. CAREC’s sector committees will provide technical and advisory support, as will the MIs.
- (iv) **Procedures:** The Subcommittee will consult (including through video conferencing) periodically during the year, so as to fulfill the responsibilities outlined. The first order of

business will be to review the development plans and public investment programs of CAREC countries, to determine the regional complementarity of the transport, trade and energy initiatives. The Subcommittee will receive support under the CAREC Program. The sector steering committees, the domestic and international advisors to the CAREC Program, the regional coordination specialists, and the CAREC Institute will provide further support.

H. Geographic Scope of the CAREC Program

44. The geographic focus is Central Asia and neighboring countries, reflecting the key goal of the CAREC Program – development through cooperation. More specifically, the Program contributes to improved trade and new development opportunities, helping landlocked countries/areas to better access markets so as to facilitate economic growth and poverty reduction. Given the vast geographic scope of the CAREC Program, regional cooperation initiatives will include bilateral arrangements and clusters of CAREC countries.

45. Regional transport initiatives will be of three varieties: strengthening linkages between two neighboring countries (e.g., the Almaty-Bishkek highway improvement project); strengthening regional linkages (e.g., the proposed Xinjiang UAR –Kyrgyz Republic-Tajikistan-Uzbekistan railway); and strengthening linkages to external markets (e.g., the Kyrgyz Republic-Tajikistan-Afghanistan-Pakistan transmission line). These projects involve two or more CAREC countries, but not all eight. Software initiatives (e.g., harmonization of cross-border transport regulations) could also be on a bilateral or two plus principle. A cross-border transport agreement will ideally involve all CAREC countries.

46. Trade facilitation and regional energy initiatives will include country-based projects, for some dimensions are fundamental building blocks or prior conditions for regional cooperation (e.g., customs modernization; commercially-based electricity tariffs and institutional reforms). Beyond the basics, trade facilitation and regional energy initiatives will include bilateral arrangements and clusters of countries. Ideally, these initiatives will be guided by common standards or objectives (e.g., the WTO framework; development of energy markets). Trade policy will be addressed primarily on a CAREC-wide basis.

47. Central Asia is viewed as a land link for Eurasia and South Asia. The primary focus of the CAREC Program will be the Eurasia link, while recognizing and developing the opportunities provided by links to South Asia through Afghanistan.

48. The CAREC Program is open to participation by additional countries and international development partners, on endorsement by the present participants. An invitation to the Russian Federation remains open, and its participation will be welcomed.

I. Coordination with Other Regional Cooperation Initiatives

“Ministers agreed that duplication and overlap in regional cooperation should be minimized. Ministers directed Senior Officials to review the interrelationship of the CAREC Program with other regional initiatives, including SCO, EurAsEC, and ECO.”

Joint Ministerial Statement, November 2005

49. CAREC projects and initiatives must complement those of the Shanghai Cooperation Organization, the Eurasian Economic Community, the Economic Cooperation Organization and other organizations (like the Eurasia Development Bank) dedicated to regional cooperation and integration. So as to help explore the possibilities for working together, and the steps needed to ensure practical results, CAREC representatives will meet with representative of these organizations. As an introductory step, these organizations will be invited to comment on CAREC's Comprehensive Action Plan. Visits and other exchanges with these organizations will be encouraged so as to develop effective partnerships.

50. Pending further clarification, the CAREC Program will interact with these organizations on a project-specific basis (e.g., CAREC support to SCO for preparation of a cross-border transport agreement). Further, CAREC's technical expertise will assist in ensuring effective use of resources for regional cooperation (including those provided by governments in the region).

Appendix 1: Sector Strategies

1. Interim sector strategies/programs are outlined in this section, beginning with an overview of a results-based framework for the transport, trade and energy sectors. The overview draws from the sector coordinating committee reports but also adds dimensions subject to discussion, modification and endorsement.

I. Overview of Results-Based Framework

A. Transport Connectivity

2. A Regional Transport Sector Roadmap, adopted by the Transport Sector Coordinating Committee (TSCC) and endorsed by the Ministerial Conference in 2005, and updated in 2006, serves as the interim work program. A CAREC strategy study for the transport sector will be undertaken in 2007.

B. Trade Expansion

3. A draft strategy paper for trade facilitation is under preparation. The mid-term work plans for trade facilitation and trade policy are outlined in this section. The trade facilitation strategy paper when completed will need to be submitted to the Ministerial Conference for endorsement. The Customs Coordination Committee (CCC) will meet in October in Astana, while the Trade Policy Coordinating Committee (TPCC) met in Tashkent in September.

C. Energy Development

4. An advisory energy sector strategy is under preparation, a draft of which is expected to be completed in August. It will need to be fully reviewed by the Energy Sector Coordinating Committee (ESCC) and submitted to the Ministerial Conference in 2006 for endorsement. The ESCC will meet in October in Urumqi.

II. Overview of Possible Sector Strategies (Reflecting In-Country Workshops)

A. Trade Expansion

Expected Outputs/Outcomes

- Convergence of trade regimes of CAREC countries to WTO and WCO framework/provisions
- Increased trade volumes
- Improved quality of trade (diversification from commodity-based trade)
- Significant decrease in customs' clearance times and costs
- Improved security and customs modernization, and a unified information system
- Regulation of cross-border and transit trade fully transparent and barriers minimized
- Significant reduction in corruption in customs procedures
- Substantive involvement of private sector in trade facilitation/policy reform

Trade Facilitation Priority Actions/Investments/Bold Strokes

- Strategic framework for trade facilitation and logistics development, including customs modernization, joint-customs control and information sharing; also related performance indicators
- Development of border posts and facilities (e.g., large-scale scanners)
- A coordinated regional program for simplification/harmonization of customs procedures/ documentation re revised Kyoto Convention; also risk management and post-audit principles, so as to enable focus on high risk cargoes
- Integrated customs, transit and transport regimes for selected transport corridors, with single-stop customs inspection
- A regional program for strengthening trade logistics framework/services (TIR Convention, multi-modal transport hubs/container assembly points)
- A regional program for establishment of a “Customs Information Platform”, providing a unified automated information system re customs laws/regulations/procedures/forms
- Capacity building; ICT master plan for improving customs and tax administration
- Market analysis and information services, so as to assist SMEs in breaking into new export opportunities
- Improved coordination with transport and trade policy committees

Trade Policy Priority Actions/Bold Strokes - to be updated to reflect the meeting of the TPCC in Tashkent

- Implementation of endorsed trade policy measures to reduce barriers to transit trade and application of related performance indicators
- WTO membership for all CAREC countries
- Strategic trade policy thrusts (e.g., WTO product standards, reduction of trade taxes)
- Rationalization of regional trade agreements (the spaghetti bowl)
- Simplification/harmonization of tax/regulatory frameworks concerning cross-border trade
- A time frame for removing quantitative restrictions on trade
- Understanding of trade realities, including global value chains and cross-border production networks
- Improved coordination with trade facilitation committee

Trade Facilitation Performance Indicators

- change in trade volumes among CAREC countries;
- WCO framework diagnosis; comparison of provisions in CAREC countries to WCO standards;
- time-release survey; time involved in customs clearance;
- availability of customs information; trade data compliance to WTO standards

Trade Policy Performance Indicators

- WTO adherence scoring system
- level of tariffs, including fees and charges on trade

- number of prohibited exports/imports
- number of trade registration requirements
- progress in eliminating main impediments to transit trade
- milestone: WTO accession

B. Transport Connectivity

Expected Outputs/Outcomes

- Significant progress towards creating a highly efficient multimodal transport system integrating the region and connecting to global markets
- Sharp drop in transport costs/travel times /impediments to trade
- Designation/strengthening of transport corridors north-south and east-west (PRC envisages three east-west corridors from Urumqi, and one north-south corridor from the Western Corridor in Mongolia through Urumqi to Arabian sea ports)
- Eurasia as primary focus (incorporation of Central and South Asia Transport and Trade Forum into CAREC Program in balanced manner)
- Significant progress towards a regional cross-border transport agreement facilitating the movement of produce and trade
- Improvements in transport services (e.g., logistics center in Andijan, Uzbekistan) and legal/regulatory framework (e.g., TIR system, unified transit fees)
- Mainstreaming of regional transport cooperation into country development plans/public investment programs, as well as MI programming

Priority Actions/Investments/Bold Strokes

- A strategic plan of action for creating a highly efficient multimodal transport system
- Agreement on key transport corridors (road and rail) and scheduling for completing the corridors
- Agreement on process and scheduling for securing a comprehensive cross-border land transport agreement, including simplification/harmonization of cross-border transport procedures, documentation and regulations
- Harmonization of transit fees
- Integrated transport/trade/transit measures, including elimination of provincial check points/unofficial payments
- Targeted cuts in time and cost of land transport on key routes
- Bilateral and multilateral air services agreements (more open skies), leading to improved air access to and within the region
- Comparisons of development plans, public investment programs, MI programming, so as to rationalize resource prioritization for the transport sector

Performance Indicators

- economic distance or the cost of moving a consignment to market along key road and rail transport corridors
- volumes of regional road/rail/air freight traffic
- volume of regional road/rail/air passenger traffic

- milestones
 - adoption of a strategic plan of action for transport connectivity
 - regional cross-border transport agreement (including formal protocols/ annexes and implementation phases)

C. Energy Development

Expected Outputs/Outcomes

- Energy security; significant improvement in universal access to electricity
- Series of integrated energy markets among CAREC country clusters
- Consolidation of role of CAREC Members Electricity Regulators Forum (CMERF)
- Significant improvement in energy savings/efficiency (including through application of the Clean Development Mechanism, Kyoto Protocol)
- Energy development opportunities facilitated on a cooperative basis
- Investment mobilization, private sector participation
- Continued technical reports on energy options
- Continued reform and capacity building of energy sector

Energy Priority Actions/Investments/Bold Strokes

- Strategic framework for energy cooperation in the region, for enhancing the energy security of CAREC countries and development of the region's energy potential
- Ministerial-level energy forum in 2007 (including challenges/opportunities resulting from continued high oil prices)
- Promotion and facilitation of integrated electricity markets within the region
- Focus on energy savings and efficiency improvements through cooperative action (CMERF), application of the Clean Development Mechanism of the Kyoto Protocol, and domestic reforms (pricing policies/improved energy consumption records)
- Private sector investment mobilization for energy development/privatization opportunities
- Facilitation of access to new energy markets (exports of electricity of Pakistan)
- Greater third-party participation by MIs to help broker win-win energy initiatives
- Regional program for country-based capacity building, to put energy sector on a more commercial basis
- Knowledge/information "bank" for the sector (including tracking of bilateral and multilateral agreements of CAREC countries)

Performance Indicators

- % of households in rural areas with access to reliable electricity
- % reduction in system losses
- commercial principles (tariffs relative to marginal cost)
- energy efficiency: energy use per unit of GDP
- milestones
 - strategic framework for regional cooperation in energy sector
 - universal energy security and electricity supply

III. Possible Other Sectors

A. Tourism

Expected Outputs/Outcomes: major expansion of tourism in Central Asia, both in terms of numbers of visitors and expenditures (length and quality of stay)

Priority Actions/Investments/Bold Strokes: visas made easier (on arrival, multiple entry) to facilitate entry; more cross-border points upgraded to international status; new air routes and schedules to improve access; regional services (marketing, information)

B. Human Development

Expected Outputs/Outcomes:

- Skills development: a well-trained cadre of government officials skilled in effective regional cooperation; continued integration of labor markets
- Health Services: regional preparedness/action to combat communicable diseases (avian flu, HIV/AIDS)

Priority Actions/Investments/Bold Strokes:

- Establishment of a CAREC Institute: to promote and facilitate regional research networks, dialogue and training
- Skills development: replication of the GMS Phnom Penh Plan for CAREC countries
- Special projects to combat communicable diseases: avian flu, HIV/ AIDS

C. Agriculture

Expected Outputs/Outcomes: better income prospects for farmers through facilitation of cross-border and transit trade in agricultural products/livestock; also, better water use practices

Priority Actions/Investments/Bold Strokes: regional MOU concerning animal disease control

D. Environment

Expected Outputs/Outcomes: improved natural resource management and disaster preparedness; also improved environmental provisions re CAREC infrastructure

Priority Actions/Investments/Bold Strokes: hosting of a Ministerial Conference on the environment for CAREC countries; bilateral and multilateral water management initiatives

Transport Connectivity: Interim Strategy/ Program

CENTRAL ASIA REGIONAL ECONOMIC COOPERATION IN TRANSPORT



- National Capital
 - City/Town
 - Border Town
 - Regional Road Transport Corridor
 - Regional Railway
 - Regional Ferry Route
 - Provincial Boundary
 - International Boundary
- Boundaries are not necessarily authoritative.

Regional Transport Sector Roadmap

A. Program for Regional Cooperation in Transport

1. The goal of regional cooperation in transport is to develop an integrated and efficient transport system among the CAREC member countries to help achieve sustainable economic growth and poverty reduction. The new transport system should be based on an integrated multimodal transport infrastructure network, and will provide links within the CAREC member countries, enhance their access to outside large markets, reduce transport costs, improve transport services, and facilitate cross-border and transit traffic in the region.

2. In achieving this goal, regional cooperation in transport among the CAREC member countries has six strategic priorities:

- (i) Harmonization and simplification of cross-border transport procedures and documentation among the CAREC member countries to facilitate the movement of passengers and freight across borders.
- (ii) Harmonization of transport regulations among the CAREC member countries to create a level playing field for transport operators and promote efficiency and better services.
- (iii) Development and improvement of regional and international transport corridors to link production centers and markets within the CAREC member countries, and to enhance CAREC member countries' access to neighboring regions and markets.
- (iv) Restructuring and modernization of railways to provide quality and efficient services through private sector participation and improved corporate governance.
- (v) Improvement of sector funding and management to ensure that the regional transport network is developed, operated, and maintained properly.
- (vi) Incremental approach to liberalization of the civil aviation subsector, focusing on the adoption of bilateral agreements using common legislative clauses, with a view to expanding sub-regional agreements among neighboring countries, and potentially more widely in the long term. Enhancement of external inputs from all stakeholders, especially business and tourism, in aviation policy making.

B. MI's Assistance Program for Regional Cooperation in Transport (2006–2008)

3. Multilateral institutions (MIs)¹ will continue providing financial and advisory assistance to the CAREC member countries in support of its strategy for regional cooperation in transport. The MI's assistance program for 2006–2008 comprises 28 lending projects amounting to \$1324 million and 29 nonlending projects amounting to about \$26.4 million. A consolidated assistance program of multilateral institutions for lending and non-lending products in 2006–2008 is shown in Tables 1 and 2, respectively, of Appendix 3. The major lending projects likely to be supported

¹ Multilateral institutions comprise the Asian Development Bank (ADB), European Bank for Reconstruction and Development (EBRD), Islamic Development Bank (IsDB), United Nations Development Programme (UNDP), and the World Bank (WB).

in the road subsector are the north-south road corridor in Afghanistan, southern road corridor in Azerbaijan, regional transport corridor in Xinjiang, PRC, western road corridor in Mongolia linking it to PRC and the Russian Federation, and the Dushanbe-Kyrgyz corridor in Tajikistan. The lending pipeline for the railway subsector includes a regional railways rehabilitation project to strengthen the access to Afghanistan via Uzbekistan and the locomotive and track renewal, and rail trade and transport facilitation in Azerbaijan. In addition, maintenance of regional road transport corridors is proposed. Nonlending projects will be provided during the same period to support regional transport studies and institutional strengthening and capacity building of transport agencies. MIs will continue working closely with other development partners to cofinance lending and nonlending projects for regional cooperation in transport in the CAREC member countries.

4. The consolidated assistance program of CAREC's MI partners for 2006-2008 is shown in Tables 1 and 2, respectively. Appendix 2 provides detailed information about these loan and non-loan projects, in two formats:

- A results framework;
- A development matrix.

5. Major regional transport investments since the Fourth Ministerial Conference include:

- (i) Afghanistan: ADB approved a \$55 million loan for improving the Qaisar–Bala Murghab road and is preparing a \$140 million loan for improving the north-south corridor, to be finalized in 2006;
- (ii) Azerbaijan: ADB approved a \$52 million loan for improving the east–west highway (Yevlah–Ganja and Qazakh–Georgian border sections) in December 2005 and the World Bank approved a \$200 million loan for improving part of the southern road between Alat and the Iranian border in January 2006;
- (iii) Kyrgyz Republic: the Islamic Development Bank (IsDB) approved a \$9.2 million loan for improving the Taraz–Talas–Suusamyr road (Phase I);
- (iv) Mongolia: ADB is preparing an investment project for developing the western regional road to link the PRC and the Russian Federation; (v) PRC: ADB is preparing an investment project to upgrade the Korla–Kuqa road in Xinjiang; and
- (v) Tajikistan: ADB approved a \$29.5 million loan for rehabilitating the Dushanbe–Kyrgyz border road (Phase II).

6. At the fifth TSCC Meeting, the delegation of the Kyrgyz Republic requested MIs to consider financing the investment project to develop the railway line linking the PRC and Uzbekistan via the Kyrgyz Republic. The subject was reconsidered at the sixth TSCC Meeting in August 2006. It should be noted that in June 2006, PRC and Kyrgyz Republic signed an MOU concerning their sections of the railway, whereby a feasibility study will be undertaken and financing sought.

7. Major non-lending assistance since the Fourth Ministerial Conference include:

- (i) Azerbaijan: ADB is helping the Government develop a transport sector development strategy;
- (ii) Kazakhstan: WB is providing technical assistance (TA) to prepare a transport sector strategy;
- (iii) Mongolia: the ADB-funded pre-feasibility study of the western regional road development was completed; ADB is helping the Government prepare a

transport development strategy and the World Bank is preparing an infrastructure strategy; and

- (iv) Uzbekistan: ADB is helping the Government formulate a transport sector strategy.
- (v) Regional: ADB is in the process of consultant recruitment under the TA for Facilitation of Transport Cooperation among CAREC countries (Phase I) and has initiated preparation of the TA for improving regional road transport funding and management.
- (vi) Regional: the World Bank is financing a study to pilot transport corridor performance measurement in Central Asia.

Table 1: Approved and Planned Program for Infrastructure Investments, 2006–2008

	Project Title	Country Involved	Lending Agency	Amount (US\$ million)
2006 APPROVED				
1.	Highway II (Alat-Masally; Baki-Shamakhi)	AZE	WB	200.0
2.	TSA Air Fleet Upgrade	TAJ	EBRD	4.9
	Subtotal Approved for 2006			204.9
2006 PLANNED				
1.	North-South Corridor	AFG	ADB	118.2
			JFPR	20.0
2.	Locomotive and Track Renewal	AZE	EBRD	30.0
3.	Osh-Irkeshtam Road Rehabilitation (phase I)	KGZ	IsDB	10.5
4.	Shagon-Zigar Road (phase III)	TAJ	IsDB	10.0
5.	Rehabilitation of Railway Network (Termez-Galaba Bridge)	UZB	IsDB	9.0
	Subtotal Planned for 2006			197.70
2007 PLANNED				
1.	Ring Road and Road Network	AFG	ADB	110.0
2.	Southern Road Corridor Improvement (Masally-Astara)	AZE	ADB	100.0
3.	Highway III	AZE	WB	150.0
4.	Rail Trade and Transport Facilitation	AZE	WB	100.0
5.	Western Trade Corridor Road Rehabilitation (Shymkent-Arubulak)	KAZ	WB	TBD
6.	Maintenance of Regional Road Transport Corridors	KGZ	ADB	20.0
7.	Reconstruction of the Taraz-Talas-Suusamyrd Road (phase II)	KGZ	IsDB	10.0
8.	Osh-Batken-Isfana	KGZ	WB	20.0
9.	Western Regional Road Development	MON	ADB	32.0
10.	Urban Infrastructure in Ulaanbaatar (with Transport element)	MON	WB	15.0
11.	Xinjiang Regional Road Improvement	PRC	ADB	150.0
12.	Dushanbe-Kyrgyz Republic Border Road Rehabilitation (phase III)	TAJ	ADB	25.0
13.	Regional Infrastructure (Roads)	UZB	ADB	20.0
	Subtotal Planned for 2007			752.0
2008 PLANNED				
1.	Road Network 1	AFG	ADB	50.0
2.	Secondary Roads Improvement	AZE	ADB	75.0
3.	Bishkek-Torughart Road Rehabilitation	KGZ	ADB	20.0
4.	Issyk-Kul Ring Road Reconstruction	KGZ	IsDB	10.0
5.	Regional Transport	MON	ADB	32.0
6.	Regional Railway	UZB	ADB	20.0
	Subtotal Planned for 2008			207.0
	TOTAL (2006-2008)			1361.6

Table 2: Approved and Planned Program for Technical Assistance, 2006–2008

Project Title	Country Involved	Donor Agency	Amount (US\$'000)
2006 APPROVED			
1. Railway Trade and Transport Facilitation Project	AZE	WB	900.0
2. Southern Road Corridor Improvement	AZE	ADB	700.0
3. Preparing the Maintenance of Regional Road Transport Corridors	KGZ	ADB	500.0
4. Prefeasibility and Feasibility Studies for Road Sections of the "Termez-Dushanbe-Sary Tash" Road	KGZ	TRACECA	1795.7
5. Preparing the Western Regional Road Development	MON	ADB	650.0
6. Infrastructure Strategy (with Transport element)	MON	WB	195.0
7. Preparing the Xinjiang Regional Road Improvement	PRC	ADB	600.0
8. Preparing the Dushanbe-Kyrgyz Republic Border Road Rehabilitation (phase III)	TAJ	ADB	650.0
9. Tajikistan Air Transport Study	TAJ	WB	125.0
Subtotal Approved for 2006			6115.7
2006 PLANNED			
1. Preparing the Road Rehabilitation and Capacity Building Cluster	AFG	ADB	2700.0
2. Preparing the Secondary Roads Improvement Project	AZE	ADB	500.0
3. Feasibility Study on Issyk-Kul Ring Road Reconstruction	KGZ	IsDB	350.0
4. Preparing the Logistics Development and Capacity Building in Xinjiang	PRC	ADB	700.0
5. Feasibility Study on Kafanigan-Yavan Railway Line	TAJ	IsDB	250.0
6. Transport Master Plan	TAJ	ADB	500.0
7. Preparing the Regional Infrastructure (Roads)	UZB	ADB	300.0
8. Central Asia Regional Transport Strategy Study	Regional	ADB	950.0
9. Regional Road Funding and Management in Central Asia Regional Economic Cooperation (CAREC) Countries	Regional	ADB	600.0
Subtotal Planned for 2006			6850.0
2007 PLANNED			
1. Preparing the Road Network III	AFG	ADB	1000.0
2. Capacity Building for the Ministry of Public Works	AFG	ADB	1000.0
3. Preparing the Bishkek-Torughart Road Rehabilitation	KGZ	ADB	600.0
4. Preparing the Regional Transport	MON	ADB	600.0
5. Transport Sector Reform and Efficiency	TAJ	ADB	400.0
6. CAREC Regional Railway Development (Phase I)	Regional	ADB	850.0
7. Central Asia Transit Performance Measurement	Regional	WB	100.0
8. Analysis and Forecasting of Traffic Flows for the TRACECA Countries and Interregional Transport Integration	Regional	TRACECA	4104.5
9. Motorways of the Sea	Regional	TRACECA	3206.6
Subtotal Planned for 2007			11861.1
2008 PLANNED			
1. Road Sector Planning	AFG	ADB	1200.0
2. Capacity Building for the Ministry of Transport	AFG	ADB	1000.0
3. Furthering Policy Reform in Railway Sector	PRC	ADB	400.0
4. Dushanbe-Tursunzade Uzbek Border Regional Road Rehabilitation	TAJ	ADB	500.0
5. CAREC Policy Reforms in the Transport Sector	Regional	ADB	600.0
Subtotal Planned for 2008			3700.0
TOTAL (2006-2008)			28526.8

ADB=Asian Development Bank; AFG=Islamic Republic of Afghanistan; AZE=Azerbaijan; EBRD=European Bank for Reconstruction and Development; IsDB=Islamic Development Bank; JFPR=Japan Fund for Poverty Reduction; KAZ=Kazakhstan; KGZ=Kyrgyz Republic; MON=Mongolia; PRC=People's Republic of China; TAJ=Tajikistan; UZB=Uzbekistan; WB=World Bank

C. Criteria for Regional Classification of Investment Projects and Studies

8. The transport sector comprises the following sub-sectors: roads, rail, civil aviation, water, pipelines, and urban transport. The investment projects and studies classified as regional cooperation involve at least one of the following:

- (i) The development or enhancement of policies, regulations, and agreements related to facilitating efficient movement of freight and passengers between more than one CAREC member countries.
- (ii) The preparation of feasibility studies or designs of transport corridors linking more than one CAREC member countries.
- (iii) The construction or improvement of transport infrastructure on the transport corridors linking more than one CAREC member countries.
- (iv) Projects aimed at facilitation of transport logistics centers and information systems for monitoring transit freights with regional implications.
- (v) National interventions in CAREC member countries (e.g. feeder roads to primary delineated transport corridors, sustainable road maintenance, human resources development) with regional implications.
- (vi) Projects aimed at construction or rehabilitation (upgrade of technical capacities) of mechanical engineering facilities (enterprises for manufacturing and repair of rolling stocks) with regional implications.

9. The investment projects and studies are classified as regional cooperation if at least 30% of the following components address regional issues: the total cost of investment projects; or the total consulting inputs for studies.

10. The investment projects and studies under the CAREC program cover the following countries: Islamic Republic of Afghanistan, Azerbaijan, Kazakhstan, Kyrgyz Republic, Mongolia, People's Republic of China (Xinjiang Uygur Autonomous Region), Tajikistan, and Uzbekistan.

D. Key Sector Issues

11. The medium-term outlook for the transport sector in the CAREC member countries is promising. Given projected continued economic growth in the region and positive prospects for major developed markets, railway freight traffic is projected to grow at 2–3% annually over the medium term and road traffic by 4–7% annually. Bottlenecks are expected to occur over the short term at certain border stations on the railway network in the CAREC member countries, such as at Druzhba of Kazakhstan and Serakhs of Uzbekistan, where traffic is already growing at over 20% per year. The Caspian Sea ports are also expected to experience increased transit transport.

12. The transport sector in the CAREC member countries faces the following key issues on regional transport:

- (i) Inefficient cross-border and transit movement of people and goods due to excessive bureaucratic procedures and poorly equipped border posts. The cross-border procedures, formalities, and documentation (e.g., customs, immigration, and quarantines) at borders are not entirely based on international conventions or best practice, and are time-consuming, complicated, and expensive. The

dislocations caused by the breakup of the railways into national units in Central Asia have also created numerous cross-border obstacles, such as a lack of track-sharing agreements, frequent changes in locomotives and time-consuming train re-marshaling at borders, and inter-railway payment delays.

- (ii) Lack of unified transport regulations among CAREC member countries. This includes lack of compatible standards based on international best practices (e.g. technical aspects, road clearance, axle load control, vehicle emission control, tariff, and traffic safety); road permit quotas for foreign vehicles that restrict competition; skewed rules for transport services; road user charges not related to costs of road use; discretionary tariff setting for railways; discriminatory transit fees; and limited private sector participation.
- (iii) Inadequate regional transport network. The transport links in Central Asia and Mongolia need to meet the requirements of reoriented economic and trade ties with all countries in the region. There is a lack of the adoption of an integrated and regionally oriented multimodal transport approach in the planning and operation for transport infrastructure development. Roads connecting some production centers, markets, and ports are lacking. A large proportion of the existing transport infrastructure (roads, railway track, and rolling stock) is poor and deteriorating due to insufficient funding for proper maintenance.
- (iv) Lack of competition in railways due to the monolithic and monopolistic nature of the organizations. This has resulted in inefficient railway service, lack of commercial management of operations and investment, obsolete track and rolling stock, outdated internal telecommunications technology, excessive tariffs for international traffic, tariffs that do not separate movement and terminal costs, and lack of convenient billing systems and consignment information for shippers.
- (v) Limited institutional and human resource capacities in the transport sector. This is reflected by weak planning for public investment, inadequate design standards for transport investment projects, weak financial and project implementation management, and lack of effective monitoring and evaluation.
- (vi) Lack of regional approach in civil aviation subsector and lack of commonality in aviation policy and liberalization prospects across the region. There is no uniform industry structure and ownership model in the region, and bilateral agreements are the predominant mode to regulate international air service. Intra-regional air service levels are low. There is also a fear that in a liberalized environment strong foreign airlines would undermine local industry participants.

E. Role of Regional Cooperation

13. Regional cooperation in transport among the CAREC member countries plays an important role in promoting sustainable economic growth, which is crucial to poverty reduction. Three factors account for this. First, there exists a regionally integrated transport system inherited from the past in Central Asia, which requires a regional approach to rehabilitation and development of the system in contrast to the national solutions and self-sufficiency. Second, regional cooperation can help develop a regional transport network to minimize location disadvantages and improve access to large neighboring and major developed markets. Third, regional cooperation can help reduce barriers to intraregional and transit traffic, lower transport

costs, and improve transport services to overcome disadvantages of small national markets, thereby making the region more attractive for foreign and domestic investors as well as in support of new trade opportunities. Thus, regional cooperation in transport among the CAREC member countries is a necessity, not an option.

F. Performance Monitoring

14. Benchmarks to monitor transport sector performance are shown in the following tables.

Central Asia Regional Transport Sector Roadmap

Item	Indicators/Targets		
	2003	2010	
A. Sector Outcomes			
External Trade (US\$ billion)	85.1	119.8	
Volume of Freight Traffic (billion ton-km)	375.6	528.5	
Volume of Passenger Traffic (billion passenger-km)	187.0	263.2	
B. Sector Outputs			
Length of Road Network (km)	464,890	498,400	
Of which, length of category I highway (km)	n.a.		
Length of Railway Network (km)	27,400	29,000	
Of which, length of electrified railway lines (km)	7,688	8,000	
Road Network Density (km/100 km ²)	6.2	6.6	
Railway Network Density (km/100 km ²)	0.4	0.4	
Road Accident (total number/ fatalities)	n.a.	To be reduced by 5% per annum	
Regional Road Transport Agreement	No	In place	
Share of public investment in transport to GDP (%)	2.1	3.0	
Share of funding for road maintenance to GDP (%)	0.2 ^a	0.3	
Aircraft departures (thousands)	1,020	1,435	
Passengers carried by air services (thousands)	90,107	126,790	
Air freight (million ton-km)	6,563	9,235	
C. Key Sector Issues			
<ul style="list-style-type: none"> • Inefficient cross-border and transit movement of passengers and freight due to excessive bureaucratic procedures and poorly equipped border posts. • Lack of unified transport regulations in the CAREC countries. • Inadequate regional transport network, particularly lack of transport connections to production centers, markets, and land access to ports, as well as poor transport infrastructure due to insufficient funding for proper maintenance. • Lack of competition in railways due to the monopolistic nature of the organizations, and limited private sector participation. • Limited institutional and human resource capacities in the transport sector. • Lack of regional aviation approach and lack of commonality in aviation policy and liberalization prospects. 			
D. Actions, Milestones, and Investments			
	Schedule	By Agency	
		Multilateral Institutions	
		CAREC Governments	
Harmonization and simplification of cross-border transport procedures and documentation	2005-2010	ADB, EBRD, WB	X
Harmonization of transport regulations	2005-2010	ADB, EBRD, WB	X
Development and improvement of regional and international transport corridors	2005-2010	ADB, EBRD, IsDB, WB ADB, EBRD, IsDB	X
Railway restructuring and modernization	2005-2010	ADB, EBRD, IsDB, WB	X
Improvement of sector funding and management	2005-2010	ADB, EBRD, IsDB, WB	X
Incremental approach to liberalization of civil aviation subsector	2005-2010	EBRD, IsDB, WB	X
MIs' assistance program: \$1324 million (lending) and \$26.4 million (nonlending)	2006-2008		X

^a Excluding the PRC and Uzbekistan due to the unavailability of the data.

ADB = Asian Development Bank, EBRD = European Bank for Reconstruction and Development, IsDB = Islamic Development Bank, km = kilometer, WB = World Bank.

**Key Transport Sector Indicators in the CAREC Member Countries
(2003)**

Item	Afghanistan	Azerbaijan	Kazakhstan	Kyrgyz Republic	Mongolia	PRC		Tajikistan	Uzbekistan
						National ^b	Of which, XUAR		
Length of Road Networks (km)		25,021	89,000	34,000	49,250	1,765,222	59,910	26,000	181,712
Of which, Category I Highways (km)		134	n.a.	n.a.	0	52,598	n.a.	n.a.	n.a.
Road Network Density (km/100 km ²)		27.9	3.3	17.0	3.3	18.3	3.6	18.2	40.6
Length of Railway Networks (km)		2,944	14,510	425	1,815	71,898	2,775	950	3,993
Of which, Electrified Railway Lines (km)		1,270	5,800	0	0	17,409	0	0	618
Railway Network Density (km/100 km ²)		3.4	0.5	0.2	0.1	0.2	0.2	0.7	0.9
Freight Traffic (million ton-km)		22,165	259,090	1,479	7,504	5,054,300	83,704	1,664	28,595
Of which, Roads (million ton-km)		6,241	40,158	875	242	678,250	32,500	571	9,600
Railways (million ton-km)		7,719	147,672	561	7,253	1,551,560	47,500	1,086	18,900
Civil Aviation (million ton-km)		204	94	43	8	5,155	64	8	95
Passenger Traffic (million passenger-km)		12,601	94,806	5,493	2,246	1,412,570	34,200	2,683	34,971
Of which, Roads (million passenger-km)		9,861	81,464	5,033	557	780,580	19,500	1,727	28,949
Railways (million passenger-km)		654	10,686	50	1,039	496,940	10,610	50	2,065
Civil Aviation (million passenger-km)		1,113	2,654	410	650	126,870	4,090	906	3,957
Road Accidents (number)		2,311	14,013	1,555	5,278	773,137	10,095	1,378	n.a.
Road Accidents (fatalities) ^a		724	2,754	n.a.	391	109,381	2,563	421	n.a.
Registered Vehicles ('000 units) ^a		487	1,460	264	138	205,317	468	187	240
Public Investment in Transport (million in local currency)		1,693,468	52,900	522	20,300	n.a.	n.a.	26.4	163,700
Share of Public Investment in Transport to GDP (%)		9.0	1.2	0.6	1.5	n.a.	n.a.	0.6	1.7
Funding for Road Maintenance (million in local currency)		70,000	2,200	298	1,834	n.a.	n.a.	5.3	n.a.
Share of Funding for Road Maintenance to GDP (%)		0.2	0.1	0.4	0.1	n.a.	n.a.	0.1	n.a.
Aircraft departures (thousands)		9	20	5	7	950	n.a.	7	22
Passengers carried by air services (thousands)		684	1,010	205	289	86,041	n.a.	413	1,466
Air freight (million ton-km)		67	21	5	7	6,385	n.a.	7	71

^a 2002 figures for XUAR in the PRC.

^b 2002 figures for the PRC due to the non-availability of the 2003 figures.

CAREC = Central Asia Regional Economic Cooperation, GDP = gross domestic product, km = kilometer, PRC = People's Republic of China, XUAR = Xinjiang Uygur Autonomous Region in the PRC.

Sources: Governments of CAREC member countries; 2005 World Development Indicators, World Bank.

Trade Expansion: Interim Strategy/Program

Trade Expansion

1. A trade expansion regional cooperation strategy paper for the CAREC Program will be prepared in 2007 and submitted to the Sixth Ministerial Conference for endorsement. The mid-term work plans for trade facilitation and trade policy are outlined following.

Trade Facilitation and Customs Cooperation Program Status Report and Medium-term Work Program: October 2006

A. Introduction

2. The Trade Facilitation Program (the Program) was launched in 2002. Its short- to medium-term objectives are to promote concerted customs reforms and modernization, and serve as a regional forum to address issues of common interest such as regional transit development. Its long-term objective is to support an integrated trade facilitation approach through interagency cooperation and partnership with the private sector. Please refer to Attachment 1 for the Program's framework, which includes its objectives, priority areas, performance indicators, and results framework.

3. The Customs Cooperation Committee (CCC), consisting of the heads of customs administrations of the participating countries, has been coordinating the Program toward meeting its objectives. The CCC's guidance reflects the country-driven process of the Program. In its first meeting in Urumqi, People's Republic of China (PRC), the CCC endorsed a Common Action Plan and created two working groups for the plan's implementation. One working group is chaired by PRC and the other by Uzbekistan.

4. The Program has been implemented with a pragmatic and result-oriented approach focusing on (i) promotion of bilateral initiatives, e.g., bilateral agreements and pilot-testing, and (ii) country-specific customs modernization efforts. This approach differs from other subregional cooperation programs where participating countries have better comparative capacity and whose focus has been on forging multilateral trade and transport agreements, followed by pilot-testing. Training and knowledge sharing through regional events have been another priority area, which has helped strengthen capacity, trust, and confidence among the participating countries.

5. Inter-agency cooperation and partnership with the private sector are key features of Program activities. The International Road Transport Union (IRU) as well as private transport operators have joined the Program to support the transit development initiative. Tax administration officials have also become actively involved in the Program to promote integrated e-governance services.

B. Progress and Proposed Activities

6. The Program's activities since the last Ministerial Conference continued to focus on the areas endorsed by the CCC in its First Meeting in Urumqi, PRC in August 2002. Several regional and in-country capacity building activities were organized to address priority issues, including (i) a seminar in Daejeon and Seoul, Republic of Korea on trade facilitation and e-governance in December 2005, and (ii) a forum in Singapore in January 2006 focusing on issues related to customs automation and IT platform for trade and logistics, (iii) an in-country workshop in Ulaanbaatar on trade logistics and customs modernization, on 8-9 February 2006,

(iv) an in-country workshop in Urumqi on Xinjiang's trade logistics development, on 9 April 2006, (v) a seminar in Tokyo, Japan on 17-19 April 2006 on trade facilitation and customs modernization, and (vi) a seminar in Urumqi, PRC on 12-14 July 2006 on the World Customs Organization's (WCO's) framework of standards and customs data model. The PRC Customs General Administration sponsored training programs in Shanghai Customs Academy, for Kazakhstan customs officials in May 2006 and for Mongolia customs officials in September 2006. The 5th CCC Meeting was held on 11-13 October 2006 in Astana, Kazakhstan. Several in-country capacity-building seminars are also planned in Mongolia, Kyrgyz Republic, and Tajikistan during the fourth quarter of 2006.

7. Two studies were conducted that support the broadening of the Trade Facilitation Program: (i) the Trade Logistics Strategy for PRC's Xinjiang Uygur Autonomous Region, and (ii) an Integrated Trade Facilitation Strategy based on interagency cooperation and partnership with the business community. A trade logistics development study was launched in Mongolia in February 2006. A similar study was launched in August 2006 for the Inner Mongolia Autonomous Region of the PRC. As part of the continuing efforts to promote an integrated, multi-agency approach to trade facilitation, senior officials from tax administrations and border guard agencies were invited to attend the regional forums in Singapore and Korea.

8. To widely disseminate knowledge products, the Program has produced several publications and contributed several articles in the CAREC Newsletter. The Trade Facilitation Program website² is regularly updated as depository of all reports and publications produced under the Program, and continuously serves as a gateway for accessing the websites of the participating countries' customs administrations.

9. Highlights of the activities and major initiatives under each priority area are as follows.

Customs Automation

10. The master plans for customs automation being developed respectively by the Kyrgyz Republic and Tajikistan will present detailed discussions on technology issues related to the unified automated information system (JAIS) under the Regional Customs Modernization and Infrastructure Project. Workshops will be organized by Kyrgyz and Tajikistan Customs in the fourth quarter of 2006 to seek suggestions and comments on the master plans from the participating countries. Customs officials from Tajikistan will conduct a study tour in Kazakhstan in October 2006 under the ADB technical assistance project.

11. The needs assessment for customs modernization in Mongolia has been completed and it is expected that ADB will approve within 2006 an investment project to modernize Mongolia's customs administration. A similar exercise in Uzbekistan will be launched by ADB in 2007. In Kazakhstan, the development of E-Customs Master plan is supported by the Government of Korea, which is likewise supporting the e-Customs Feasibility Study for Azerbaijan.

12. The December Seoul Forum aimed to (i) share Republic of Korea's e-governance solutions and best practices, and (ii) promote cooperation between customs and tax administration agencies through ICT. To promote cooperation and interoperability between the systems of revenue administrations, senior officials from customs and tax administrations were invited to attend the forum.

² <http://www.adb.org/Projects/TradeFacilitation>

Risk Management and Post-Entry Audit

13. The Program continues to support the participating countries' efforts to implement and enhance their risk management systems. The following elements are stressed as essential pillars for risk management:

- (i) change in corporate culture of customs administrations from “control-orientation” to “compliance facilitation” or “informed-compliance” where customs tries its best to serve the business community for economic development;
- (ii) introduction of a structured approach to data review, taking into account the evolving and country-specific nature of risks; and
- (iii) importance of data exchanges among neighboring countries, thus the bilateral Agreement on Mutual Administrative Assistance and Cooperation providing the legal basis for such exchanges.

14. For countries at the early stage of introducing risk management systems, the emphasis was on identifying a “baseline of compliance” in relation to traders and companies to be inspected. This enables customs to determine a level of non-compliance which is the target of a risk management system. Incentives should be provided to traders with good compliance records such as fast-track clearance.

15. Japan's application of risk management in customs reform and modernization was discussed in greater detail during the April Tokyo Forum. During the July Urumqi Seminar, the PRC shared key recommendations of the WCO diagnostic mission including the need to introduce a more comprehensive risk management system which also addresses security issues, instead of merely focusing on fraud and smuggling activities. The Program produced a publication entitled “Risk Management: Catalyst of Customs Reforms and Modernization” highlighting experiences and initiatives of CAREC participating countries.

Joint Customs Control and One-Stop Services

16. The Program remains supportive of the participating countries' efforts to provide one-stop and single electronic window services for the business community in the long term, including the joint customs control initiative by Kazakhstan and the Kyrgyz Republic. The “time release study” by Kazakhstan Customs on the joint control at the Akzhol-Kordai shows significant reduction in clearance time.³ Encouraged by the positive outcome, Kyrgyz and Kazakhstan Customs will soon initiate joint control at the Aktilek-Karasuu crossing point, and Mongolia Customs is discussing with PRC Customs for a pilot-test at a crossing point to be agreed by the two countries' customs administrations. A meeting for this purpose was held on 27-28 April 2006 in the PRC. The next meeting is planned to be held in the fourth quarter of 2006 in Mongolia. Mongolia Customs is currently preparing a strategic framework for single electronic window practices.

³ See presentation by Deputy Chairman Baurzhan Abdishev at the seminar in Bangkok on 27–29 July 2005 from <http://www.adb.org/Documents/Events/2005/Trade-Facilitation-One-Stop-Service/presentation-joint-customs-kaz.pdf>

Regional Transit Development

17. Promotion of bilateral transit arrangements and PRC's accession to the TIR Convention⁴ are two priorities of the Program. It is hoped that the experience with the implementation of transit agreements that have been signed between the Kyrgyz Republic and Tajikistan, and the Kyrgyz Republic and Kazakhstan, will provide inputs for developing a regional transit agreement in the future. ADB has also published a paper on TIR Customs Transit System highlighting the experiences and initiatives of CAREC participating countries.

18. The establishment of SafeTIR System for Kyrgyz Republic will be jointly supported by ADB and IRU. With ADB support, training seminars on TIR Transit System will be conducted in October by IRU in Ulaanbaatar for Mongolia customs officials and transport operators, and in Geneva for Kyrgyz customs officials. IRU likewise sponsored a Regional TIR Workshop in Astana in June 2006 for transport operators in Central Asia and neighboring countries.

Bilateral Initiatives for Harmonization of Customs Procedures

19. Simplification and harmonization of customs procedures are being achieved through a host of efforts, including the revision of customs codes, introduction of risk management practices, joint customs control, and business process reengineering in relation to customs automation. Concrete proposals in relation to harmonization of customs procedures have been presented by PRC Customs. These are (i) harmonization of cargo manifest, and (ii) mutual recognition of customs inspections and seals/stamps. Efforts to harmonize data requirements for cargo manifests will facilitate data exchanges between exporters and importers for the preparation of customs declaration and thus reduce customs clearance time and improve the quality of trade statistics. Mutual recognition of customs inspection and customs seals and stamps provide an essential pillar for regional transit arrangement. Several countries responded positively to the proposals. PRC and Kazakhstan Customs will pilot-test the initiative under the two countries' existing cooperation framework and have requested ADB support to facilitate bilateral consultation and working group meetings.

20. The Program has supported revision and dissemination of Customs Codes in the Kyrgyz Republic, Mongolia, and Tajikistan. Similar support will be provided for other CAREC's participating countries for revision of their Customs Code in line with the Revised Kyoto Convention and New Framework of Standards.

Bilateral Initiatives for Data Exchanges

21. Data exchanges between customs administrations and between importers and exporters are essential for fast clearance and effective risk management. The Uzbekistan Customs had proposed to establish an electronic platform for data exchange among the participating countries, and the drafting of an agreement to provide the legal basis for the initiative. While the technical proposal was broadly endorsed by the member countries, suggestions were made to clearly define the trade facilitation objective of the proposal and the scope of data-exchange

⁴ The most important international convention concerning transit by road is the Transport Internationaux Routiers (International Road Transport) Agreement, or TIR Agreement, concluded in 1949. This Agreement provided a guarantee system that would cover the duties and other charges at risk on goods moving in the course of international trade. Its success led to the creation in 1959 of the Customs Convention on the International Transport of Goods, also known as the TIR Convention. The 1959 TIR Convention was subsequently revised in 1975 to reflect new technical methodologies, such as the introduction of containers in transport. Among the CCC member countries, only the PRC has not acceded to the TIR Convention.

requirements for facilitating trade clearance. Kyrgyz and Uzbekistan Customs proposed to pilot-test the initiative.

22. The July Urumqi Seminar included a detailed presentation of the WCO Customs Data Model and Unique Consignment Reference (UCR). The Customs Data Model aims to standardize, harmonize and reduce customs data requirement by defining a maximum set of data for the accomplishment of export and import formalities. The UCR is a numbering system to be used by all parties involved in the entire supply chain. The CAREC members were encouraged to take into account WCO tools in developing systems for data exchanges.

CAREC Trade Facilitation Program Framework

Objectives	Priorities and Performance Indicators	Highlights of Activities
<p><u>Short- to Medium-Term objectives:</u> To promote concerted customs reforms and modernization and to serve as a regional forum to address issues of common interest</p>	<p>1. Customs Automation</p> <ul style="list-style-type: none"> • Automation systems adopted, particularly for Kyrgyz Republic and Tajikistan 	<ul style="list-style-type: none"> • Customs modernization assessments and master plans for customs automation (Azerbaijan, Kyrgyz Republic, Mongolia, and Tajikistan) and related consultation and dissemination workshops • Customs modernization needs assessment for Afghanistan and Uzbekistan to be launched in 2007 • Study tour for Kyrgyz Republic and Tajikistan on customs automation; training for Kazakhstan and Mongolia officials sponsored by PRC Customs • Kyrgyz Republic and Tajikistan: Regional Customs Modernization and Infrastructure Development Project; Project Management Offices established • Customs Modernization Project for Mongolia to be approved in 2006 • Seminar on customs automation and e-governance initiatives (Seoul, December 2005 and Singapore, January 2006) • Regional seminar cosponsored by Japan Customs in April 2006

Objectives	Priorities and Performance Indicators	Highlights of Activities
	<p>2. Risk Management, Post-Entry Audit, and Customs Intelligence</p> <ul style="list-style-type: none"> • Risk management practices adopted 	<ul style="list-style-type: none"> • Publication of “Risk Management Guide” with the WCO • Risk management and post-entry audit seminar (Shenzhen, PRC in June 2005) • WCO diagnostic missions on Framework of Standards concluded in Mongolia and the PRC, and planned for Azerbaijan, Kazakhstan, Kyrgyz Republic, Tajikistan and Uzbekistan • Publication of “Risk Management: Catalyst of Customs Reforms and Modernization”
	<p>3. Joint Customs Control</p> <ul style="list-style-type: none"> • Pilot-testing implemented and extended in other countries 	<ul style="list-style-type: none"> • Pilot-testing of joint customs control by Kazakhstan and Kyrgyz Republic in (i) Akzhol-Kordai and (ii) Aktilek-Karasuu; bilateral agreement on joint customs control signed between Kazakhstan and Kyrgyz Republic • Efforts to pilot-test joint customs control between Mongolia and PRC • One-Stop/Single Window Seminar (Bangkok, Thailand in July 2005)
	<p>4. Regional Transit Development</p> <ul style="list-style-type: none"> • PRC’s accession to the TIR Convention • Bilateral transit agreements implemented 	<ul style="list-style-type: none"> • Study tour fielded by PRC Customs to consult with relevant organizations on accession procedures • Establishment of SafeTIR system in Kyrgyz Republic • Forum on regional transit development (Shanghai, October 2005) • Training on TIR system for Kyrgyz Republic and Mongolia customs and transport operators in October 2006 • Bilateral transit agreements signed between Kyrgyz Republic and Tajikistan, and between Kazakhstan and the Kyrgyz Republic • Publication of TIR Customs Transit System: Experiences and Initiatives of CAREC participating countries

Objectives	Priorities and Performance Indicators	Highlights of Activities
	<p>5. Harmonization of Customs Procedures</p> <ul style="list-style-type: none"> • Cargo manifest harmonized • Accession to Revised Kyoto Convention 	<ul style="list-style-type: none"> • Harmonization of cargo manifest (bilateral consultation meeting between Kazakhstan and PRC) • Accession to the Revised Kyoto Convention by Azerbaijan and Mongolia in 2006
	<p>6. Data Exchange</p> <ul style="list-style-type: none"> • Data elements for cargo manifest and customs declaration harmonized • Technology solutions for data exchange agreed bilaterally 	<ul style="list-style-type: none"> • Training seminar on WCO's Framework of Standards and Common Data Model cosponsored by PRC Customs and ADB • Bilateral agreement on exchange of customs statistics signed between Kyrgyz Republic and PRC • Efforts to pilot test electronic data exchanges between Kyrgyz Republic and Uzbekistan
	<p>7. Framework for Customs Cooperation</p> <ul style="list-style-type: none"> • Bilateral agreements on mutual administrative assistance and customs cooperation signed 	<ul style="list-style-type: none"> • Bilateral agreements signed between Azerbaijan and PRC, between Azerbaijan and Kyrgyz Republic, and between Kyrgyz Republic and Mongolia
<p><u>Long-term Objective:</u> To support an integrated trade facilitation approach through interagency cooperation and partnership with the private sector</p>	<p>Establishment of a National and Regional Mechanism for Integrated Trade Facilitation Approach</p> <ul style="list-style-type: none"> • National Trade Facilitation Committee established • Integrated Trade Facilitation Strategy developed in support of one-stop and single electronic window services • Regional Committee established consisting of National Trade Facilitation Committees 	<ul style="list-style-type: none"> • Trade Facilitation Sub-Committee under Public-Private Sector Consultative Committee established in Mongolia in 2005 • Formulation of Mongolia's single electronic window initiated • Study on Trade Logistics Strategy for PRC's Xinjiang Uygur Autonomous Region concluded, with workshop held on April 2006 • Study on an Integrated Trade Facilitation Strategy • Study on Trade Logistics Development for Mongolia launched • Study on Trade Logistics Development for Inner Mongolia Autonomous Region in the PRC launched

**Trade Policy Coordinating Committee:
Status Report and Medium-term Work Program: October 2006**

A. Introduction

23. At the request of the 2nd Ministerial Conference (MC), the April 2004 Senior Officials Meeting (SOM) discussed the possible objectives, mandate, terms of reference and work plan for the new CAREC Trade Policy Coordinating Committee (TPCC). It was agreed that the TPCC should help all CAREC member countries adopt more open trade regimes, so as to facilitate both intra- and inter-regional trade.

24. More specifically, it was agreed that the TPCC would address trade liberalization in the context of the WTO and the desire of non-members to become members of WTO. Priority should be given to assisting countries to accede to the WTO, including by providing them with information on the benefits of WTO membership. The Committee should also address bilateral and multilateral trade agreements in the region, with a view to minimizing trade distorting effects. Finally, it was agreed that the Committee should start with an assessment of current trade policies and trade policy initiatives.

25. While on the side of the Multilateral Institutions (MIs) the IMF agreed to take the lead in organizing the work of the TPCC, it was noted that the IMF has limited capacity to undertake the activities required to make this committee effective. The TPCC was the first CAREC committee established whose focus would be exclusively on policies, not projects.

B. Previous TPCC Meetings

First TPCC Meeting and Subsequent SOM

26. The first meeting of the TPCC was held immediately in advance of the September 2004 SOM. The purpose of this first TPCC meeting was to prepare a draft agenda of work for the committee, which could be presented to the SOM for approval. To facilitate the discussions in the committee, the IMF prepared a background paper, *Trade Policy Issues in the Central Asian Republics*. This paper provided a summary of bilateral trade relations, regional and other trade agreements, the issue of establishing a central Asian customs area or free trade zone, individual CAREC country progress toward WTO accession, and the issue of sequencing WTO accession and further deepening of regional trade relations.

27. Based in part on this paper, the members of the TPCC extensively discussed issues related to WTO accession, as well as regional and bilateral trade issues. Drawing upon this discussion, the TPCC produced a list of seven possible topics to work on, and submitted that list to the SOM, asking the SOM to choose 2-3 topics that they would like the TPCC to focus on first.

28. The SOM identified three topics as the highest priority for work by the TPCC:

- (i) An analysis of barriers to trade in Central Asia and possible measures to facilitate trade;
- (ii) A study of Central Asia's actual or potential comparative advantage in global trade;

- (iii) And a review of existing regional trade agreements, including an analysis of any potential conflicts between these agreements and WTO accession, as well as a review of lessons that can be learned from regional trade agreements elsewhere.

29. The SOM also tentatively identified other areas for future work by the TPCC: a regional analysis of the impact of WTO accession; agricultural policy and WTO accession; a regional educational/informational program about WTO accession; and possible regional measures to address the special trade-related problems of land-locked countries. This work program was subsequently endorsed by the 3rd MC.

Second TPCC Meeting and Associated SOM

30. The second meeting of the TPCC was held in advance of the April 2005 SOM in Manila. In preparation for this meeting, three papers were prepared, one on each of the three identified priority issues for the TPCC.

31. ADB took the lead in preparing a paper, *Trade Barriers in Central Asia*. This paper focused on barriers in trade policy (quantitative restrictions, registration requirements for exports or imports, tariffs, and other trade taxes), barriers related to transport and transit, barriers related to border crossing and customs clearance, and other trade barriers.

32. The World Bank took the lead in preparing a paper, *Comparative Advantage in International Trade for Central Asia*. The paper notes the difficulties in unambiguously identifying areas of comparative advantage in a dynamic world economy, and thus argues against any attempts to directly subsidize industries that are deemed to have comparative advantage. However, it argues that having some indication of where a country's comparative advantage may lie can help governments prioritize infrastructure investments and other market-friendly policies.

33. Finally, the IMF staff circulated two papers: *Regional Trade Integration: Considerations for the CAREC Countries*, and *Regional Trade Integration and WTO Accessions: Which is the Right Sequencing? An Application to the CIS*. The first paper summarizes best practices in designing regional trade agreements, and touches briefly on the issues of WTO accession and regional trade integration. The second paper, which was an IMF Working Paper, analyzes the appropriate sequencing between WTO accession and implementation of the Eurasian Economic Community (EAEC) customs union. It concludes that welfare will be greater if WTO accession precedes the EAEC Customs Union.

34. The meeting was devoted to a discussion of these papers, including their policy implications. In the end, the TPCC reached agreement on two recommendations, which were later endorsed by the SOM. First, it was agreed that there is a need to reduce delays in and financial costs of entrance and transit. The TPCC was instructed to prepare an analysis of these delays and costs, as well as recommendations for measures to reduce them. Second, and similarly, the TPCC agreed to review barriers to border trade and to present recommendations for possible improvements in these policies and procedures to the next SOM.

Third TPCC Meeting and Associated SOM

35. The ADB produced a paper entitled *Barriers to Transit Trade in Central Asia*. This paper assessed barriers related to customs transit, transport and governance problems. Based on this

analysis, the paper made a number of concrete recommendations for policy actions which CAREC member countries could take to ease or eliminate these barriers.

36. Following extensive discussions, the committee agreed to recommend for consideration of the Senior Officials Meeting the following measures aimed at reducing the existing barriers to transit trade in Central Asia:

- (i) Ensuring the control of customs officers and other agencies regarding full compliance with the TIR Convention; China will take steps to accelerate TIR accession and promote the TIR Customs Transit System in the region;
- (ii) Reduction in the rate of charges for customs convoy under the national transit systems in appropriate countries with simultaneous reductions in the list of goods subject to such convoys; concrete proposals to these ends will be developed by the time of the next Trade Policy Coordinating Committee meeting;
- (iii) Reduction in the cost of non-reciprocal road transport permits to levels that will cover related costs without discouraging transit trade;
- (iv) Abolition of all other charges and fees on entry (transit) of foreign carriers;
- (v) Reduction of the cost of entry visas for foreign road carriers and foreseeing the issuance of visas to foreign road carriers at international pass points in a simple way;
- (vi) Unification of transport, customs, and border documentation in order to harmonize procedures of control and to minimize time to pass at the border; and
- (vii) Taking measures to prevent and eradicate cases of unofficial payments from road carriers in transit.

37. Preliminary discussions were also held on the issue of barriers to border trade. While committee members agreed that this was an important issue, it was felt that substantial work was needed in this area. This work should first seek to clearly define the concept of border trade, and should then look at the legal framework for border trade, tax and infrastructure issues, and other related aspects.

38. The TPCC agreed that its agenda going forward should focus on three aspects of barriers to trade: (i) the work noted above on barriers to border trade; (ii) work on quantitative restrictions to trade in CAREC countries; and (iii) work on trade taxes in CAREC countries.

39. In addition, it was agreed that the country delegates to the TPCC should take responsibility for monitoring the implementation of the recommendations related to barriers to transit trade. Thus, each country delegation will report to the TPCC on the status of implementation of the recommendations in its country, and the TPCC will in turn produce a consolidated report on the implementation of these recommendations for consideration by the next SOM.

40. Finally, it was agreed that there is a need to increase the awareness of the analytical work that has been done in and by the TPCC among key decision makers in all CAREC-member countries. Thus, the TPCC agreed to ask the International Monetary Fund and Asian Development Bank to arrange seminars in each CAREC-member country, designed to

summarize the work done for the TPCC to date and the implications of this work for the various countries in CAREC.

Fourth TPCC Meeting and Associated SOM

41. The Fourth Meeting of the TPCC was held in Urumqi, China on April 8, 2006. During the meeting, delegates reviewed the progress made in implementation of the instructions from the 4th Ministerial Conference of November 2005 and gave guidance on priorities and future direction to the TPCC's work program. Broadly, the delegates emphasized the importance of producing concrete policy reforms in CAREC countries in parallel with continuing analytical work and discussions on trade policy issues.

Review of progress

42. In line with the communiqué of the 4th Ministerial Conference, country delegates to the TPCC reported on the implementation of the recommendations to reduce barriers to transit trade. In the discussion, the participants noted, with satisfaction, the measures that are being put in place to reduce barriers to transit trade, although the extent of measure varied significantly depending on the circumstances of each country. They also noted that: (i) it will take time to fully implement all the necessary measures; (ii) reciprocity between countries will become an issue as countries move forward with measures; and (iii) some of the issues have to be addressed in coordination with neighboring countries to achieve effective outcomes. Among the measures that are being considered, the TPCC welcomed in particular the intention to introduce "one stop service" for processing of customs and other procedures.

43. The International Monetary Fund and the Asian Development Bank have initiated outreach seminars in each country designed to summarize the analytical work done for the TPCC to date and the implications of this work for the various countries in CAREC. Such seminars were held in Astana and Bishkek in February 2006.

Papers presented at the Fourth TPCC meeting

44. The EBRD took the lead in preparing a paper, *Beyond Borders: Reconsidering regional trade in Central Asia*. The paper notes that the impact of borders on price variations across different locations in Central Asia is much smaller than conventionally thought. In contrast, it argues that market integration inside countries in Central Asia remains limited.

45. The delegates noted several factors that could explain the relatively small price variations across borders in Central Asia, including the biased sample of goods covered in the study, the price indices used for the analysis, and the use of black market exchange rates that are no longer in existence in most countries. In their view, the findings confirm the existence of smuggling for consumer goods and the consequent small variations in prices across borders despite cross border barriers, and the importance of transportation costs in explaining price differentials which in some cases amounted to 40-45 percent of the cost of a good.

46. There was also some discussion on barriers to border trade led by the Kazakh and Uzbek delegations, which highlighted the complexities of the issues involved. Subsequently, TPCC decided that further work would be needed before it could formulate recommendations to reduce barriers to border trade for consideration of the SOM (see below).

Future Work Plan

47. The TPCC agreed that its agenda going forward should include: (i) continued monitoring of the implementation of the recommendations related to barriers to transit trade endorsed by the 4th Ministerial Conference; (ii) continuing the outreach seminars to increase the awareness of the analytical work that has been done by the TPCC among key decision makers; (iii) undertaking further work on barriers to border trade; and (iv) preparing papers, as agreed in the previous meeting, on quantitative restrictions to trade in CAREC countries and on trade taxes in CAREC countries.

Recommendations for consideration for the SOM

48. Based on the discussions, the TPCC reached agreement on three recommendations, which were later endorsed by the SOM. First, there should be greater predictability and more transparency in trade policies of CARs, including through more information on existing restrictions as well as closer monitoring of changes in policies. Second, given the overlapping nature of issues addressed by the Trade Policy Committee and the Trade Facilitation Committee, there should be more interaction between these two committees. Similarly, a closer cooperation among officials dealing with these two issues in each member country is also essential. Third, given the role of the private sector in trade, there should be more involvement and participation of the private sector in CAREC activities. To this end, it was proposed to organize a business forum in Urumqi prior to the next Ministerial Conference.

Fifth TPCC Meeting

49. The fifth TPCC meeting was held in Tashkent on September 25, 2006. The meeting was largely devoted to discussion of trade taxes in CAREC countries and of recommendations to reform the trade tax system. Delegates also reviewed the progress made in implementation of the instructions from the 4th Ministerial Conference and gave guidance on priorities to the TPCC's work program.

Review of Progress

50. In line with the communiqué of the 4th Ministerial Conference, the TPCC continued monitoring of the implementation of the recommendations to reduce barriers to transit trade based on reports by country delegates to the TPCC. In the discussion, it was noted that: (i) Azerbaijan, Kazakhstan, Krygyz Republic, Mongolia, Tajikistan, and Uzbekistan are members of the TIR Convention and are in full compliance with its requirements, AFG has initiated steps to reactivate its membership, and PRC has initiated the accession work; (ii) no customs convoys are formed for transportation of transit goods through AFG and PRC, and the customs fees charged for customs escorts have been reduced in KAZ; (iii) no fees or charges other than transit fees are applied in KAZ and transit goods are exempted from other fees and charges in AFG, PRC, TAJ, and UZB if there are reciprocity arrangements with the countries of goods' origin; (iv) issuance of visas and reductions in the cost of visas for drivers are being implemented on a reciprocity principle in AFG, PRC, and TAJ, an agreement has been signed between KAZ and UZB which provides for eliminating the system of entry permits, and KAZ reduced the costs of issuing visas significantly; (v) KAZ and KGZ implemented a pilot project of joint border control through an expedited "one stop service" processing of customs and other procedures, and a similar arrangement is being considered by KAZ and UZB; and (vi) to prevent unofficial payments from road carriers, KAZ, KGZ, MON, and TAJ are automating customs

procedures, while AFG had developed a code of conduct to encourage reporting of illegal payments and is closing illegal check points.

51. Based on submissions by country delegates, a more detailed report on the implementation of the recommendations aimed at reducing the existing barriers to transit trade in Central Asia is provided in the full status report of the TPCC.

52. The International Monetary Fund and the Asian Development Bank continued outreach seminars in member countries designed to summarize the analytical work done for the TPCC to date and the implications of this work for the various countries in CAREC. Such seminars were held in Beijing in April 2006, Dushanbe, Kabul, and Tashkent in September 2006, and Ulaanbaatar in October, 2006.

Papers Presented at the Fifth TPCC Meeting

53. In line with the work program agreed in the previous TPCC meeting, the International Monetary Fund presented a paper on *Trade Taxes in CAREC Countries*. The paper analyzed the taxes levied on international trade in CAREC countries and assessed to what extent they could be a barrier to trade. The paper concluded that the overall level of import tariffs, as measured by simple and weighted average tariff rates, is relatively low. However, the trade tax regimes are complex and subject to frequent changes. Based on this analysis, the paper recommended that reform of trade taxes in CAREC countries should aim at a simple, transparent regime, with low and relatively uniform rates, in line with international best practices.

54. Following a lively exchange of views on the paper, the committee agreed to recommend for consideration of the Senior Officials' Meeting the following measures aimed at reforming the trade tax regimes in Central Asia:

- (i) reducing tariffs and other trade taxes in countries where the cumulative average rate is high, with the aim of bringing the simple average tariff below 10 percent;
- (ii) reducing the maximum and high tariff rates, with the maximum rate limited to 20 percent;
- (iii) cutting the number of non-zero tariff bands to around 3;
- (iv) eliminating specific and combined tariffs by shifting to an ad valorem methodology for simpler calculation and enforcement;
- (v) removing exemptions and abstaining from granting them in the future;
- (vi) applying taxes (VAT and excise) uniformly to imported and domestically produced goods; and
- (vii) consolidating other import taxes, fees, and charges into a single rate.

55. In addition, it was agreed that the country delegates to the TPCC should take responsibility for monitoring the implementation of the recommendations related to reform of trade taxes, assuming they are endorsed by the SOM and eventually by the Ministerial Conference. Thus, each country delegation will report to the TPCC on the status of

implementation of the recommendations in its country, and the TPCC will in turn produce a consolidated report on the implementation of these recommendations for the SOM.

56. The Committee also continued discussions on barriers to border trade led by the Kazakh delegation, focusing mainly on defining the concept of border trade. The delegates once again decided that further work would be needed before it could formulate recommendations to reduce barriers to border trade. Thus, the TPCC asked the World Bank to finalize a paper on barriers to border trade by mid-2007, building on the work that has already been done by the Kazakh delegation. Progress report on this paper will be presented at the next meeting of the TPCC.

57. The GTZ (German Technical Cooperation) made a presentation of their project “Support to Regional Economic Cooperation in Central Asia”. The project aims to reduce the administrative burden of import and export procedures for traders. Under this project KGZ and TAJ will reduce the amount of documents and the time needed to export and import. The Kazakh and Uzbek governments were invited to restart the project in their countries and the PRC was invited to consider joining the project for its western border regions.

Future Work Plan

58. The TPCC agreed that its agenda going forward should include:

- (i) continued monitoring of the implementation of the recommendations related to barriers to transit trade endorsed by the 4th Ministerial Conference;
- (ii) monitoring implementation of the recommendations related to reform of the trade tax systems—assuming they are endorsed by the SOM and eventually by the Ministerial Conference;
- (iii) undertaking further work led by the World Bank on barriers to border trade and formulating recommendations to address these issues;
- (iv) preparing the paper on quantitative restrictions to trade in CAREC countries, led by the Asian Development Bank as agreed in the previous meeting;
- (v) contributing to capacity building and information sharing on WTO related issues to facilitate member countries’ accession to the WTO; and
- (vi) continuing the outreach seminars to increase the awareness of key trade policy issues and the analytical work that has been done by the TPCC among decision makers.

Recommendations for consideration for the SOM

59. Based on the discussions, the TPCC reached agreement on the following recommendations to be submitted to the SOM in October 2006: (i) the seven measures aimed at reforming the trade tax regimes in Central Asia that are listed in Section D. 2 above; (ii) the implementation of “one stop service” processing of customs and other procedures in all CAREC countries to facilitate transit trade; and (iii) the use of reciprocity principle in encouraging reductions in existing barriers to transit trade in Central Asia.

Energy Development: Interim Strategy/Program

Energy Development

1. An advisory energy sector strategy for CAREC countries is under preparation. The medium-term work program for the Energy Sector Coordinating Committee (ESCC) is outlined below, together with the tentative framework for energy sector development through regional cooperation.

Energy Sector Coordinating Committee: Status Report and Medium-term Work Program October 2006

2. The Energy Sector Coordinating Committee (ESCC), which held its first formal meeting in October 2005, received endorsement during the Fourth Ministerial Conference to address a wide range of interests. In addition to power sector development, it was agreed that the ESCC will address oil and gas exports, energy efficiency and opportunities afforded by the Clean Development Mechanism of the Kyoto Protocol. It was further agreed that the ESCC will need to complement and support the activities of other regional energy coordinating bodies, and to develop a regional monitoring framework against which overall performance of the energy sector can be assessed.

3. At its April 2006 meeting in Urumqi, the ESCC agreed on a timetable to develop an Energy Sector Strategic Action Plan, identifying investment needs, capacity building needs, expected outputs and outcomes, and performance Indicators for the energy sectors of each of the CAREC countries. It is understood that this Plan, together with the individual country plans, will be completed in 2007. To date, national energy sector action plans have been received from Afghanistan, Azerbaijan, Kyrgyz Republic, Tajikistan, and Mongolia. The World Bank has prepared a Discussion Note on these action plans.

4. The ESCC also endorsed conducting a study to assess the available options for "Movement of Primary Energy Commodities from Central Asia". The PRC recommended that the study should be at a 'pre-feasibility' level, identifying the strategic options and policy choices and requirements. Project proposals resulting from this study would then be developed on a bilateral/trilateral basis with the relevant countries. Consultations are currently being held to determine the willingness of CAREC countries to participate in the study.

5. The ESCC further agreed that, in view of the complexity of the Clean Development Mechanism (CDM) and the many sectors that provide opportunities for CDM projects, the MIs should, in the context of their operational visits, make additional presentation to all relevant officials in each of the CAREC members. In this regard, it was agreed that CAREC members could benefit from the experience of PRC, who have the most CDM projects among CAREC members. ADB and the World Bank have developed a number of CDM programs and projects, as summarized below:

- The ADB Carbon Market Initiative (CMI) is currently receiving expressions of interest from potential participants. ADB's management has approved the CMI concept to be submitted for the Board consideration upon reaching approximately US\$80 million in commitments. An Asia Pacific Carbon Fund (APCF) is under preparation.
- The ADB Energy Efficiency Initiative (EEI) includes the preparation of country-level investment and action plans on energy efficiency, development of the project pipeline for

2008-2010, design and establishment of the Asia-Pacific Fund for Energy Efficiency (APFEE), and identification of immediate energy efficiency investment opportunities.

- The World Bank has recently endorsed an assistance program for countries of Central Asia which have ratified the Kyoto Protocol and have a portfolio with the World Bank. At present, Uzbekistan and the Kyrgyz Republic are the most likely participants. The assistance program will focus on raising awareness about the CDM opportunities and developing a potential pipeline of CDM projects. Related support is already being extended to Uzbekistan and Azerbaijan.

6. During the Fourth Ministerial Conference, Ministers signed the Memorandum of Understanding for the formal establishment of the CAREC Members Electricity Regulators Forum (CMERF). The Second Annual Meeting of the CAREC Members Electricity Regulators Forum (CMERF) was successfully held in Almaty, Kazakhstan on 11-13 September 2006. It was co hosted by ADB and the Agency for Regulation of Natural Monopolies (ARNM) of Kazakhstan. The three-day event sponsored by ADB and the Public-Private Infrastructure Advisory Facility (PPIAF) brought together a total of 60 participants: (i) regulators from Afghanistan, Azerbaijan, People's Republic of China, Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan and Uzbekistan; (ii) international power regulation experts, and (iii) representatives of multilateral institutions.

7. The Meeting covered the following main topics: (i) tariff design and social safety net; (ii) privatization of distribution company management; (iii) power utility costs; (iv) pricing of ancillary services; and (v) risk sharing in power purchase agreements. The ADB presented and discussed the interim findings of the ongoing studies on these topics. Prominent power regulation experts delivered presentations and led discussions on aligning government and investor expectations, regulatory issues faced by private companies and regulators, and shared the lessons learned from electricity restructuring in transition countries. The country delegations stressed the importance of the role that CMERF plays in supporting the region's power regulators and ongoing sector reforms. They indicated that training should be provided on specific regulatory topics.

Strategic Framework for the Energy Sector in CAREC Countries⁵

8. CAREC ministerial level meeting held in November 2005 concluded that development through cooperation is the way forward and greater momentum in regional cooperation is vital. In this context the ministers agreed that formulating a strategic framework is essential for enhancing regional cooperation and also enlarged the scope of the Energy Sector Coordination Committee's (ESCC) work to cover not only electricity but also oil and gas, energy efficiency and opportunities available under Clean Development Mechanism (CDM).

9. The Senior Officials Meeting held in April 2006 noted that the advisory strategic framework for the energy sector would be an input to the CAREC Comprehensive Action Plan as well as for the CAREC Business Development Forum.

⁵ This paper was prepared for the Energy Sector Coordination Committee Meeting to be held at Urumqi on October 17, 2006 by a World Bank team consisting of Venkaraman Krishnaswamy, Nikolay Nikolov and Raghuvier Sharma. The views expressed are those of the team and are not necessarily those of the World Bank, its management or its Board of Executive Directors.

10. The ESCC in its meeting held in April 2006 finalized and adopted its terms of reference, of which the fifth item was: “To advise on (a) the formulation of a comprehensive strategic framework for energy sector development including investments and policy measures; (b) the prioritization and sequencing of investments and policy initiatives for the short to medium term; (c) articulating associated performance indicators with a focus on key expected outputs and outcomes; (d) mainstreaming the strategic framework into the country based development plans and public investment programs, and financing options.”

11. In pursuit of this, member countries were invited to provide their national energy sector action plans. Such plans have been received from Afghanistan, Azerbaijan, Kyrgyz Republic, Tajikistan, and Mongolia and are awaited from the remaining members. Meanwhile available information with the World Bank and information collected by CAREC secretariat in their country workshops have been used to formulate the possible strategic framework.

12. The participants in the workshops conducted by CAREC secretariat in member countries in June-July 2006 brought out the following as the key elements (expected outputs/outcomes) of regional cooperation in the energy sector:

- Energy security and improvement in universal access
- Series of integrated energy markets among CAREC member country clusters (and their neighbors)
- Significant improvements in energy efficiency and conservation (including through CDM and Kyoto Protocol and domestic pricing reforms)
- Energy development opportunities facilitated on a cooperative basis
- Investment mobilization and private sector participation
- Facilitation of access to new energy markets
- Country based capacity building programs to enable the operation of the energy sector on commercial basis

13. The purpose of this note is to: (i) present in a uniform manner the individual energy action plans of the CAREC countries; (ii) outline a tentative framework for energy sector development through regional cooperation, mainstreamed into the countries’ energy action plans; and (iii) indicate the lines along which they could be further refined and updated.

14. The region covered by the CAREC countries has enormous energy resources unevenly distributed among the countries. Kyrgyz Republic and Tajikistan have a large hydro potential, but have little hydrocarbon resources. Azerbaijan, Kazakhstan and Uzbekistan have considerable hydrocarbon resources for export. Mongolia has enormous coal reserves. China has considerable energy resources of all types, but its rapidly growing demand far outstrips supply necessitating energy imports. Afghanistan does not have the financial resources to develop even its modest energy resources and depends significantly on energy imports in the short to medium term. The five countries in the west—Azerbaijan, Kazakhstan, Kyrgyz Republic, Tajikistan and Uzbekistan – have electricity systems in which nearly 100% of the population has access to electricity, and demand growth in the medium term in these countries is expected to be modest (in the range of 2% to 3% per year or even less). Access to electricity in Afghanistan is believed to be limited to about 16% of the population only. About 70% of the population in Mongolia has access to electricity and China is yet to achieve electricity access to 100% of its population, but has significantly high demand growth expectations based on the objective of doubling the GDP during 2000-2020. Such diversity and complementarity in resource endowments and the state of development of the sector and the economy provide considerable

scope for regional cooperation while pursuing national development goals. Regional cooperation would thus be a logical, and often a key component of the national energy strategies.

15. The overarching objective of the energy sector is perhaps best articulated as ensuring that adequate volumes of commercial energy supplies are made accessible to everyone in a reliable, financially sustainable and environmentally sound manner.

16. To achieve this objective the strategic framework would have the foundation of sound policy measures / initiatives on which would rest the investment initiatives relating to (a) the domestic energy sector recovery and security; and (b) regional energy cooperation and trade to enable exports, imports and for balancing demand and supply in the energy sector (Figure 1)

A. Strategic Policy Measures:

17. Achieving the overall sector objective would depend on the adoption of sound policy measures in a wide range of areas. Of these the following may be considered as strategically important from the regional context.

- *Improving the financial viability of the supply entities and ensuring sustainability of services.* This would involve operational improvements to minimize the cost of supply and tariff improvements to cover the full cost of supply (including the cost of capital). Key elements of operational improvements would be: (a) better and transparent accounting of energy flows throughout the system through appropriate system metering, (b) adoption of better and more efficient methods of meter reading, billing and collection and prevention of theft, and (c) the adoption of improved governance and internal controls to discourage corruption. Tariff improvements have to sub-serve the interests of ensuring financial viability of energy supply entity, managing demand or promote energy use efficiency and energy conservation, and enabling rational inter-fuel substitution (Possible performance indicators (PI) for this would be percentage of total system losses, generation (including net imports) to billing ratio, billing to collection ratio, ratio of average tariff/kWh to cost of supply and similar ratios for gas and heat).
- *Social Protection measures* to enable the poorer sections of the population to consume reasonable minimum quantities at prices they can afford, especially in the context of rising prices. (PI: Coverage Ratio or the ratio of people actually supported to those who should be supported and the Target Ratio or the ratio of the benefit actually reaching the poor to the total benefits provided by the scheme)
- *Sector Restructuring and Commercialization* to enable (a) private sector participation and investment, (b) greater transparency and efficiency, (c) competition, and (d) regional trade (PI could simply be the status of restructuring itself or the share of private investment in the total energy sector investment or imports and exports of energy).
- *Promotion of Private sector participation* especially in investments and management of the supply entities and operations (PI: volumes of investment, or the number of entities privatized or given on concession or management contracts)
- *Sector Regulatory arrangements* which (a) protect the consumers and the investors alike, (b) ensure quality of supply, (c) promote sector operational efficiency, and (d) enable third party access to transmission/transport lines and transparent transmission tariffs necessary to promote trade and competition. (PI: simple yes or no to each item)
- *Promotion of Energy Use Efficiency and Energy Conservation* (PI: per capita energy consumption, energy intensity of GDP growth)
- *Environmental Protection* (PI: Reduction in the pollution indicators)

- *Promotion of the use of alternative and renewable energy sources.* (PI: the percentage of energy supply from such sources to total energy supply)
- *Littoral Agreements for the use of sea bed resources in common seas such as the Caspian Sea* (PI: investments in the exploitation of such seabed resources)

Figure 1: CAREC Countries: Strategic Framework for the Energy Sector

<p style="text-align: center;">Investment Measures: Domestic Energy Sector For Sector Recovery/ Energy Security/ Access Energy Efficiency/Environment Protection</p> <p style="text-align: center;">(Short term / Medium Term)</p> <ul style="list-style-type: none"> • Commercial and Technical Loss Reduction • Rehabilitation of Energy Production Assets • Rehabilitation of Transmission and distribution networks • Expansion of Production, transmission and distribution capacities to improve access • Survey, Identification, Exploration and Development of Domestic Energy Resources • Investments in Decentralized heating options • Retrofits for mitigation of pollution • Investments in Alternative and renewable Energy Sources • Capacity Building for commercial operations, Regulation, DSM, and Policy making 	<p style="text-align: center;">Investment Measures: Regional Energy Cooperation & Trade For Exports and Imports Balancing of demand and supply/ Environmental Mitigation</p> <p style="text-align: center;">(Short Term / Medium Term)</p> <ul style="list-style-type: none"> • Investment in transmission for trade • Facilitation of access/transit to third country energy markets • Investment in Export Production • Development of Energy Resources on a cooperative basis • Investments in the integration of the energy markets • Capacity building in Energy Trade • Investment in Clean Development Projects • Investment abroad to access energy resources there
<p>Foundation: Policy Measures (Short Term / Medium Term)</p> <ul style="list-style-type: none"> • Financial Viability & Sustainability of Services • Social Protection for the poor • Sector Restructuring and Commercialization • Promotion of Private Sector Participation • Sector Regulation • Promotion of Energy Use Efficiency and Energy Conservation • Environmental Protection • Promotion of Alternative and Renewable Energy Sources • Littoral agreements for the use of seabed resources in common seas 	

B. Strategic Domestic Investment Measures:

18. To achieve the sector objective, a wide range of investment measures are needed to augment supplies, expand access to the population, improve reliability and quality of supply. The strategic priorities could be:

- *Commercial and technical loss reduction* in transmission and distribution systems including consumer metering and system metering improvements (PI: Systems Loss ratio, Generation to Billing ratio, Billing to Collection ratio, number of meters installed, percentage of consumers remaining unmetered).
- *Rehabilitation of generation/production assets* to improve production capacity and reduce cost of production (PI: Capacity restored or added, the extent of extension of useful life of these assets, or the percentage of production efficiency improvement)
- *Rehabilitation of transmission and distribution networks* (PI: transmission and distribution capacity restored or the extent of extension of useful life of these assets)
- *Expansion of Generation/Production, transmission and distribution facilities*, in a balanced and least cost fashion and in an environmentally sound manner, to meet forecast demand, and to increase access to the population. (PI: MW, Km of lines, MVA of substations added, percentage of population with access to energy)
- *Survey, Identification, Exploration and Development of Domestic Energy Resources* (PI: volume of additions to national resource inventory)
- *Investments in Decentralized Heating Options* especially in rural areas (PI: area actually covered by such options to the total area to be covered)
- *Retrofits to existing facilities to mitigate environmental degradation*(PI: data on extent of pollution before and after)
- *Investments in promoting Alternative and Renewable Energy Sources* (PI: volume of new capacities created under each such resource)
- *Capacity building* for the commercial operation of the sector, sector regulation, public private partnership arrangements and demand side management and policy making (PI: No. of people and organizations covered, No. of training programs organized)

C. Strategic Investment Measures for Regional Cooperation and Trade:

19. Energy security consists essentially of diversifying energy resources and the sources of supply of such diversified energy resources. Often imports constitute an important component of the cost effective supply mix and thus enhances energy security. Energy trade enlarges energy markets and resulting economies of scale make it possible to exploit economically certain energy resources (a large hydroelectric project for example), which may not make economic sense in the context of meeting only the small domestic energy demand. In the case of small economies, endowment of large energy resources may make it possible to achieve energy export-led growth. Energy trade and integration and enlargement of energy markets are thus significant aspects of regional cooperation. CDM provides yet another opportunity for the development of clean energy resource potential (hydro, wind, solar) for effective trading and environment protection.

20. Strategic priorities in such regional cooperation oriented investments would include:

- *Construction of trade related transmission /transport facilities* including facilities for energy transit with metering arrangements (PI: Volume of the incremental exports/trade facilitated)

- *Investment in export production facilities* Identification, development and construction of such facilities preferably using Public Private Partnerships to secure investment and commercial management and involving MIs to provide mediation and risk mitigation (PI: quantum of such export production)
- *Development of large energy resources on a cooperative basis* through Joint ventures involving two or more countries. (PI: Number of such projects undertaken and successfully completed)
- *Investments in the integration of energy markets of two or more countries* (PI: No. of such market agreements implemented)
- *Investment in Clean Development Mechanism* related projects (PI: No. of such projects completed)
- *Capacity building* for energy trade and performance and settlements under contracts for supply and purchase, arbitration systems, harmonization of system operations and codes (PI: Number of people and organizations covered, Number of training programs organized)
- *Investment abroad to access energy resources there* (volume of energy resources so accessed)

21. Both policy measures and two types of investment measures have to be divided into short term (2006-07) measures and medium term (2007-10) measures. For each activity the outcome and or outputs and performance indicators (wherever possible) need to be indicated. Possible PIs for most items have been suggested above.

22. Based on the very limited information received from the member states and the information readily available in the World Bank, Appendix 1 indicates (for each country) a National Energy Action Plan in which the above considerations have been mainstreamed at least partially. Its inadequacies (in terms of lack of coverage in some cases, excessive coverage of details in some cases, lack of performance indicators in most cases) highlight the need for the ESCC to obtain from member countries more complete information on their nationally important policy and investment measures (avoiding at the same time too much of local details) in a common format. It is hoped that in subsequent events the member states would be able to provide a more complete set of information under the strategic headings along with outcome, outputs, time frame, funding status and details, and that the country appendices could be updated refined and improved at least once a year.

23. Among other things the above approach could help us identify opportunities for regional cooperation in the energy sector among the CAREC countries based on common interests and shared experiences.. Such areas of common interest include a range of topics such as energy conservation, energy use efficiency improvement, promotion of alternative and renewable energy sources, retrofits for environmental mitigation. For example, in addition to these areas, China may have a great deal of useful experience in the extensive use of prepaid metering

24. The above approach may also lead to the identification of major potential regional projects which may deserve special attention from ESCC to pursue the possibility of promoting them, and monitoring their progress. Examples of such bold stroke projects could include the items shown in Table 1.

Table 1: Examples of Some of the Key Projects for Regional Cooperation

Project	Sector Outcomes	Indicators/Targets(2007, 2010)
Completion of Kekiyak-Kumkol section of the Kazakhstan-China oil pipeline	To enable flow of Oil from the Caspian Sea region of Kazakhstan to China	Completion by 2010. Flow of 400,000 bbl of oil/day to be achieved
Kazakhstan Joining Uzbekistan and Turkmenistan in Central Asia Oil Pipeline project to access Gwadar deep sea port in Pakistan	Diversify opportunities for oil exports	Could materialize by 2010 or later
China-Uzbekistan partnership in surveying and drilling for oil and gas.	Improved oil and gas export potential in Uzbekistan. Improve security of oil and gas supply for China	Development of new oil and gas fields in Uzbekistan
Kazakhstan joining Turkmenistan and Uzbekistan in the Trans Afghan pipeline project	To improve project economics by providing larger volumes of gas for export and thus making it attractive to India also to join this project as importer	Materialization by 2010. PI: flow of gas to Pakistan and India
Kazakhstan- China gas pipeline	Enable Kazakh gas to flow to Xin Jiang from where it flow further east in the Chinese east-west gas pipeline	Possible completion by 2010 or later. PI: flow of Kazakh gas into Xin Jiang province
Gas Flaring Reduction in Kazakhstan and Azerbaijan and elsewhere in the region for want of gas gathering and transmission facilities.	To avoid environmental pollution and increase gas availability for national and regional benefits	PI: Substantial reduction in gas flaring by 2010
The second phase of the North South Electricity Transmission Line Project in Kazakhstan	Enhanced regional integration with respect to optimizing the use of energy resources through electricity trade	Construction of a new 475 km, 500 kV single circuit transmission line from Ekibastuz substation (1,150/500 kV) to substation Agadyr (500kV),
Rehabilitation of the western part of the Kyrgyz section of the Tashkent-Bishkek-Almaty (TBA) gas pipeline	Enhanced quality and reliability of supply of natural gas from Uzbekistan to the Kyrgyz Republic and southern Kazakhstan,	Rehabilitation of 63 kilometers of the line from the Kazakh border to Bishkek (2007-2008)
Central Asia - South Asia Electricity Trade Projects (CASAREM)	Enhanced export-led economic growth for CA countries and improved power supply in Afghanistan and Pakistan through public-private partnership	1.Completion of Sangtuda-1 HPP in Tajikistan (2008) 2. Completion of (i) a dedicated high voltage transmission link between Tajikistan and Pakistan, via Afghanistan, and (ii) 220KV lines in Tajikistan 220Kv, 90 km (Lolazor-Obimazor) and from Tajikistan to and within

Project	Sector Outcomes	Indicators/Targets(2007, 2010)
		Afghanistan. 3. Completion of 500 kV transmission link of 350 km within Tajikistan to link the country's south to its north
Kazakhstan and Uzbekistan joining CASAREM project as exporters of thermal power	This will enable export of "firm power". Larger volumes may enable exports to India too	To be completed by 2010. PI: export of 1000 MW by 2010
Studies on DSM and Retail price adjustment for gas in the light of steeply rising gas prices in the region	Greater energy use efficiency, improved financial viability and improved resource allocation in the region	Studies to be carried out upon availability of adequate financing. Implementation in the medium term. PI: Reduction in the GDP elasticity of natural gas demand
Study on Mongolia's potential as an energy transit country	Promotion of energy trade between Russia and China and also possibly Korean peninsula	Studies to be carried out upon availability of adequate financing..
Exchange of experience in Sector restructuring, Private Participation, Regulation and Capacity Building	Benefit from the experiences of each other.	Exchange in respect of regulation is already taking place. Re: the rest appropriate forum/event to be evolved in the medium term
A Study of the potential of the Xinjiang province to emerge as a major energy transit province	A detailed knowledge (of the energy potential, status and outlook (demand and supply) and its links to the east) of this province will promote further trade between Central Asia and China	Study to be carried out upon confirmation of interest from key relevant entities in the CAREC countries and availability of adequate financing.
A study of China's role as a major investor in the energy resource development of Central Asia and as the market for Central Asian energy exports	The Study will enable Central Asia to make effective use of the potential of China in this regard.	Study to be carried out upon confirmation of interest from key relevant entities in the CAREC countries and availability of adequate financing.
A study on possibilities for movement of primary energy commodities from Central Asia	Improved possibilities for energy Exports for Central Asia.	Study to be carried out upon confirmation of interest from key relevant entities in the CAREC countries and availability of adequate financing.

25. Interdependence among countries is increasing globally. Within the CAREC region interdependencies are created by differential resource endowments and the differences in the status and growth rates of development. A matrix as given in Appendix 2 could help to focus on the type of interdependencies and to isolate the areas for further study, analysis, and cooperative measures.

26. The members of the Energy Sector Coordinating Committee are invited to comment on the proposed strategic framework and national energy action plans with a particular focus on further identifying the interdependencies and areas of regional cooperation with relevant

initiatives (“bold strokes”), the national energy strategy would call for. Such tentative activities are presented in Table 1 on Key projects for regional cooperation above and in Appendix 2 on Energy Interdependencies in the Region.

27. The members of the Energy Sector Coordinating Committee are also invited to share their views on: (i) whether the Terms of Reference of the Committee may need amendments; and (ii) whether future work under the proposed strategic framework will include discussions on progress in implementing the national energy action plans in terms of sharing knowledge and experience, or would focus mainly on regional cooperation activities.

Tajikistan Energy Sector Action Plan

A. Policy Measures

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Enhance Capacity Building	Separation of policy making and operations and improved regulatory and policy making capacity	Separate policy-making from commercial operations (separate Barki Tajik from the Ministry of Energy (06) Autonomous and competent single regulatory body to be in operation by 2010
Improve Financial Viability of the sector	Improve structure and levels of electricity tariff to cost recovery levels. Improve metering, billing and collection	Cost recovery tariffs in stages by 2010. Billing and collections to reach industry standards by 2010
Social Protection	Ensure access to a basic minimum energy consumption by the vulnerable sections of the population	WB financed study completed by 2006. Improve lifeline tariff and ECM based on recommendations (2007-08). Operation of a fiscally sustainable and well targeted social protection scheme for energy consumers by 2010
Sector Restructuring :Electricity	Unbundling to enable trade, improved efficiency, private investment and exports	By 2007 one company to own all generation and transmission assets and three distribution companies. By 2010 separate transmission company and set up several generation companies including those for new projects.
Sector Restructuring: Natural Gas	Unbundling to improve trade and efficiency of operations	By 2010 separate the gas transmission as one company which will also handle imports of gas and transit issues and divide gas distribution into 3 companies co-terminus with those of the three power companies.
Promote Private Participation	Private participation is needed in power and gas distribution and in export production	Sangtuda Power company with substantial private investment to be in operation in the medium term. Pamir Power II to be facilitated by 2008-09

B. Investment Measures (Domestic)

Loss Reduction Programs in Power and Gas Sectors	Extensive metering and billing and collection improvements. Change the norms for gas billing meanwhile.	Metering, billing and collection to reach industry standards by 2010. private interest in Distribution rehabilitation to be sought meanwhile
Energy Efficiency Program	Shifting Aluminum production from Winter to summer,	Reduction in Winter demand by TADAZ by 2007-2010
Network rehabilitation	Reduced technical losses	Private investment to be sought in the medium term
Decentralized heat delivery	Shift heat source away from electricity to gas, coal and biomass through suitable	Heat Strategy Study funded by EU JEP II.. Use of electricity for space heating to come down notably by

	technology	2010
Power Plant Rehabilitation	Rehabilitation of Nurek HPP, Kairakum HPP, Golovnaya HPP, Varzob cascade HPPs which will increase generation capacity by 550 MW and provide notable winter supply to ease winter shortages Rehab of Dushanbe and Yavan CHPs would also be examined.	Private sector is being approached. Interest has been expressed by one investor in Golovnaya HPP. Others would be pursued

C. Investment Measures (Exports)

Sangtuda I HPP	To export 670 MW to Pakistan by 2009	Generation co has been set up with 75% foreign equity. Pakistan has agreed to buy 1000 MW from Tajikistan. Further studies are ongoing. Project completion targeted for 2009-2010
Export transmission line for Sangtuda I	Dedicated export line to Pakistan	Negotiations with interested parties are ongoing. Expected completion by 2009-2010
220 kV double circuit lines to Afghan border to export 300 MW to Afghanistan		MOU signed by Afghanistan. ADB financing is envisaged Likely to be completed by 2008-09
Sangtuda II HPP	To supply 270 MW to Iran	An MOU has been signed with Iran. Iran will make substantial investment in this. Completion date likely by 2010.
Tajik North-South 500 kV transmission line	This will connect the country's load centers with resource centers in a reliable manner and would also help in allowing Kyrgyz power to flow to Pakistan through the dedicated transmission line from Sangtuda I	Chinese Exim bank has financed this line and the line is expected to be operational by 2010
Rogun HPP,	Major Storage hydro project which will provide winter power and would provide large volume exports to Pakistan./Iran/ and possibly China	Intergovernmental riparian agreements with down stream countries would be pursued. Private sector interest already expressed will be followed up. Commissioning would be beyond 2010

Note: The above table had been prepared from the contents of the Policy note and action plan submitted by the Government to WB in respect of a recent loan operation and other information available with the WB.

Kyrgyz Republic: Energy Sector Action Plan

A. Policy Measures

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Strengthening Regulation	Independent, competent and coordinated regulation of electricity and gas sectors	Establishment of an independent state regulatory authority in the short term
Sector restructuring and privatization	Privatization or grant of concessions for power distribution companies, Electricity market improvements, Network access rules and sales of electricity from alternative energy sources, Gas sector denationalization and privatization, complete privatization of the coal sector	Operation of retail competition by 2010, Notable progress in privatization in power, coal and gas sectors by 2010.
Improvement of corporate governance and financial management	Improvement in the selection of executives and Board Members of the energy companies. Institution of financial incentives for improved performance	Short term program pending privatization in the medium term.
Medium term tariff policy, Improvements in metering, billing and collection (power, gas and heat).	Tariffs to cover economic costs of supply, and to improve the financial viability of the supply entities. Also cross subsidies would be sought to be minimized. Financial control and discipline to be improved. Predictability and openness of the policy.	Gradual increase in tariff levels reaching 2.3 Cents/kWh, collections in cash to reach 93% of bills by 2010 and QFD to be reduced to 2.9% of the GDP by that time.
Social Protection Arrangements	Monetization of the privileges (in utility tariffs), Targeted social protection to help the poorer households	Monetization of privileges by 2008 and operation of a social protection scheme by 2010.
Energy use efficiency and energy conservation	Intensity of energy consumption and per capita energy consumption would be reduced from the present high levels. Special focus on consumption by government agencies.	Formulation of program by 2008 and implementation thereafter.
Create conditions for development and use of alternative and renewable energy sources.	Diversification of environmentally friendly energy sources	By 2010 increase in investment in such sources and their contribution to energy supply.
Improve accounting for export volumes and value and maximize value of exports	Optimal export receipts to the sector and economy by use of transparent mechanisms	To be achieved in the short term. Export tariffs to be not lower than the regional market prices.
Capacity building for State Property Management	Improved performance of state owned assets	To be achieved in the medium term

Committee	and improved privatization receipts and dividends.	
-----------	--	--

Note: Policy measures may give priority to creating legal basis for the grant of concessions in respect of power, gas and heat facilities.

B. Investment Measures (Domestic)

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Commercial Loss reduction in distribution segment of power and gas	Improved financial viability of the distribution entities	Improved metering, billing and collection efficiencies by 2010 contributing to QFD reduction targets.
Distribution rehabilitation and reinforcements (mostly to be done by private investors after concessions are given)	Reduction of technical losses to industry standards, increase in sales	Increase in sales, reduced shortages in winter by 2010.
Rehabilitation of generating assets: Bishkek CHP 1, and HPPs Uchkurgan and Atbashy, (\$ 40 million)	Recovery of full name plate generating capacity. Relief to winter power shortages	To be completed by 2010
Technical upgrading and rehabilitation of small HPPs	Recovery of name plate capacity	To be completed by 2010
Construction of CHP II in Bishkek	To provide the thermal power support to the system and to relieve winter power shortage	To be completed by 2010, perhaps by private investors with concession for Karakeche Coal mines, heat distribution in Bishkek and rehab if CHP I.

Note: It may be worth the while to consider according priority to carry out studies (a) greater use of coal in the system, and (b) Decentralized heating options to minimize the use of electricity for space heating.

C. Investment Measures (Exports)

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Construction of Kambarata II HPP 360 MW (\$ 365 m)	Increased amount of electricity available for export	Construction period 4 years. Targeted for 2010 tentatively.
Construction of Kambarata I HPP 1900 MW storage hydro	To relieve winter energy shortages and to increase greatly exportable surplus.	Water sharing agreements to be concluded with riparian states in the medium term. Given the high cost (over \$2.0 billion) and the construction period of 8 years this will be a long term project.
Construction of 500 kV transmission line Kambarata-Kemin and a 220 kV substation at Datka and associated by pass lines (\$455 m)	Facilitate export of power from Kambarata HPPs. Also relieves congestion in the by-pass area	Bypass may be ready in the medium term, but the other items are for the long term completion.

Mongolia: Energy Sector Action Plan

A. Policy Measures

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Ensure financial viability of power sector by power tariff increases to affordability levels, write-off irrecoverable debts, and ensure sustainable borrowing levels with sovereign guarantee	Improved financial viability of the sector and reduction in inter company arrears.	Write off of debts/arrears in the short term Tariff adjustments both in the short and medium term to reach affordability levels by 2010.
Social protection in the context of tariff increases by way of lifeline tariffs for power and heat, with subsidy coming from social funds.	Improved affordability of the poorer sections of the population	Lifeline tariffs to be in place in the short term. Subsidy needed for this to be firmed up from social funds in the medium term
Promote greater exploitation of the coal resources	Environmental friendly utilization of coal resources for the country's benefit.	Complete studies for increased coal exports and foreign experience in coal processing technologies in the short term. Promote coal liquefaction and gasification technologies and processing of coal for petrochemicals
Creation of investor friendly condition, by improving the investment environment and by amending the Energy law.	New Market structure and clarified status of the Energy Regulatory Authority	Amendments to law and announcement of rules and regulations in the short term New market structure in operation in the medium term
Promotion of energy conservation and use of renewable energy	Enactment of laws enabling the encouragement of these activities	Pass the Renewable energy law in the short term and the other law in the medium term, based on a study of experiences of other countries.
Capacity Building	Enhanced capacity in the country for sector policy making, management and regulation	Training courses conducted in the short term and comprehensive program evolved in the medium term.

B. Investment Measures (domestic)

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Reduce losses and improve collections and reinforce distribution networks	Increased sector financial viability	Metering, billing and collection improvements in the short term and Distribution network and management strengthening in the medium term
Improve reliability and availability of power plants and transmission network in the Central Grid	Better balance between demand and supply in the grid	Improved efficiency of operation in the short term

Rehab of Power plant #2 and 3 in Ulaanbaatar and Darkhan Power Plant	Recovery of nameplate capacity of the units	Improved efficiency of operation in the medium term
Loss Reduction heat efficiency improvement projects to improve the efficiency of secondary networks, Renovation of Darkhan Heating system and DSM measures	Improved efficiency in the heat sector	Reduced level of losses and improved efficiency in the district heating systems of Ulaanbaatar, Darkhan, Erdnet, Choibalsan, and other aimag (provincial) centers in the medium term
Construction of Egiin HPP (220 MW), Feasibility studies for Orkhon HPP (100 MW) and Ulaanbaatar Pumped Storage project (40 MW)	A more reliable Central Energy System capable of meeting its forecast peak demand	120 soums (areas) presently receive 3-5 hours of supply. This will be increased to 24 hour supply in the medium term
Construction of Durgun HPP (12 MW) and Taishir HPP (11MW) in the Western Grid	A more reliable Western Grid	Improved supply situation in the grid in the medium term
Construction of a new coal fired thermal power plant at Tavantolgoi and construct transmission lines to serve newly developing mines and the Southern Gobi area	Extension of the grid to supply new demand and new areas.	Carry out studies, solicit financing from possible investors, determine the project structure (BOT/Concessions) and secure finance in the short term and supply power in the medium term
Interconnection of the Central, Eastern and Western grids	To enable integrated operation the grids	Carry out studies in the short term and complete the integration in the medium term ⁶ (?)
Provision of solar panels and wind power resources to the nomadic herding families.	Decentralized access to modern services and basic needs for these families.	50,000 families would get solar panels by 2006 Over 170,000 families would get solar or wind generating sources in the medium term
Import LPG and promote its use in transport, industries and households.	Diversification of environmentally friendly energy source.	Taxi cabs and public transport to switch to LPG in the short term. Carry out a LPG development master plan in the medium term
Studies for wind, solar and small hydro power	Promotion of alternative and renewable energy sources	Carry out studies in the short term and solicit funding support in the medium term. Over 30 soums (areas) not connected to the grid will benefit from these initiatives.

C. Investment Measures (Export/import/transit)

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Studies to review the possible role of Mongolia as transit country for flow of oil, gas and electricity	Emergence of Mongolia as major energy transit country. May also make large scale	Studies to be funded by MIs to be completed by 2008 ⁷

⁶ Source: Presentation in the Asian Energy Security Workshop, Beijing, May 12-15, 2004 by Ts. Sukhbaatar et al of the Mongolian Energy association.

from Russia to China and perhaps to Korean peninsula	generation based on coal economic for export to China.	
--	--	--

Azerbaijan: Energy Sector Action Plan

A. Policy Measures

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Adjust tariffs to cover costs, improve metering, billing and collections, reduce arrears and resolve mutual debt issues. Use improved norms for billing unmetered customers	Improved financial discipline in Gas sector	All customers metered. Commercial functions to reach utility standards by 2010.
Give priority for loss reduction measures, gas treatment measures	Improved quality of gas and increased volumes of gas sales.	Measures to be completed by 2010
Improve legislative framework in the energy sector	To restructure the energy/power/heat sectors and increase private participation in utility operations	Laws to be enacted in the short to medium term
To improve legislation to promote further utilization of alternative and renewable energy sources based on a study of international experience in this regard, and promote the increased use of such resources. Train the specialists and educate the consumers. Undertake a study of the potential for such resources.	Increased use of such resources	Studies to be completed and Laws to be improved by 2007. Progress in increased utilization in the medium term
Focus on measures to improve metering points to ensure accurate recording of fuel and energy resources use (system metering and consumer metering)	Better management of resources	Some progress in the short term and notable progress in the long term.
Privatization of small HPPs (Guba, Gusar, Chichakly, Zeykhur, Nugedi, Chinarly)	Private investment in small hydro power sector	To be completed in the short term
Establish independent regulatory regimes for gas, heat and electricity	Independent regulation to protect investors and customers	To be operational in the medium term
Design and adopt social protection schemes to enable the poorer sections of the population to consume a reasonable minimum amount of energy at affordable cost.	Social protection for the poor in the context of tariff increases to achieve financial viability of supply entities.	To be operational in the medium term.

Priorities indicated in other sources: Gas sector: Rehabilitate gas storage, Avoid gas flaring, increase capacity for gas treatment at (Garadag or tolling arrangement at Sangachal) , Rehabilitate gas transmission and distribution network, Control system losses, adjust tariffs to cover costs and

⁷ Source: Suggestion by participants in the CAREC secretariat workshop in June-July 2006.

investment needs, improve collection, reduce debt, eliminate non-payment, establish regulatory regimes, improve coordination between SOCOR and Azerigaz. Improve norms for billing unmetered customers (WB note on Gas Sector Challenges Jan 2006).

Power Sector: Collection improvement plan to reach 100% by 2010 by the management contractors of the distribution companies needs to be monitored. Restructuring for separation of generation and transmission to precede private sector involvement in generation, transmission and dispatch rehab needs priority. Tariff adjustment / Social protection. Regulatory arrangements / competition/ market structure/private sector participation (WB Issues and options in Energy sector March 2005)

B. Investment Measures (Domestic)

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Geology, geophysics and geological exploration:		
(i) Completion of the "Ashrafy" and "Garabag" fields exploration and preparations for industrial development (ii) Restarting of survey-exploration works on the "Umid" and "Babek" perspective structures	Increased hydrocarbon resources for production	(i) Completion by 2008 (ii) Restart in 2008
Development of oil & gas fields		
(i) Development of "Ashrafy" and "Garabag" fields (ii) Preparation of a special activity plan of actions to ensure efficient development of "Gunashly" field; (iii) To ascertain the reserves of fields under development, to prepare new development projects and carry out supervisory control (iv) Drilling of horizontal wells; (v) Use of modern effective methods in layers and borehole zones to increase oil recovery of layers	Increased hydrocarbon resources for production and increased production	(i) Implementation: 2008-2010 (ii) Implementation short term (iii) to (v) Implementation 2005-2015
Oil & Gas Production		
Construction, refurbishment and rehabilitation of hydrotechnical plants for oil & gas production in offshore fields	Increased production of hydrocarbons	Implementation 2005-2015
Modernization of gaslift system on "Gunashly" field; rehabilitation of system for low-pressure gas collection and its transportation to shore; construction of pipeline for transportation of high-pressure gas to "Oil Rocks"; upgrading of deepwater fixed oil rig power supply system	Increased production of hydrocarbons	Implementation 2005-2007
Installation of computer-aided oil and gas accounting/metering nodes and upgrading of the computerized information-management system for optimization of control over oil & gas extraction and transportation processes	Increased production of hydrocarbons	Implementation 2005-2008
Use "Bahar" field as an underground gas storage	Increased gas storage	Implementation 2005-2010
Rehabilitation of Mobile Deepwater Diving Plant for diving works in 200 m depths	Increased production of hydrocarbons	Implementation 2005-2008
Upgrading of the "Khazardenizneftdonnama" (Caspian Oil Fleet) and purchase	Improved sea transport of oil	Implementation 2005-

of modern ships to increase the quality of sea transport services		2015
Modernization of existing technical and technological facilities of Baku Deepwater Platforms Plant to meet the international standards	Increased production of hydrocarbons	Implementation 2005-2009
Oil Refinery		
“Azerneftyanajag” Refinery Plant: construction of European standards (EURO-2005) hydrogen purification system for production of diesel and jet engine fuel	Increased production of refined products	2010-2015
Construction of European standard water treatment facility to supply chemically pure water to the existing and under-construction facilities	Improved refinery operations	2005-2007
Construction of a facility for processing oil and oil product sludge	Improved refinery operations	2005
Baku Oil Refinery Plant: Modernization of the plant to increase product quality, reduce losses, ensure efficient utilization of wastes and improvement of heat exchange system of initial oil refinery ELOU-AVT-6 facility	Improved refinery operations	2005-2007
Construction of the facility for production of oxygen-component high octane petrol component – de-isopropyl ether from propane-propylene gases	Improved refinery operations	2005-2007
Construction of the butane-butylenes gases alkylation facility to produce high octane petrol which meets international standards	Improved refinery operations	2005-2009
Gas Processing		
Azerbaijan Gas Processing Plant (AGPP) JSC : Apply the use of propane cooling system to intensify the gas processing	Increased volume of gas treatment which will reduce corrosion of gas pipelines	2005-2008
Construction and rehabilitation of automated metering system and gas metering points for dry gas delivery	Better resource control	2005-2008
Construction of modern gas processing facility with 2.5 billion cubic meters/year processing capacity to intensify the processing of gas	Increased volume of gas treatment which will reduce corrosion of gas pipelines	2008-2010
Upgrading of processing and manufacturing facilities as well as water and power supply system of the plant to ensure continuous and efficient operation mode	Improved production	2005-2015
Health and safety environment		
Establishment of training center for human life safety on the sea	Safety and environmental improvement of operations	2005-2007
Development and use of alternative utilization techniques for main pollutants in production sites		Results in medium term
Clean up of oil ponds and rehabilitation of polluted areas originated from oil-gas production in Absheron Peninsula		Results in medium term
Gas supply		
Implementation of works on receiving, transportation and distribution of high-pressure gas coming from “Azeri”, “Chirag”, “Gunashly” and “Shahdeniz” fields and from Sangachal terminal		2005-2008

Removal of gas pipelines from basements of multi-story buildings and replacing them to safe places in Baku, Sumgayit and Ganja	Rehab of gas pipelines	2005-2007
Rehabilitation of Astara-Gazimammad gas pipeline	Rehab of gas pipelines	2005-2008
Implementing works to expand the active gas capacity of "Garadag" and "Galmaz" gas storages up to 3.0 billion cubic meters	Increases Gas storage capacity	2005-208
Construction of main pipelines and control/metering points to increase the reliability of fuel supply to AzDRES and Ali-Bayramly SRPP	Rehab of gas systems	2005-2006
Construction of Sumgayit-Digah main gas pipeline and gas control/metering points required for rehabilitation of Sumgayit CHPP	Rehab of gas systems	2005-2006
Restoration of gas supply to Azerbaijan regional centers with suspended gas supply	Restoration of gas supply	2005-2008
Construction of 530 mm high pressure "Culfa-Nakhchivan" gas pipeline with crossing of Araz river Construction of gas metering point at Culfa city gas inlet stations, gas quality check laboratory and operator's building. Setting up communication system Rehabilitation of gas distribution network in Nakhchivan city Rehabilitation of gas distribution network and system in regional centers of Nakhchivan Autonomous Republic Setting up communication system, construction of gas metering points, laboratory and new gas compressor plant on Azerbaijan (Astara city)-Iran border for gas export to Iran	Restoration of Gas supplies to Nakhchivan Autonomous Republic (Has this been achieved already?)	2005
Connecting of control/metering system software and gas distributors' software, communication equipment and channels into a united flexible control system, and based on that, establishment of an automated Central Dispatch Board	Operational improvements	2005-2007
Installation of domestic gas meters	Improved commercial practice in the sector	2005-2008
Construction, Reconstruction, Capital Repair and Maintenance of Power Plants		
Rehabilitation of 1-8 units at AzDRES	Generation Rehabilitation	2005-2008
Complete rehabilitation of Mingechavir HPP	Generation Rehabilitation	2005-2007
Commissioning of Nakhchivan CHPP by shifting from liquid fuel to natural gas.	Efficiency improvement	2005- 2006
Construction of 400-500 MW-capacity modern power plant in Sumgayit city	Generation capacity addition	2005-2007
Construction of 400 MW-capacity 2nd power unit at Shimal DRES	Generation capacity addition	2005-2008
Construction of a power plant of 800-900 MW capacity in Ali-Bayramly City	Generation capacity addition	phase 1: 2007-2009 phase 2: 2010-2011
Construction of 36 MW "Ordubad" and 4.5 MW "Vayxir" HPP Plant	Generation capacity addition	2005-2009
Feasibility study for the construction of modern CHPP in Sangachal settlement	Studies for future capacity addition	2007
Feasibility study for the Hydro Accumulation Power Plant in Shamkir	Studies for future capacity addition	2007
Feasibility study for the construction of AzDRES 9th Unit	Studies for future capacity addition	2005-2007
Feasibility study for the construction of the CHPP in Nakhchevan AR (100 MW)	Studies for future capacity addition	2006-2007

Development of High Voltage Electric Networks		
Reconstruction of electric transmission systems and rehabilitation of National Dispatcher Center	Rehab of transmission and dispatch	2005-2007
Construction of inputs & outputs of 330 4 th ETL between Ali-Bayramly DRES and Yashma substation to 500/330/220 kV Absheron substation. Reconstruction of 330 kV system	Rehab of transmission system	2005-2006
Construction of 220/110/10 kV "Boyukshor" substation and 220/110/10 kV "Sheki" substation and connecting them by 110-35 kV ETL.	Rehab of transmission system	2005-2008
Construction of two circuit 220 kV ETL between Shimal DRES "Hovsan" and "Boyukshor" – "Sanaye Govshagy" substations.	Rehab of transmission system	2005-2007
Replacement of old transformers with new and more powerful ones in 330/110 kV Ganja, 220/110/10 kV Khirdalan and Agsu, 110/35/6 kV Binagedi, Zabrat and Akhmedli substations	Rehab of transmission system	2005-2006
Distribution Rehabilitation		
Construction and rehabilitation of Nakhchivan HVN	Improvement of Power Supply of Nakhchevan AR	2005-2006
Reconstruction of existing 110, 35, 10, 6, 0.4kV networks in Baku, construction of new substations, ETLs and work on their connection to HVN.	Improvement of Power Supply of Baku City	2005-2015
Improvement of energy distributing in Sumgayit, Guba, Khachmaz, Gusar, Devechi, Siyazen, Gobustan regions.	Improvement of Electricity Supply of Sumgayit City	2005-2015
Construction of new substations and ETL, replacement of old transformers with new and more powerful ones in Ganja and western regions in order to improve energy distribution to this region of the country	Electric Network Reconstruction and Rehabilitation Activities to be Performed in Ganja and Ali-Bayramly regions	2005-2015
Construction of new substations and ETL, replacement of old transformers with new and more powerful ones in southern regions in order to improve energy distribution to this region of the country		2005-2015
Management of the energy sector		
Establishing of integrated computer-information network and centralized data bank in fuel-energy sector	Improved sector management	2005-2010
Establishing of sector-based information recourses and automatic information and project system	Improved sector management	2005-2011
Alternative (renewable) Energy Sources		
Development of single scientific-methodic coordinating center and database for efficient utilization of alternative (renewable)	Promotion of Alternative energy	2004-2006
Undertake actions towards the reconstruction of Varvara Hydro Power Plant	Renewable energy hydro	2005-2007
Design and construction of hydro power plant on Vaykhyr River	Renewable energy hydro	2005-2007
Carry out the construction of small hydro power plants on mountain rivers and irrigation canals in order to use their potential	Renewable energy hydro	2005-2013
Wide application of wind power plants in accordance with wind power potential	Promotion of wind power	2004-2013

in Azerbaijan		
Study the wind power potential in electricity supply in Nakhchevan Autonomous Republic and secure its utilization	Promotion of wind power	2006-2008
Application of solar collectors for heating in Absheron Peninsula, Mil-Mugan flatland and Nakhchevan Autonomous Republic	Promotion of Solar energy	2005-2007
Using local scientific-technical potential and raw materials, Increase the efficiency rate of photo elements used in production of solar power and start their production	Promotion of Solar energy	2005-2007
Provide heat to residential, institutional and other buildings by using the thermal energy of geothermal waters	Promotion of Geothermal energy	2005-2013
Application of plastic pipes with lower heat transfer capacity in order to efficiently utilize thermal energy of geothermal waters	Promotion of Geothermal energy	2006-2013
Use of geothermal waters for heating greenhouses in fall-winter seasons	Promotion of Geothermal energy	regularly
Conduct scientific-research works towards the conversion of power of sea high and low tide into electric power	Promotion of tidal energy	2005-2010
Develop modern technologies for production of bio-substances from industrial, agricultural and domestic wastes; undertake works towards construction of small biomass-firing power plants	Promotion of bio-mass power	2005-2013
Develop technologies for getting coke briquettes from oil refinery wastes at refinery plants in order to produce heat energy	Promotion of decentralized heating options	2005-2008

C. Investment Measures (Electricity Trade)

Expanding of cross-border relations with neighboring countries		
Construction of second 330 kV line between Derbend (Russia) and Yashma (Azerbaijan) and construction of 330-110/10 kV Khachmaz substation.	Improved trade with Russia	2005-2007
Rehabilitation of 330 kV- section of Imishly substation in order to increase electric power exchange with Islamic Republic of Iran and construction of second 330 kV ETL between Imishly and Parsabad	Improved trade with Iran	2005-2006
Construction of 330 kV AzDRES-Imishly and 330 Kv Ali-Bayramly SRPP-Imishly ETLs.	Improved trade with Iran	2005-2007
Construction of 220 kV ETL between Ali-Bayramly SRPP and Salyan, construction of Salyan substation with one 125 MW capacity transformer and its connecting to 110 kV ETLs	Improved trade with Iran	2005-2006
Construction of 220 kV Salyan-Masaly and Masally-Astara electric power transmission lines, reconstruction of 220 kV Masally substation.	Improved trade with Iran	2005-2006
Construction of 110 kV ETL from Araz HPP to link to 110 kV Nakhchivan-Julfa ETL	Improved trade with Iran	2005

Note: Key point to discuss. (1) Most of newly discovered and produced gas is destined for export. Gas demand in Azerbaijan is forecast to increase and it is expected the country will continue to import gas from Russia (present price \$110/KCM) at a price higher than what it will get from gas exports to Turkey. This raises the priority for eliminating gas flaring, loss reduction in gas transport and distribution, economic pricing, and demand side management in respect of gas. All new power plants based on gas need to adopt combined cycle technology. Gas use in the standard steam turbines units should be avoided. (2) Oil production is expected to peak and decline from 2012 creating spare capacity in the BTC oil pipeline. The need for allowing Kazakh and Turkmeni oil (possibly Uzbek oil too) to flow through this route may improve the economy of this line and will provide oil from these countries outlets to a seaport (Ceyhan). (3) Similarly the economics of BTE line might improve if some Turkmeni and Kazakh gas also flows through it. These aspects may need study. (4) The information from the country does not give targets or indicators.

Afghanistan: Energy Sector Action Plan

A. Policy Measures

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Pricing Policy for the gas sector	Sector recovery	Establish in the short term and improve in the medium term
Regulatory policy for the gas sector	Sector development	Approval of regulations, establishment of cadastre, inspectorate and regulatory functions in the MMI in the short term. MMI evolves into the regulatory body in the medium term
Privatization policy for the gas sector	Market oriented sector operation	Privatization of the State gas company in the medium term. Privatization of assets such as Fertilizer Plant, coal enterprise and cement enterprise to include the captive energy assets they own in the medium term
Effective use of electricity imports as a part of the supply mix in the power sector operations	Sector stabilization	Stabilization achieved in the short term and imports helping to meet part of the incremental demand in the medium term
Legal framework for power sector, laws enacted, regulations issued	To make the legal framework of the sector	To be achieved in the short term
Corporatize and commercialize DABM	Corporatization	To be achieved in the Short term, commercialization in the medium term
Improvements in metering billing and collection improvements, theft control,	Commercialization of the power sector	To be achieved in the short and medium term
Tariff adjustments to ensure availability of services	Measure of sector stabilization	To be achieved in the short and medium term
Separation of transmission from generation and distribution	Sector restructuring to enable transit and transmission tariffs	To be achieved in the medium term Kabul Distribution Company to be created as a legal entity in the short term

B. Investment Measures (Domestic)

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Oil, Gas and Coal Sectors		
Gas Wells reworking, Pipeline rehabilitation, metering, billing and collection improvements	Gas sector recovery	To be carried out in the short term
Reinforce gas distribution networks, additional wells reworking and pipeline rehab and set up modern technical training program	Gas sector recovery	To be carried out in the medium term
Oil field concessions for exploration and construction of refinery	Oil sector revival	Private sector to explore known fields in the short term and commence oil exploitation and oil refining in the medium term
Procurement of improved coal mining equipment	For urgent coal production needed for heating	Procure equipment in the short term and use in the medium term to increase production and safety of mining.
Reconstruct lost data, install MIS and modern information systems in MMI	For MMI to have market – based systems	Market based systems and approaches to be adopted in the short and medium term
Airborne assessment of resources	Availability of resources data	Short term
Develop database on resources and reserves in Afghanistan		Medium term
Confirm available gas reserves, quality and price for gas supply to power sector	Enable viable power sector operations	To be carried out in the short term
Produce and supply gas to the power sector	Same as above	Carry out in the medium term
Review Pre-privatization aspects and commence privatization of Afghan gas Enterprise and Northern Coal enterprise	Private operation of the sector	Carry out in the short term
Complete the above privatizations in a sound and transparent manner	Same as above	Carry out in the medium term
Capacity building in MMI for regulation of gas sector, policy making, project finance, transparent procurement processes, accounting, computer skills and English language skills, environmental impact assessments and ethnic diversity issues	Functioning of MMI with necessary skills	Short and medium term
Enhance and update technical skills of the oil and gas sector personnel	Modernized sector	Medium term
Draft initial environment regulations and work with the Environmental agency	Improve the environmental aspects of the oil and gas sector	Short term

Environmental impact assessment teams and regimes for all energy projects and operational protocol for identification of environmental violations and remediation actions	Same as above	Medium term
Electricity Sector		
Rehabilitation of generating units (Mahipar, Sarobi, Naghlu, Kajakai, Kabul TPP, Darunta)	Recovery of generation capacity	Partly in the short term, and the rest in medium term measured by domestic generation
25 new Diesel generation sets, 60 MW Diesel Power station, Kajakai Unit 3,	Domestic Generation capacity addition	Part of it in the short term and the rest in medium term
Feasibility studies for Baghdara HPP(280 MW), Sheergan Gas fired TPP (150 MW), Kabul North West Combine Cycle project (30 MW),	Domestic Generation capacity addition	Studies to be completed in the short to medium term
Studies for decentralized power supply in rural areas using renewable energy sources	Rural energy supplies	Studies to be completed in the short term
Transmission rehabilitation to create North East Power System and construction of a number of new 220 kV double circuit lines	North and Eastern grids integrated	Imported power flow to reach Kabul and Jalalabad in the medium term
Studies for further transmission extensions to relatively larger towns (Bamiyan, Taloqan, Ghazni, Khost and others)	Grid expansion	Studies to be completed in the short term
Emergency rehab of Kabul distribution and a number of other provincial cities	supply restoration	To be completed in the short term
Major rehab of Kabul distribution system and its extension	Supply stabilization in the capital region	To be completed in the medium term
Preparation of rehab of Herat system and the systems of other cities and 18 off-grid networks	Supply stabilization	To be completed in the short term and works commenced in the medium term
Capacity building in policy making, restructuring, commercial operations, accounting reforms, tariff setting, regulation and all aspects of modern utility operations	Improved sector operation	Ongoing and will continue in the medium term

C. Investment Measures (exports, imports, transit)

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Participate in the Trans Afghan Pipeline project to export gas from Turkmenistan and Uzbekistan to Pakistan and India and facilitate the project	Transit revenues and possible supply of imported gas to Afghanistan	Medium to long term
Increasing the capacity of substations and lines for handling imports of power from Iran, Turkmenistan,	Volume of imports increased and made	Most of this is being carried out as a part of the NEPS creation. All of this to be completed by medium term

Uzbekistan and Tajikistan	reliable	
Concluding agreements with Iran and Central Asian Countries for increased supplies. 300 MW (Tajikistan), 150 MW/300 MW (Uzbekistan), 300 MW (Turkmenistan), 56 MW (Iran)	To make imports reliable	Most inter governmental MOUs signed and are operational. Formal PPAs or alternative instruments are being prepared for adoption in the medium term
Transmission line for selling Tajik and Kyrgyz power to Pakistan	Regional trade facilitation, Transit fee earnings	Inter-governmental agreements to be concluded in the short term and project pursued in the medium term

Note: Information on oil, gas and coal based on the Afghan government letter provided to ESCC. Information on power sector is from presentations made by Afghan officials in March 2005 and March 2006 in Kabul in connection with other events and also based on readily available info from WB and ADB documents. The power sector road map contained in an ADB appraisal report (March 2005) envisages that in the medium term access to electricity would rise from 6% to 40%, system losses would be reduced by half, 75% of all districts would be receiving electricity, 200 MW of new generation capacity would be added and the backbone national transmission system would be in place.

Uzbekistan: Energy Sector Action Plan

A. Policy Measures

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Tariff adjustments at regular intervals for power, heat and gas to cover the cost of supply	Financial viability of the sector and avoidance of excessive waste (especially in gas and heat sectors)	Notable progress has been achieved in respect of power. Further progress in the medium term
Improvements to social protection arrangements	Protection of the poor in the context of rising prices	Short term: Privilege tariffs abolished and cash compensation mechanism introduced. Social protection study completed. Medium term Cash compensation scheme to be improved and prerequisites for lifeline tariffs namely full consumer metering to be pursued.
Accelerate Resource Surveys and independent certification of resource reserves	Attraction of investment in resource development and exports	To be carried out in the medium term.
Promote energy conservation and energy use efficiency through pricing and non-price methods, especially in the use of gas. Industrial use of electricity and gas, energy use for space heating should also be targeted for improvement.	Rational resource use	Pricing aspects to be achieved in the medium term. For example domestic gas prices may have to approach gas export prices suitably adjusted to lower transmission costs. Programs and incentives for the other objectives established in the medium term
Completion of the sector restructuring process	Facilitation of Improved efficiency, investments, competition, transparent transmission tariffs and third party access to	To be carried out in the short to medium term

	transmission system	
Regulatory Improvements	Facilitation of investments and protection of the consumer and promotion of competition	To be carried out in the medium term
Proactive role in promoting regional cooperation to foster rational use of the water/energy resources, improving reliability and efficiency of power system operations, creation of energy markets and development of power trade.	To improve regional cooperation	Ongoing in the short and medium term.

B. Investment Measures (domestic)

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Exploration of the Kandym and Ghadjak gas fields and commencement of production depending on the results of exploration	Increase in Gas production	Time frame 2006-2008
Exploration and production in a few other oil and gas fields	Increase in Gas production	Medium term 2009-2010
Introduce catalytic cracking in Ferghana refinery to handle 600,000 Tons of Mazut/year to produce light oils	To match the slate to changing demand	2009-2010
To add in the Buhara refinery a light naphtha isomerization plant to increase gasoline out put and to produce high Octane gasoline for export.	To match the slate to changing demand	2009-2010
Construct new blocks for amine desulfurization at Mubarek and Shoutan to increase liquefied hydrocarbon gas by about 580,000 tons/year	Improving condensed gas recovery	2009-2010
Improved and modern technologies for treatment of raw hydrocarbon, replacement of the gas compressors in transmission by those with more efficient ones	To reduce losses in gas processing and transmission.	Save 2 BCM of gas and improve compressor efficiency by 37% in the medium term
Installation of 4.1 million single phase and 340,000 three phase meters in the power sector	Commercial efficiency improvement	To be completed by 2008
Rehab and upgrade of Tashkent CHP, Mubarek CHP, Navoi TPS, Tashkent TPS, Sirdarinskaya TPS	Recovery of nameplate capacity and improvement in generation capacity.	Increase in generation capacity by nearly 1000 MW in the medium term
Construction of additional transmission lines (661 km of 500 kV and 80 km 220 kV) and increase in substation capacity	Improvement of transmission capacity	To be carried out in the medium term
Bulk metering at generation and transmission systems	To get better electricity	To be done in the medium term

and at supply points to distribution systems and major buyers	flow accounting	
---	-----------------	--

C. Investment Measures (for exports/trade/regional cooperation)

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Upgrades to transmission links to Afghanistan	Exports	Short term to raise export capacity from 85 MW to 300 MW
Upgrades to Transmission links to Tajikistan	Better operation of Tajik power system	Medium term To remove transmission bottlenecks.
Diversify gas exports by joining the planned trans afghan pipeline	Possible gas exports to Pakistan and India	Medium term
Possible oil pipeline from Turkmenistan and Uzbekistan to Pakistan's Gwadar deep sea port (Central Asia oil pipeline)	Export outlet for oil	Medium term

Note: above was compiled based on the presentations made by Uzbek officials and the information available with readily available documents of WB and ADB. Clearly this would need substantial revisions by the Uzbek authorities.

Kazakhstan: Energy Sector Action Plan

A. Policy Measures

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Diversification of oil and gas export markets and routes	Increase in exports	Nearly double the export oil and gas between 2005 and 2010
Increasing oil production and gas production for exports by accelerating the exploitation of Tengiz and Kashagan fields	Increases in production and exports	More than 30% increase in oil production by 2010. Gas production to reach 40 BCM by 2010
Reduce energy intensity of production and processing by enterprises in the processing industries.	Energy conservation	Medium term target?
Reduce gas flaring	Environmental protection and increase in usable gas	Medium term Target?
Complete electricity market reforms and establish a real time balancing market	Promotion of competition	To be completed in the short term
Electricity Transmission tariff improvements to introduce zonal tariffs and remove the distance related components	Promotion of competition	To be completed in the short term
Improvements in regulatory arrangements	Improved retail price	Medium term

	regulation	
Promote water sharing agreements and address energy/water nexus issues with other Central Asian neighbors.	Optimal use of water and Energy resources	Medium term

B. Investment Measures (domestic)

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Rehabilitation of generation assets at the national and regional level	To recover name plate capacity	Medium term (PI will be the capacity in MW recovered and improvement in heat rate achieved)
Completion of the Construction of Moinak HPP (329 MW). (Peaking power plant) which started in 1985, continued till 1992 and later suspended. Now sought to be completed by KazKuat JSC	To reduce energy shortages in the South Kazakhstan	Completion targeted for 2008. May go till 2010. (PI would be the MW commissioned (329 MW))
Construct North Kazakhstan- Aktyubinsk region transmission line 500 kV	Interconnection of the northern and western grids in the country	Medium term (PI: operation of both grids as well interconnected grids)
Construction of the Second 500 kV north south Transmission line	To enable larger power transfer capacity between Northern and Southern grids.	Medium term (PI will be the loading of the two NS 500 KV lines in MVA or MW)
Rehabilitation and reinforcement of Distribution systems and some transmission systems	Loss reduction and capacity increases	Medium term

C. Investment Measures (Export/Trade/Regional cooperation)

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Completion of all sections of the oil pipeline from Atrau in the Kazakh Caspian coast to Alashankou in the Chinese border via Kenkiyak, Kumkol, and Atsau,	Oil exports to china	Short term or Medium term (?)PI: Volume of exports
Processing of Karchaganak gas in the Orenburg gas processing facilities and expanding export links	Gas Exports to Russia	Short term PI: volume gas processed and exported
Rehabilitation and upgrade of national gas pipeline network by KazRosGas	Improve Gas transmission to increase gas exports to the North.	Medium term. PI: volume of gas exports north.
A study of the alternative oil (and possibly gas) export routes to the south, east and west to handle the large volumes of anticipated oil and gas production	To open new routes for exports	Short term
Capacity expansion of the CPC oil pipeline to	To facilitate movement of	Medium term: Indicator Volumes oil moved per year

Novorossisk and the Samara-Atyrau oil pipeline.	larger volumes of oil	
Construction of a 4000 MW coal fired Thermal Power Plant in North Kazakhstan (Ekibastuz coal basin) and a 4500 km HVDC (1150 kV)line to go deep into China for export of power by a Joint venture between KEGOC of Kazakhstan and SGC of China ⁸	For exports of coal based electricity	Medium term or longer. PI will be the volume of exports of thermal power to China (4000 MW).

Note: The above table has been developed based on data available with WB. May need extensive changes based on receipt of future information from the government.

Other items of interest may be: (1)A study the possibility of Kazakhstan joining the Trans Afghan Pipeline project to supply gas to Pakistan and India, (2) A study of the possible gas exports to Xinjiang province of China since China has constructed the West to East pipeline from that province, (3) a study of the possibility of Kazakhstan joining the Central Asia Oil Pipeline project to transport oil from Turkmenistan and Uzbekistan to the Gwadar deep sea port in Pakistan., (4) a study of the possibility of Kazakh oil and gas being exported through the BTC and BTE pipelines to reach Mediterranean coast.

China (Xinjiang province) Energy Action Plan

A. Policy Measures

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Rapid Capacity addition in power sector		
DSM and load management		
Energy efficiency		
Environmental protection		
Investments abroad to access external energy resources		

B. Investments Measures (Domestic)

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
Rapid capacity addition in Power sector		
Substantial addition to transmission capacity to create a unified national grid and a national electricity market		
West to transmission and North to south transmission		
West to East oil and gas pipelines		

C. Investment measures (Trade and Regional)

Item	Sector Outcomes	Indicators/Targets(2007, 2010)
------	-----------------	--------------------------------

⁸ Source: Briefing Book for the Electricity Beyond Borders conference in Istanbul June 12-14, 2006

Interconnection of the power system of Xin Jinan province to the Central grid of China to enable power transfers from West to east	Enable flow of power from Central Asia to Central and eastern China	Medium term
Study the possibility of Kasha area importing power from Kyrgyz Republic	Export of Kyrgyz Power	
Invest in resources (exploration and production) abroad		
Investment in Transmission lines and pipelines abroad		
Facilities for Import and export of electricity		
Facilities for the Import of oil and gas		

Note: .The above table has been developed based on data available with WB Also, it remains to be clarified whether we would deal with the whole of China or with the Xinjiang province which is located in between Mongolia in the East and Central Asia in the west with common borders on either side. This province will play a key transit role in the energy trade between Central Asia and China and therefore it is necessary to have a clear understanding of the current status of the power, oil and gas infrastructure and entities there, including its own demand-supply status and forecasts and plans development in that province. We have very little information on these aspects.

Appendix 2 Energy Interdependencies in the Region

	Azerbaijan	Kazakhstan	Kyrgyz Republic	Tajikistan	Uzbekistan	Afghanistan	China	Mongolia
Azerbaijan	xx	Oil and gas exports through BTC and BTE/littoral agreements						
Kazakhstan	Oil and gas exports/Littoral agreements	xx	Import hydro power/Transit for power exports north/Water sharing agreements	Import hydro power/Transit to power exports north/Water sharing agreements	Import of gas/power/Water sharing agreement	Export of power and gas through CASAREM and TAPI	Export of oil and gas and thermal power	
Kyrgyz Republic		Import oil and coal and gas/Transit for power exports south/possible coal imports	xx	Transit to export of power to south	Import of oil, gas and coal Power transit	Export of power through CASAREM		
Tajikistan		Export of power /Transit for Power exports north	Transit for Power exports north	xx	Power transit, Import of oil and gas	Export of Power/ Possible import of gas	Potential export of power	
Uzbekistan		Gas exports/power transit/ water agreements	Exports of oil and gas/power transit/water agreements	Exports of oil and gas/power transit/water agreements	Xx	Export of power	Potential Export of gas and oil	
Afghanistan		Potential for imports under CASAREM	Potential for imports under CASAREM	Imports of power and Potential for imports under CASAREM	Import of power	xx		
China		Investments in KZ/import of oil/gas and electricity	Potential power imports	Potential power imports	Investments in UZB. Potential oil and gas imports		xx	Potential transit facilities for import of energy from Russia/Potential power trade
Mongolia		Potential energy imports					Potential power trade/Potential energy transit country between Russia and China	xx

Appendix 2: MI Pipeline Loan Projects/Grants/TAs 2006-2008

1. The MI pipeline of regional cooperation loan projects/grants/TAs for 2006-2008 is presented in two sets of tables:

- Interim CAREC Results Framework, which describes, for each project, the strategic goals and objectives, the key constraints for achieving these goals and objectives, the interventions of the MIs and CAREC countries in support of the goals and objectives, the expected outputs and outcomes of the interventions, and the milestones and performance indicators for tracking progress; each project is coded, so as to facilitate reference to the second set of tables, the Development Matrix;
- Development Matrix, which provides additional information about each of the projects, including the full name of the project, a project description, the CAREC countries involved in the project, the amount and form of financing, the project status, the implementation schedule and contact information.

CAREC Results Framework

Interim CAREC Results Framework

Strategic Goals/ Objectives for CAREC	Key Constraints to Achievement of the Goals/Objectives	Code	Interventions of MIs and CAREC Countries in Support of Goals	Expected Outputs / Outcomes of CAREC Interventions	Milestones/Performance Indicators for Tracking CAREC Progress
1. Trade Expansion					
(i) promote concerted customs reforms and modernization; (ii) serve as a regional forum to address issues of common interest; and (iii) support an integrated trade facilitation approach through interagency cooperation and partnership with the private sector	(i) inadequate legal and regulatory framework; (ii) inefficient customs revenue collection; (iii) weak governance and institutional capacity of Customs Administrations; (iv) low operational efficiency and complex procedures; and (v) lack of mechanism for regional cooperation.	Tf-01	Trade Facilitation and Customs Cooperation (Phase II) 6203-REG	<i>Regional</i> (i) adoption of revised customs codes by DMCs including simplification and harmonization of customs procedures and cargo manifests; (ii) establishment of customs automation systems and information platform to support data sharing among customs administration; (iii) adoption of risk-based customs control procedures and post-entry audit system;	(i) submission to Parliament of revised customs codes of Mongolia in 2006, Azerbaijan and Uzbekistan by 2008; agreement reached on harmonization of cargo manifests between PRC and Kazakhstan, and PRC and Mongolia by 2008; (ii) enhancement of information systems by Azerbaijan, Kazakhstan, Mongolia, and PRC by 2008; conclusion of bilateral agreement on exchange of customs statistics between Kazakhstan and PRC in 2006; and agreement on electronic data exchange reached between Kyrgyz Republic and Uzbekistan in 2006; (iii) adoption of risk-based customs control system by Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan, and Uzbekistan by 2008; (iv) development of technical specifications for border post infrastructure and facilities by Kyrgyz Republic and Tajikistan by 2008; (v) installation of SafeTIR software (an international electronic data interchange control system for TIR) in Kyrgyz Republic in 2006; and training on TIR for Kyrgyz Republic, Kazakhstan and Mongolia in 2006; (vi) completion of World Customs Organization (WCO) diagnostic study in Mongolia in 2006; and capacity building on accession to WTO through regional seminars for Azerbaijan, Kazakhstan, Tajikistan and Uzbekistan by 2008; (vii) conduct of capacity building forums on trade facilitation and customs modernization, and dissemination of best practices and lessons learned including WCO's Framework of Standards; and (viii) conclusion of trade logistics development study and finalization workshop in Xinjiang, PRC and Mongolia in 2006; and initiation of
		Tf-02	Trade Facilitation and Customs Cooperation (Phase I) 6058-REG		
		Tf-03	Regional Modernization and Infrastructure Development Project / L2113-2114 (KGZ-TAJ); 6203-REG; 6058-REG	(iv) development of border posts infrastructure and facilities; (v) development of simplified transit system and effective implementation of the <i>Transport Internationaux Routiers</i> (TIR) transit system; (vi) accession to World Trade Organization (WTO) and adoption of international conventions on trade facilitation; (vii) capacity building for regional customs organizations through seminars and joint regional training initiatives, public awareness campaign, and border interagency cooperation; and (viii) development of integrated trade facilitation strategy in support of one-stop and single electronic window (SEW) services for traders and business communities.	

Interim CAREC Results Framework

Strategic Goals/ Objectives for CAREC	Key Constraints to Achievement of the Goals/Objectives	Code	Interventions of MIs and CAREC Countries in Support of Goals	Expected Outputs / Outcomes of CAREC Interventions	Milestones/Performance Indicators for Tracking CAREC Progress
					SEW services through development of electronic platform by Mongolia by 2008;
		Tf-01 Tf-02	6203-REG; 6058-REG	<p style="text-align: center;"><i>Bilateral</i></p> (i) implementation of the bilateral transit agreements among Kazakhstan, Kyrgyz Republic, and Tajikistan; (ii) pilot-testing of joint customs border control; and (iii) implementation of bilateral agreements on mutual administrative assistance and customs cooperation.	(i) establishment of detailed operation procedures for the bilateral transit agreement between the Kyrgyz Republic and Kazakhstan; and Kyrgyz and Tajikistan by 2007; (ii) conclusion of agreement between Kazakhstan and PRC on the scope of data sharing and implementation at selected border posts for pilot-testing of joint border control in 2006; (iii) implementation of bilateral agreements on mutual administrative assistance between Azerbaijan and PRC; Azerbaijan and Kyrgyz Republic; and Kyrgyz Republic and Mongolia in 2006; and agreement reached on customs cooperation between Mongolia and Tajikistan by 2008;
				II. IN-COUNTRY	
		Tf-01 Tf-02 Tf-03	L2113-2114 (KGZ-TAJ) (piggy backed TA 4450-4451 (KGZ-TAJ); 6203-REG; 6058-REG	(i) PRC's accession to the TIR Convention; (i) development of customs information and communications (ICT) master plans for Azerbaijan, Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan and Uzbekistan; and (ii) development of a unified automated information system (UAIS) for Kyrgyz Republic and Tajikistan.	(i) PRC's accession to the TIR Convention by 2008; (ii) Completion of draft Customs ICT masterplan and consultation workshop for Kyrgyz Republic; Tajikistan and Mongolia in 2006; development of E-Customs masterplan by Kazakhstan in 2006; and initiation of customs modernization assessment in Azerbaijan in 2006 and Uzbekistan by 2007; (iii) development of the core application systems of the UAIS and its implementation in customs declaration by Kyrgyz Republic and Tajikistan by 2008; and establishment of risk management and post-entry audit system in 10 major posts in Kyrgyz Republic and Tajikistan by 2008.

Interim CAREC Results Framework

Strategic Goals/ Objectives for CAREC	Key Constraints to Achievement of the Goals/Objectives	Code	Interventions of MIs and CAREC Countries in Support of Goals	Expected Outputs / Outcomes of CAREC Interventions	Milestones/Performance Indicators for Tracking CAREC Progress
(i) enhanced efficiency and transparency in customs services and administration; and (ii) readiness of the customs' ICT systems to integrate into SEW and e-government	(i) the functionality of Customs ICT system (GAMAS) is unable to meet the need of customs administration. Modern customs business process such as risk management cannot be effectively and widely introduced due to the lack of internet-enabled system and a centralized database; (ii) the conditions of most border post facilities are inadequate and designs are not in conformity with the needs for facilitation of quick movement of goods and passengers. Customs inspection equipment and anti-smuggling detection facilities are not available in most customs border posts	Tf-04	MON Customs Modernization Project	(i) migration and upgrading of the GAMAS system for customs services and administration, which will be rendered internet-based and interfaced within a national SEW for e-government; (ii) improvement of infrastructure at selected major customs houses and customs border posts, including provision of inspection equipment and laboratory apparatus; (iii) business process re-engineering, capacity building, interagency coordination, regional cooperation, and public-private partnership	(i) System migrated to internet-based; (ii) System interfaced with SEW and e-government (i) strengthened anti-drug-trafficking capacity; (ii) enhanced facilitation of trade at the borders (i) streamlined and simplified business-processing; (ii) customs officers trained with modernized customs environment; (iii) involvement of related agencies in SEW and improved coordination between customs and related agencies; (iv) integrated trade facilitation and improved business sector participation; and (v) enhanced cooperation with other customs administration
(i) facilitate trade	(i) limitation of abilities by banks in the region to obtain confirmation for their trade finance due to restrictions on country and counterparty risk exposure prevents access to financing for trade by exporters and importers	Tf-09	Regional Trade Facilitation Programme (EBRD)	(i) Expansion of regional trade through the development of a network of confirming and issuing banks in the region. (ii) Growth of interregional trade between the countries of operation (iii) Expansion of know-how and utilization of more sophisticated structured banking instruments in trade	(i) The development of a network of confirming and issuing banks in the region measured by the number of participating banks in the region, facility utilization by number of transactions as supported, network intensity, risk sharing by confirming banks and the tenor of transactions. (ii) Total volume of intra-regional trade supported by the programme. (iii) Skill/know-how transfers on documentary business/trade finance to be measured by the number of banks and bankers that received documentary credit training/seminar/consultancy services as well as by the increase of the utilization of the limits under TFP and intensification of the cooperation with confirming banks (clean risk basis).
Transport Connectivity					
Objective 1: To harmonize and simplify cross-border transport procedures and documentation among CAREC	(i) Inefficient cross-border and transit movement of people and goods due to excessive bureaucratic procedures and	Tr-01	Study on CAREC: Harmonization and Simplification of Transport Agreements, Cross Border	Action Plan for Harmonizing Regional Transport Regulations and Cross-border Agreements among CAREC Countries	Draft Action Plan discussed at 4 th and 5 th TSCC meetings in October 2005 and March 2006

Interim CAREC Results Framework

Strategic Goals/ Objectives for CAREC	Key Constraints to Achievement of the Goals/Objectives	Code	Interventions of MIs and CAREC Countries in Support of Goals	Expected Outputs / Outcomes of CAREC Interventions	Milestones/Performance Indicators for Tracking CAREC Progress
countries to facilitate the movement of passengers and freight across borders.	poorly equipped border posts (ii) Lack of track-sharing agreements, frequent changes in locomotives and time-consuming train re-marshaling at borders and inter-railway payment delays (iii) Limited capacity of officers serving at borders (iv) Limited willingness of CAREC countries to share information (v) Issues relating not only to roads and railways, but also to Customs and other agencies		Documents and Transport Regulations completed in October 2005 (also Objective 2)		Revised draft Action Plan to be discussed/endorsed at 6 th TSCC Meeting in August 2006
		Tr-02	Planned RETA for Central Asia Regional Transport Strategy Study (2006) (also Objective 2)	Central Asia Regional Transport Cooperation Strategy	To be determined
Objective 2: To harmonize transport regulations among CAREC countries to create a level playing field for transport operators and promote efficiency and better services.	(i) Lack of unified transport regulations among CAREC countries (ii) Limited capacity of government agencies to enforce regulations	Tr-01	Study on CAREC: Harmonization and Simplification of Transport Agreements, Cross Border Documents and Transport Regulations completed in October 2005	Action Plan for Harmonizing Regional Transport Regulations and Cross-border Agreements among CAREC Countries	Draft Action Plan discussed at 4 th and 5 th TSCC meetings in October 2005 and March 2006
		Tr-02	Planned RETA for Central Asia Regional Transport Strategy Study (2006)	Central Asia Regional Transport Cooperation Strategy	Revised draft Action Plan to be discussed/endorsed at 6 th TSCC Meeting in August 2006 To be determined
Objective 3: To develop and improve regional and international transport corridors to link production centers and markets within CAREC countries, and to enhance CAREC countries' access to neighboring regions and markets.	(i) Inadequate regional transport network. (ii) Lack of adoption of an integrated and regionally oriented multimodal transport approach for transport infrastructure development (iii) A large proportion of existing transport infrastructure is poor and deteriorating due to insufficient funding for maintenance (iv) Limited government funds for construction and improvement of transport infrastructure (v) Resource constraints of multilateral institutions. (vi) Limited interest from private sector to finance transport projects due to large funding requirements and low rate of	Tr-03	Dushanbe–Kyrgyz Border Road Rehabilitation (Phase II) Project (TAJ)	(i) About 90 km section of the Dushanbe–Kyrgyz border road improved. (ii) Ministry of Transport's capacity strengthened	(i) Civil works to be completed by May 2009 (ii) Financing of road maintenance increased at same rate as national budget during 2008-2009 (iii) Road maintenance equipment procured by November 2008. (iv) Ministry of Transport's Road Planning and Assessment Unit operational by 2009

Interim CAREC Results Framework

Strategic Goals/ Objectives for CAREC	Key Constraints to Achievement of the Goals/Objectives	Code	Interventions of MIs and CAREC Countries in Support of Goals	Expected Outputs / Outcomes of CAREC Interventions	Milestones/Performance Indicators for Tracking CAREC Progress
	return on investment				
		Tr-04	East-West Highway Improvement Project (AZE)	(i) A two-lane paved road on Yevlakh–Ganja section and Qazakh–Georgian border section (127 km) of the east-west road improved (ii) Border-crossing facilities and capacity at Red Bridge improved	(i) The project road to be improved by end 2008 (ii) Border facilities at Red Bridge to be improved by end 2008
		Tr-05	Qaisar Bala Murghab Road Project (AFG)	(i) Qaisar-Bala Murghab section (90 km) of Herat-Andkhoy road rehabilitated (ii) Road tolling facilities installed	To be determined
		Tr-06	RETA on Facilitation of Transport Cooperation Among Central Asia Regional Economic Cooperation Countries (Phase I)	(i) Pre-feasibility study on developing and improving selected regional roads prepared	(i) Pre-feasibility study report to be completed by end of 2006.
		Tr-07	North-South Corridor (2006/AFG)	(i) Access to road transport for the central mountain region provided (ii) Direct and shorter connections between various regions and North-South transit traffic facilitated	To be determined
		Tr-08	Southern Road Corridor Improvement (2007/AZE) (ongoing PPTA, approved on 3 November 2005)	(i) About 80 km Masally–Astara section of the Alat-Astara road improved (ii) Cross-border facility at Astara improved (iii) Institutional capacity of the Road Transport Service Department strengthened	To be determined
		Tr-09	Western Regional Road Development Project (2007/MON) (ongoing PPTA, approved on 10 May 2006)	To be determined.	To be determined
		Tr-10	Xinjiang Regional Road Improvement Project (2007/PRC) (ongoing PPTA, approved on 21 March 2006)	(i) The Korla–Kuqa section of Highway 312 upgraded to an expressway	To be determined
		Tr-11	Dushanbe-Kyrgyz Republic Border Road Rehabilitation Project (Phase III) (2007/TAJ) (ongoing PPTA, approved 10 May 2006)	(i) The remaining 121 km section of the road between Dushanbe and Kyrgyz Republic border improved	To be determined
		Tr-12	Regional Infrastructure	To be determined	To be determined

Interim CAREC Results Framework

Strategic Goals/ Objectives for CAREC	Key Constraints to Achievement of the Goals/Objectives	Code	Interventions of MIs and CAREC Countries in Support of Goals	Expected Outputs / Outcomes of CAREC Interventions	Milestones/Performance Indicators for Tracking CAREC Progress
			(Roads) (2007/UZB) (PPTA planned for approval in October 2006)		
		Tr-13	Rehabilitation of Regional Airports II (2007/AFG)	(i) Regional airports rehabilitated (ii) Air navigation equipment procured (iii) Ministry of Transport's capacity for civil aviation management strengthened	To be determined
		Tr-14	Road Network 1 (2008/AFG) (PPTA planned for 2006)	To be determined	To be determined
		Tr-15	Bishkek-Torughart Road Rehabilitation Project (2008/KGZ) (PPTA planned for 2007)	To be determined	To be determined
		Tr-16	Regional Transport (2008/MON) (PPTA planned for 2007)	To be determined	To be determined
Objective 4: To restructure and modernize railways to provide quality and efficient services through private sector participation and improved corporate governance.	a. Lack of competition in railways due to the monolithic and monopolistic nature of the organizations b. Limited government funds for construction and improvement of transport infrastructure c. Resource constraints of multilateral institutions. d. Limited interest from private sector to finance transport projects due to large funding requirements and low rate of return on investment	Tr-17	Planned loan for the Regional Railway Project (2008/UZB)	To be determined	To be determined
		Tr-18	Planned TA on Logistics Development and Capacity Building in Xinjiang (2006/PRC)	To be determined	To be determined
		Tr-19	Planned RETA on CAREC Regional Railway Development (Phase I) (2007)	To be determined	To be determined
Objective 5: To improve sector funding and management to ensure that the regional transport network is developed, operated, and maintained properly.	(i) Limited institutional and human resource capacities in the transport sector (ii) Limited government funds for maintenance of transport infrastructure	Tr-20	Planned loan for the Maintenance of Regional Road Transport Corridors (2007/KGZ) (ongoing PPTA, approved on 9 March 2006)	To be determined	To be determined
		Tr-21	Planned RETA for Regional Road Funding and Management in Central	(i) Current status and future needs of funding and maintenance for regional road corridors in CAREC countries	To be determined

Interim CAREC Results Framework

Strategic Goals/ Objectives for CAREC	Key Constraints to Achievement of the Goals/Objectives	Code	Interventions of MIs and CAREC Countries in Support of Goals	Expected Outputs / Outcomes of CAREC Interventions	Milestones/Performance Indicators for Tracking CAREC Progress
Objective 6: Incremental approach to liberalization of the civil aviation sector, focusing on the adoption of bilateral agreements using common legislative clauses, enhancement of external inputs from all stakeholders, especially business and tourism, in aviation policy making.	(i) Lack of regional approach in civil aviation sector and lack of commonality in aviation policy and liberalization prospects across the region (ii) Fear that in a liberalized environment strong foreign airlines would undermine local industry participants		Asia Regional Economic Cooperation Countries (2006) To be determined	assessed (ii) Three year road funding and management plan for regional roads in CAREC countries developed (iii) Transport Ministries familiarized with results based approaches to road network management To be determined	To be determined
(i) Improve transport efficiency by reducing transport costs to international and domestic road users, and by improving access to markets and social services for people in the project area. (ii) Promote sustainable economic growth in the region and project area, thereby reducing poverty, by increasing regional trade and cooperation.	The Project has been designed to reduce potential risks, including delays in implementation due to inadequate implementation capacity of MOTC, failure to provide counterpart financing in a timely manner, lower than projected traffic, and inadequate road maintenance.	Tr-24	Osh-Sarytash-Irkeshtam Road Rehabilitation Project Kyrgyzstan (IsDB)	(i) Improve 42.7 km of road from Gulcha to Sopukorgon (ii) Establish and achieve operational status of corridor management department (iii) Improve financing of road maintenance (iv) Improve financing of road safety	(i) Civil works contracts to be awarded by January 2007 and completed by June 2009 (ii) Consultants will be recruited by December 2006 and services completed by July 2009 (iii) Reduced roughness of roads, repair of bridges, slope protection, and erosion control works
(i) Increase trade in the region and economic growth in the immediate project area. (ii) Improve regional and national road network.	The Project is designed to reduce potential risks, including delays in implementation due to inadequate implementation capacity of MOTC, failure to provide counterpart financing in a timely manner, lower than projected traffic, and inadequate road maintenance.	Tr-25	Reconstruction of the Taraz-Talas-Suusamyrd Road (phase II) Kyrgyzstan (IsDB)	(i) Improve of priority sections of road to be identified by the FS (ii) Improve financing of road maintenance. (iii) Improve financing of road safety	The Project will include civil works, construction supervision, project management which will be procured under IDB procedures limited to member countries. The Project is supposed to be implemented within 30 months.
(i) Provide reliable and direct access for east-west traffic traveling between the western part of Tajikistan including the capital Dushanbe, and the eastern region of Gorno-Badakhshan, thus enhancing territorial integrity of the country (ii) link Tajikistan to the strategic Karakorum highway in China through Kulma pass, providing access to the deep-sea ports of Karachi, Pakistan, thus promoting trade and passenger and freight flow with neighboring countries	The Project has been designed to reduce potential risks, including delays in implementation due to inadequate implementation capacity of EA, failure to provide counterpart financing in a timely manner, lower than projected traffic, and inadequate financing of road maintenance.	Tr-26	Shagon-Zigar Road Rehabilitation (phase III) Tajikistan (IsDB)	(i) Improve of priority sections of road to be identified (ii) Improve financing of road maintenance (iii) Improve financing of road safety	This project is in pipeline for 2006. Could be started in 2007 and completed in 3-4 years

Interim CAREC Results Framework

Strategic Goals/ Objectives for CAREC	Key Constraints to Achievement of the Goals/Objectives	Code	Interventions of MIs and CAREC Countries in Support of Goals	Expected Outputs / Outcomes of CAREC Interventions	Milestones/Performance Indicators for Tracking CAREC Progress
<p>Pakistan, Kyrgyzstan, Uzbekistan and China</p> <p>(i) Provide reliable and direct access for east-west traffic traveling between the western part of Tajikistan and the eastern region of Gorno-Badakhshan, thus enhancing territorial integrity of the country</p> <p>(ii) link Tajikistan to the strategic Karakorum highway in China, providing access to the sea ports of Pakistan, thus promoting trade, passenger and freight flow with neighboring countries Pakistan, Afghanistan, Kyrgyzstan, Uzbekistan and China</p>	<p>The Project has been designed to reduce potential risks, including delays in implementation due to inadequate implementation capacity of EA, failure to provide counterpart financing in a timely manner, lower than projected traffic, and inadequate financing of road maintenance.</p>	Tr-27	<p>Construction of Kulyab-Khalaikum road Tajikistan (IsDB)</p>	<p>(i) Improve of priority sections of road to be identified</p> <p>(ii) Improve financing of road maintenance.</p> <p>(iii) Improve financing of road safety</p>	<p>This project included in pipeline for 2007</p>
		Tr-28	<p>Feasibility study Turkmenbashi-Karabogaz road, Turkmenistan (IsDB)</p>	<p>Technical assistance is to assist the Government in preparation of a Turkmenbashi – Karabogaz – Kazakhstan road improvement project, suitable for presentation to IFIs in order to attract financing for the road improvement.</p>	<p>Feasibility study to be finalized by end 2006</p>
<p>(i) increase trade in the region</p> <p>(ii) improve regional and national rail networks</p>	<p>Shortage of locomotives limits the transport capacity of railways in Azerbaijan, one of the key transit countries in the Caucasus.</p>	Tr-28	<p>Turkmenbashi-Karabogaz road Construction, Turkmenistan (IsDB)</p>	<p>Construction of a Turkmenbashi – Karabogaz – Kazakhstan road</p>	<p>Pipe-line project</p>
		Tr-32	<p>Azerbaijan: ADDY- Locomotive (EBRD)</p>	<p>(i) Increased transport capacity along the trans-Caucasian railway line.</p> <p>(ii) Improvement in the financial and operational performance of an integrated state-owned railway company, ADDY</p> <p>(iii) Transfer of 'know-how' in terms of international best practice for procurement.</p>	<p>(i) purchase of new electric locomotives, refurbishment of linehaul electric locomotives, and refurbishment of linehaul diesel locomotives, diesel shunting locomotives, depot equipment and track machinery by end-2008.</p> <p>(ii) Reduction of accounts receivable and payable by the end of 2007.</p> <p>(iii) Commercialization and corporatisation of ADDY by end-2007.</p>
Energy Development					
<p>This transmission line will connect the northern and southern part of the country. The construction of the transmission line will support economic development in the northern part of Tajikistan.</p>	<p>The sustainability of the Project could be at risk in case of: (i) inadequate implementation capacity of EA; (ii) failure to provide counterpart financing in a timely manner; and (iii) inadequate financing of maintenance of facilities.</p>	En-01	<p>Technical assistance for Feasibility Study and preliminary design for Construction of 500 kV South-North Transmission Line Tajikistan (IsDB)</p>	<p>Feasibility Study and preliminary design for:</p> <p>(i) Construction of 500 kV South-North Transmission Line</p> <p>(ii) Connection of 500 kV Transmission Line to existing 500 kV Regar substation in the South</p> <p>(iii) Connection of 500 kV Transmission Line to existing 220 kV Khodzhenst substation in the North</p>	<p>This TA started by the end of 2005 and to be completed within 12 months. The Construction of 500 kV South-North Transmission Line is scheduled to be started in 2007</p>

Interim CAREC Results Framework

Strategic Goals/ Objectives for CAREC	Key Constraints to Achievement of the Goals/Objectives	Code	Interventions of MIs and CAREC Countries in Support of Goals	Expected Outputs / Outcomes of CAREC Interventions	Milestones/Performance Indicators for Tracking CAREC Progress
Provide reliable and sustainable supply of electricity to the consumers in the back lands of Batken region with population of over 100,000		En-02	Construction 110 kV Transmission Line Kyrgyzstan (IsDB)	(i) Construction of single circuit 110 kV Transmission Line from 220/110 kV Aigultash substation (S/S) to existing 110 kV Samat S/S (ii) Reconstruction of 110/35/10 kV Samat S/S (iii) Reconstruction of 110/35/10kV Karabulak S/S	The project is ready to be approved within 2006 and completed in about 3 years. (i) Civil works contracts to be awarded in 1 year after approval and completed in 12 months (ii) Consultants will be recruited in 7 months after approval and services completed in 33 months (iii) Procurement of equipment will be started simultaneously with civil works and installation will be completed in 22 months
Enhance reliability of electricity supply in the region, and increase supply of low-cost electricity.	Unwillingness of countries to commit to long-term trading arrangements, i.e. power-purchase agreements.	En-08	Power system rehabilitation projects Regional power trade projects.	Facilitate regional best solutions to meet future energy demands and promote the exploitation of new energy resources in the region for export.	ADB loan for 220kV double-circuit transmission interconnection project for Afghanistan and Tajikistan to be approved in December 2006.
Promote more efficient production and use of energy domestically	(i) Excessive technical and commercial energy losses; (ii) poor billing and collection efficiency; (iii) heavily subsidized electricity tariffs and unsound tariff structures; (iv) unreliable and frequently interrupted electricity services, particularly in rural and poor urban areas; and (v) consumers' affordability problems. These problems have undermined cash flow in the power sector and crippled most utilities financially. This in turn limits their attractiveness as trading partners and has led to a deterioration of existing infrastructure and inability to finance new and needed infrastructure.	En-10	CAREC Members Electricity Regulators Forum (CMERF)	Improved regulation will be vital to attract more private investment to the power sectors of the region and will be crucial for supporting the development of electricity trade in the CAREC region.	CMERF established in November 2005 CMERF Annual Meeting September 2006 ADB RETA for CMERF Studies started May 2006 5 studies to be completed by January 2007
Increase energy trade in the region	Lack of transmission line connection between the north and south of Kazakhstan limits the scope of electricity trade in the region.	En-11	KEGOC North-South Ekibastuz-Yukgres Power Project (EBRD)	(i) Greater competition in the electricity sector (check). (ii) Successful commercialization and restructuring of KEGOC. (iii) Create market framework for regional electricity trade.	(i) Transmission capacity increase by about 200 MW and incremental transmitted volume by about 3.7 TWh. (ii) Reductions of KEGOC's technical losses to 4.5% and annual unplanned outages to 8 on the entire new North South transmission line. (iii) Support introduction of zonal transmission pricing.

Interim CAREC Results Framework					
Strategic Goals/ Objectives for CAREC	Key Constraints to Achievement of the Goals/Objectives	Code	Interventions of MIs and CAREC Countries in Support of Goals	Expected Outputs / Outcomes of CAREC Interventions	Milestones/Performance Indicators for Tracking CAREC Progress
Others					
(i) positioning Xinjiang's logistics industry development in a broader prospective as the link in the Euro-Asia continental bridge, the center for regional cooperation with central Asia, and the key enhanced efficiency and transparency in customs services and administration; and (ii) developing a strategy for logistics industry development in Xinjiang, covering issues such as such policy reforms, infrastructure development, provision of public financial resources and participation of private sector, and institutional capacity building	(i) Lack of investment and upgrade makes Xinjiang's railway system unable to meet transportation demand in the short or even medium term. (ii) Poor management, low level of containerization, and lack of investment in logistics hubs make the efficiency of road transportation system low. (iii) Institutionally, Xinjiang's logistics industry demonstrates following weaknesses	Ot-01	Logistics Development and Capacity Building in Xinjiang Autonomous Region	(i) Identification of policy, institutional and financial issues regarding logistics industry development in Xinjiang and (ii) Development public infrastructure and logistics platform, including single window for customs clearance, and over-the-counter dealing system for logistics providers; and (iii) Public investment in logistics industry as well as public private sector partnership projects for logistics industry development	(i) Recommendations to address institutional and financing issues; (ii) A master plan for logistics industry development with particularly attention to public infrastructure and logistics platform, including single window for customs clearance, and over-the-counter dealing system for logistics providers; and (iii) Compilation of a preliminary list of public investment projects as well as public private sector partnership projects

CAREC Development Matrix

Development Matrix

Sector/ Loan & TA No.	Code	Name	Project Description	Participating Countries	Financing	Project Status	Implementation Schedule	Contact Information
Trade Facilitation								
6203-REG (Dec 2004)	Tf-01	Trade Facilitation and Customs Cooperation (Phase II)	The RETA aims to facilitate trade by supporting (i) concerted customs legal reforms and harmonized reform procedures, and (ii) strengthened regional customs cooperation.	REG	\$0.9 million	ongoing	The TA implementation period is 3 years starting January 2005.	Sona Shrestha, CWGF
6058-REG (Oct 2002)	Tf-02	Trade Facilitation and Customs Cooperation (Phase I)	The RETA aims to strengthen regional customs cooperation to establish efficient and effective customs systems.	REG	\$2 million	ongoing	The TA implementation period is 4 years starting October 2002.	Sona Shrestha, CWGF
L2113-KGZ	Tf-03	Regional Customs Modernization and Infrastructure Development Project (Phase I)	The Project is a continuation of ADB's support for customs reform and modernization for the Kyrgyz Republic and Tajikistan following the launch of the Regional Trade Facilitation and Customs Cooperation Program in December 2002. ⁹ The Project comprises two key components each for the Kyrgyz Republic and Tajikistan to develop (i) a unified automated information system (UAIS), and (ii) customs border-post infrastructure.	KGZ	\$7.5 million (SF)	ongoing	The Project implementation period is 5 years starting January 2005.	Sona Shrestha, CWGF
L2114-TAJ (Nov 2004)				TAJ	\$10.7 million (SF)	ongoing		Tariq Anwar, TJRM
TA4450-KGZ	Tf-03	Capacity Building and Institutional Strengthening for Customs Modernization and Infrastructure Development	The TAs attached to L2213KGZ and L2214 TAJ aim to ensure that (i) customs modernization through automation and border-post infrastructure development is supported by the institutional structure and the business processes of the two countries' Customs Services Departments and that (ii) the UAIS and border-post infrastructure development are carried out with sound supervision and quality assurance	KGZ	\$0.5 million (JSF)	ongoing	The TA implementation period is 3 years starting January 2005.	Sona Shrestha, CWGF
TA4451-TAJ (Nov 2004)				TAJ	\$0.5 million (JSF)	ongoing		Tariq Anwar, TJRM
Trade Facilitation	Tf-04	Customs Modernization Project	The Project is a continuation of ADB's support and the Government's efforts over the past years in promoting trade and improving investment climate through customs reforms and modernization. It responds to priority needs of the Government in the context of the forthcoming accession of Mongolia to the Revised Kyoto Convention and enactment of a new customs law, and the Government's recent initiative to move towards a single electronic window (SEW) and e-government.	MON	\$5 million (ADF)	Fact-finding completed.	Approval scheduled in Nov/Dec 2006, and implementation over 3 years from March 2007.	Qifeng Zhang, EARD/EARG
Industry and Trade 4699-AFG (Nov 2005)	Tf-05	Building the Capacity of the Ministry of Commerce (MOC) for Trade and Transit Facilitation	The TA will enhance the capacity of MOC in transit and trade facilitation as well as strengthen its strategic planning and policy coordination in its border operations.	AFG	\$0.4 million	ongoing	The TA implementation period is 2 years starting December 2005.	Michaela Prokop, AFRM
40015-01	Tf-06	Integrated Regional Trade Facilitation Strategy for Individual	The RETA will develop an integrated trade facilitation strategy for individual countries, with a focus on trade logistics, product standardization, and trade and	REG	\$1.6 million	under preparation		Sona Shrestha, CWGF

⁹ Regional Technical Assistance for Trade Facilitation and Customs Cooperation Program. 6058-REG and L1926/KGZ-1927/TAJ.

Development Matrix

Sector/ Loan & TA No.	Code	Name	Project Description	Participating Countries	Financing	Project Status	Implementation Schedule	Contact Information	
		Countries (Phase I)	investment.						
	Tf-07	Integrated Regional Trade Facilitation Strategy for Individual Countries (Phase II)	The RETA will provide support for the implementation of reform recommendations made under Phase I. Specifically, the RETA will support: (i) the development of trade logistics, (ii) the adoption of international conventions of product standards, and (iii) measures to attract trade-related investment and technology transfer.	REG	\$0.8 million	planned TA for 2008		CWGF	
	Tf-08	Regional Customs Modernization and Infrastructure Development Project (Phase II)	Building on the achievement under Phase I, the Phase II of the Project aims to (i) extend the UAIS to other regional customs houses and border posts; and (ii) improve infrastructure in regional customs houses and border posts that are not covered in Phase I.	TAJ	\$8.0 million (ADF)	planned Loan for 2008		CWGF	
Transport Connectivity									
Transport	Tr-02	Central Asia Regional Transport Strategy Study	To prepare a CAREC regional transport sector strategy.	Regional	1.45	Planned (to be approved in December 2006)	To be determined	H. Wang CWID	
Transport	Tr-03	Dushanbe–Kyrgyz Border Road Rehabilitation (Phase II)	To improve a regional road network in Central Asia that links Kazakhstan, Kyrgyz Republic, PRC, Tajikistan, Afghanistan, and Uzbekistan. This network is part of a larger network providing links to the ocean ports of Iran and Pakistan to the south, and to the Russian Federation to the north.	TAJ	Total: 39.5 ADB: 29.5 (loan) 0.5 (grant) Govt: 9.5	Ongoing (Approved on 17 November 2005)	17 November 2005 – 30 June 2009	R. Ishenaliev CWID	
Transport	Tr-04	East-West Highway Improvement	To improve (i) 127 km of two-lane paved road on the sections of Yevlakh–Ganja and Qazakh–Georgian border of Azerbaijan’s primary east–west highway, (ii) support policy reforms and improve governance in the road subsector through institutional strengthening, and (iii) facilitate the movement across Azerbaijan’s border (at Red Bridge) with Georgia.	AZE	Total: 93.2 ADB: 52.0 IsDB: 10.4 SFD: 11.0 Govt: 19.8	Ongoing (Approved on 8 December 2005)	December 2005–30 November 2009	H. Wang CWID	
Transport	Tr-05	Qaisar-Bala Road	To support (i) rehabilitation of the Qaisar-Bala Murghab section (90 km) of Herat-Andkhoy road; (ii) installation of road tolling facilities for the project road; (iii) HIV/AIDS prevention and anti-human trafficking awareness activities; (iv) construction, supervision and monitoring; and (v) incremental project management.	AFG	55.0	Ongoing (Approved on 12 July 2005)	12 July 2005–31 December 2008	D. Pyo SATC	
Transport	Tr-06	Facilitation of Transport Cooperation among Central Asia Regional Economic Cooperation Countries (Phase I)	To (i) support the functioning of TSCC as an effective mechanism for planning, coordinating, and monitoring transport cooperation activities among CAREC countries; and (ii) undertake a pre-feasibility study on improving selected three regional roads to strengthen transport and economic links among CAREC countries.	Regional	0.65	Ongoing (Approved on 21 December 2005)	December 2005 – 31 December 2007	H. Wang CWID	
Transport	Tr-07	North-South Corridor	To provide access to road transport for the central mountain region and facilitating direct and shorter connections between various regions as well as facilitating North–South transit traffic.	AFG	Total: 140.9 ADB: 78.2 (loan) 40.0 (grant) JFPR: 20.0 Govt: 2.7	Planned (To be approved in August 2006)	To be determined	O. Norojono CWID	

Development Matrix

Sector/ Loan & TA No.	Code	Name	Project Description	Participating Countries	Financing	Project Status	Implementation Schedule	Contact Information
Transport	Tr-08	Southern Road Corridor Improvement	To improve the Masally–Astara section of the Alat–Astara road, develop the cross-border facility at Astara, enhance sustainability by supporting sector policy and institutional reforms.	AZE	100.0 (loan) 0.7 (PPTA grant)	Loan planned (2007) PPTA ongoing	To determined	be H. Wang CWID
Transport	Tr-09	Pre-Feasibility Study of Western Regional Road Corridor Development	Undertook a pre-feasibility study on developing a regional road to link the western Mongolia with the PRC and the Russian Federation.	MON	0.15	Completed	July–December 2005	H. Wang CWID
Transport	Tr-09	Western Regional Road Development	To strengthen transport links between western Mongolia, PRC, and the Russian Federation.	MON	32.0 (loan) 0.65 (PPTA grant)	Loan planned (2007) PPTA ongoing	To determined	be L. Athukorala EATC
Transport	Tr-10	Xinjiang Regional Road Improvement	To improve regional transport corridors in Xinjiang by upgrading the Korla–Kuqa section of Highway 312 to an expressway.	PRC	150.0 (loan) 0.6 (PPTA grant)	Loan planned (2007) PPTA ongoing	To determined	be H. Masood EATC
Transport	Tr-11	Dushanbe–Kyrgyz Republic Border Road Rehabilitation (Phase III)	To continue ADB's improvement of the key regional corridor linking Tajikistan with the Kyrgyz Republic and PRC along Dushanbe–Kyrgyz Republic border Road.	TAJ	20.0 (loan) 0.5 (PPTA grant)	Loan planned (2007) PPTA ongoing	To determined	be R. Ishenaliev CWID
Transport	Tr-12	Regional Infrastructure (Roads)	To be determined	UZB	20.0 (loan) 0.3 (PPTA grant)	Loan planned (2007) PPTA planned (To be approved in Oct 2006)	To determined	be O. Norojono CWID
Transport	Tr-13	Rehabilitation of Regional Airports II	To rehabilitate regional airports damaged during two decades of conflict and consequent neglect.	AFG	ADB: 40.0	Planned (2007)	To determined	be S. Muramoto CWID
Transport	Tr-14	Road Network 1	To be determined	AFG	Total: 150.0 ADB: 50.0 (loan) Cofinancer: 100.0 2.7 (PPTA grant)	Loan planned (2008) PPTA planned (To be approved in Jul 2006)	To determined	be CWID
Transport	Tr-15	Bishkek–Torughart Road Rehabilitation	To improve the road between Bishkek and the Kyrgyz border to the PRC at Torugrat, and border-crossing facilities and procedures in Torugart.	KGZ	20.0 (loan) 0.6 (PPTA grant)	Loan planned (2008) PPTA planned (2007)	To determined	be CWID
Transport	Tr-16	Regional Transport	To be determined	MON	32.0 (loan) 0.6 (PPTA)	Loan planned (2008) PPTA Planned (2007)	To determined	be L. Athukorala EATC
Transport	Tr-17	Regional Railway	To facilitate regional cooperation and economic growth by developing and rationalizing the railway network and promoting reliable, safer, faster, and more accessible transportation.	UZB	20.0 (loan)	Planned (2008)	To determined	be CWID
Transport	Tr-18	Preparing the Logistics Development and Capacity Building in Xinjiang	To be determined	PRC	0.7 (co-financing and administered by ADB)	Planned (2006)	To determined	be Y. Qian EARG
Transport	Tr-19	CAREC Regional Railway Development (Phase I)	To study and critically evaluate the existing railway infrastructure, develop a regional railway network, and identify the potential investments required to develop	Regional	0.85	Planned (2007)	To determined	be CWID

Development Matrix

Sector/ Loan & TA No.	Code	Name	Project Description	Participating Countries	Financing	Project Status	Implementation Schedule	Contact Information	
Transport	Tr-20	Maintenance of Regional Road Transport Corridors	infrastructure on this network to meet the needs of regional transport in these countries. To promote regional cooperation by (i) carrying out periodic road maintenance and implementing measures to improve safety on parts of the key regional roads in the Kyrgyz Republic.	KGZ	20.0 (loan) 0.50 (PPTA grant)	Loan planned (2007) PPTA ongoing	To be determined	N. Davis CWID	
Transport	Tr-21	Regional Road Funding and Management in Central Asia Regional Economic Cooperation Countries	To (i) assess the status and future needs of funding and maintenance for regional roads in CAREC countries; (ii) develop a three-year road funding and management plan for regional road corridors in CAREC countries; and (iii) familiarize the transport ministries with results based approaches to road network management.	Regional	0.6	Planned (to be approved in August 2006)	To be determined	N. Davis CWID	
Transport	Tr-22	Preparing the Road Network III	To be determined	AFG	1.0	Planned (2007)	To be determined	CWID	
Transport	Tr-23	Road Sector Planning	To be determined	AFG	1.2	Planned (2008)	To be determined	CWID	
Transport	Tr-24	Osh-Sarytash-Irkeshtam Road Rehabilitation (phase I)	Rehabilitation of part of the Regional Southern Transport Corridor connecting Uzbekistan, Kyrgyzstan, Kazakhstan and PRC	KGZ	Loan	Pipe-line	Planned to start in 2006	IDB Regional Office Almaty	
Transport	Tr-25	Reconstruction of the Taraz-Talas-Suusamyrd Road (phase II)	Further improvement of the Taraz-Talas-Suusamyrd Road linking with Kazakhstan	KGZ	Loan	Pipe-line	Planned to start in 2007	IDB Regional Office Almaty	
Transport	Tr-26	Shagon-Zigar Road Rehabilitation (phase III)	Further improvement of the Shagon-Zigar Road	TAJ	Loan	Pipe-line	Planned to start in 2006	IDB Regional Office Almaty	
Transport	Tr-27	Construction of Kulyab-Khalaikum road	Construction of Kulyab-Khalaikum road	TAJ	Loan	Pipe-line	Planned to start in 2007	IDB Regional Office Almaty	
Transport	Tr-28	Turkmenbashi-Karabogaz road Construction	Construction of a Turkmenbashi – Karabogaz – Kazakhstan road	TKM	Istisna'a	Pipe-line	Planned to start in 2007	IDB Regional Office Almaty	
Transport	Tr-28	Feasibility Study - Turkmenbashi-Karabogaz road Construction	Construction of a Turkmenbashi – Karabogaz – Kazakhstan road	TKM	Istisna'a	Pipe-line	Planned to start in 2007	IDB Regional Office Almaty	
Transport	Tr-29	Reconstruction of Baku-Astara Road	Reconstruction of road	AZE	Lending	Pipeline	Planned for 2008	IDB ROA	
Transport	Tr-30	TA for FS and PD for Construction of Dushanbe-Vakhsh railway	Construction of Dushanbe-Vakhsh railway	TAJ	TA grant	Pipe-line	Planned to start in 2008	IDB Regional Office Almaty	
Transport	Tr-31	TA for FS for Construction of Dushanbe-Tursunzoda-Sarband Gas Pipeline	Construction of Dushanbe-Tursunzoda-Sarband Gas Pipeline	TAJ	TA grant	Pipe-line	Planned to start in 2006	IDB Regional Office Almaty	
Energy Development									
Power	En-01	Construction of 500 kV South-North transmission line	Construction of transmission line	TAJ	Loan	Pipe-line	Planned to start in 2007	IDB Regional Office Almaty	
Power	En-02	110 kV transmission line	Construction of transmission line	KGZ	Loan	Pipeline	Planned for 2006	IDB ROA	

Development Matrix

Sector/ Loan & TA No.	Code	Name	Project Description	Participating Countries	Financing	Project Status	Implementation Schedule	Contact Information
Power	En-03	Mingechaur Hydropower	Procurement and installation of new equipment at Mingechaur Power Plant	AZE	Lending	Pipeline	Planned for 2007	IDB ROA
Power	En-04	Derbend-Yashma transmission line	Construction of Transmission Line	AZE	Lending	Pipeline	Planned for 2007	IDB ROA
Power	En-05	500-kv Sogdiana-Talimarjan transmission line	Construction of transmission line	UZB	Lending	Pipeline	Planned for 2008	IDB ROA
Power	En-06	TA for Nachichevan Power	Technical assistance to prepare FS	AZE	Non-lending	Pipeline	Planned for 2007	IDB ROA
Power	En-07	400 kV Balkanabad-Iranian border transmission line	Construction of transmission line	TKM	Istisna'a, Installation Sale	Pipe-line	Planned to start in 2007	IDB Regional Office Almaty
Power	En-08	Regional Transmission Interconnection	Construction of TL and rehabilitation of substations	AFG/TAJ	Loan	Feasibility under preparation	Planned to start in 2007	CWID
Power	En-09	Regional Transmission Interconnection	Project preparatory technical assistance	AFG/TAJ	Grant	Ongoing	Completed by Oct 2006	CWID
Power	En-10	Strengthening of regulatory capacity	Regional training and advisory technical assistance	REG	Grant	Planned	Start in 2007	CWID
Others								
Trade Facilitation	Ot-01	Logistics Development and Capacity Building in Xinjiang Autonomous Region	Expected impact and outcomes are: (i) positioning Xinjiang's logistics industry development in a broader prospective as the key link in the Euro-Asia continental bridge, the center for regional cooperation with central Asia, and the launching pad for China's "going-out" policy; and (ii) developing a strategy for logistics industry development in Xinjiang, covering issues such as such policy reforms, infrastructure development, provision of public financial resources and participation of private sector, and institutional capacity building.	PRC	\$500,000	MOU with EA and MOF of PRC	begin in October 2006 and end in June 2007	Ying Qian EARD/EARG
Industry and Trade	Ot-02	Regional Bonds Market Development	The TA will aim to promote private sector development through improved financial intermediation. To this end, the TA will review the constraints to bond market development, and recommend specific and time-bound measures for strengthening relevant laws and regulations, and developing bond market infrastructure and institutional capacity.	REG	\$0.8 million	planned TA for 2008		CWGF

Appendix 3: Special Initiatives

1. Special initiatives are in response to the interests and concerns of CAREC countries. They address regional issues or development opportunities additional to those related to CAREC's priority sectors. By tailoring projects designed to address specific issues and interests in human development, the environment, agriculture and other areas, the CAREC Program can be broadened and deepened in a manner that does not compromise the focus of CAREC – namely practical, results-oriented activities leading to improved transport connectivity, trade expansion and energy development.

2. Special initiatives are project specific rather than sector wide (HIV/AIDs regional program the World Bank and ADB, as contrasted to human development more generally). Their inclusion in the CAREC Program would be subject to SOM and MC approval. Management of the special initiatives would be on a project basis, as specified in the design and implementation documentation. The CAREC Unit would monitor activities under the special initiatives and report annually on them to the SOM and MC.

3. Special initiatives could include:

- (I) Avian Flu
- (II) Business Development Forum
- (III) CAREC Institute (research/policy research advisory briefs/training)
- (IV) Disaster Management and Preparedness
- (V) Economic Corridors
- (VI) Environment
- (VII) HIV/AIDS
- (VIII) Linking CAREC Business Enterprises to International Product Markets

I. Avian and Human Influenza

A. Background and Relevance to CAREC

4. A regional conference on avian influenza was held in Almaty, Kazakhstan, on 12-13 June 2006, co-organized by ADB with the CAREC Program, the US Center for Disease Control and Prevention and the US Agency for International Development, various UN agencies (FAO, UNDP, UNICEF, UNDP and WHO), and the World Bank. The purpose of the meeting was to review and compare national preparedness programs, and to increase regional collaboration by adopting a systematic, multi-sectoral, and coordinated public health approach.

5. Participants included representatives from CARs and neighboring countries,¹⁰ the donor community and technical agencies. There were three representatives per country (from the Ministry of Health, Veterinary Services, and Emergency Situations). After a series of technical presentations on avian and human influenza, the country delegations presented their national avian and human influenza preparedness programs, followed by discussion of regional coordination and collaboration. A donors' coordination meeting for CARs took place in parallel.

¹⁰ Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, Uzbekistan, as well as Azerbaijan, Afghanistan, PRC (Xinjiang Province), Georgia, Iran, Mongolia, Russian Federation and Thailand.

6. The participants recommended maintaining regular consultations to strengthen regional collaboration for avian influenza and other emerging/infectious diseases. Participants endorsed the Almaty Declaration, shown below. Both the country representatives and representatives of the donor community suggested that CAREC could help facilitate this regional collaboration and requested ADB to explore this option. In response, ADB is proposing that resources from components 1 (regional capacity building) and 2 (regional collaboration) of the Regional Avian Influenza Project be used in support of regional collaboration against avian influenza in Central Asia through CAREC.

B. Almaty Declaration on Avian Influenza and the Threat of a Human Pandemic in the CAREC Region (excerpts)

7. Following two days of deliberations, we, the participants of the Regional Conference on Avian Influenza Control and Human Influenza Pandemic Preparedness and Response, having considered:

- (i) The global risk of avian influenza due to the highly pathogenic H5N1 stain;
 - (ii) The recent outbreaks of avian influenza epidemic in Afghanistan, Azerbaijan, PRC, Kazakhstan, Mongolia and the Russian Federation and the potential risk of spread --- to other countries in the region;
 - (iii) The urgent need for immediate implementation of counter-epizootic measures in the control of avian influenza outbreaks in view of its socio-economic impacts and public health significance;
 - (iv) The weak or non-existent capacity for laboratory diagnosis of avian influenza virus for both animal and human health in the 10 participating countries;
 - (v) The uneven levels of preparedness of the countries to cope with the threat of a human influenza pandemic;
 - (vi) The serious challenge that avian and human influenza poses---
- (a) Declare the need for a firm commitment at the highest level of Government and to ensure multi-sectoral coordination;
 - (b) Declare the need for each country to give priority to finalization of preparedness and response plan;
 - (c) Declare the need for exchange of experiences and lessons learned;
 - (d) Encourage awareness-raising public communication plans;
 - (e) Call on CAREC countries to promptly notify relevant international organizations;
 - (f) Declare that countries should strictly enforce the recommended avian influenza disease control measures;
 - (g) Declare that countries should ensure that timely socio-economic and alternative livelihood studies are conducted for affected areas;
 - (h) Invite countries to take into account the re-stocking of poultry in consultation with stakeholders;
 - (i) Declare that countries should put in place incentives such as compensation funds and schemes for affected farmers;
 - (j) Declare that countries should urgently evaluate and strengthen their veterinary services;
 - (k) Declare that CAREC countries should strengthen their human health surveillance systems;
 - (l) Stress that countries should establish and strengthen collaboration between public health systems and animal health systems;

- (m) Strengthen the capacities and increase the number of veterinary and human health laboratories;
- (n) Appeal to IATA to facilitate transportation of specimens to reference laboratories;
- (o) Urge the UN system to strengthen the capacity of their country teams to support countries in responding to the avian influenza;
- (p) Reaffirm the need for countries and the international community to mobilize the necessary technical and financial resources;
- (q) Call on the international community and manufacturers of antivirals, protective equipment, vaccines, and other supplies to make these products accessible to CAREC countries; and
- (r) Decide to create a follow-up committee to monitor progress and to report to a subsequent conference.

II. Business Development Forum (October 2006)

A. Background

8. A preparatory meeting for establishment of a Regional Business Roundtable (RBR) was held in November 2005, just prior to the 4th Ministerial Conference. The Bishkek Action Plan, endorsed by the MC, outlined mechanisms for greater participation by the business community in CAREC and the Central and South Asia Trade and Transport Forum (CSATTF). In addition to the three core areas of trade, transport and energy, it was proposed that the RBR agenda should also include the financial sector and tourism.

9. Subsequently, PRC suggested that CAREC hold a Business Development Forum (BDF) for Central Asia, drawing on the experience of the Greater Mekong Subregion (GMS) Program of Economic Cooperation. The Forum would seek to deepen awareness of Central Asia and draw attention to a wide range of investment opportunities in the region, including the potential for public-private sector partnerships in the development and implementation of key infrastructure projects. The BDF would combine the activities of the RBR.

10. The CAREC BDF is to be held just prior to the CAREC MC in Urumqi, PRC in October 2006. Some 300 to 400 senior level business representatives and officials are expected to participate in the BDF.

B. Objectives of the CAREC BDF

11. The main objectives of the CAREC BDF are:

- (i) To bring together public and private sector investors to identify and define major investment opportunities and communicate to the MC barriers that prevent such investments from happening;
- (ii) To leverage available information in support of private sector investments;
- (iii) To identify the major constraints to investment in the region and develop mechanisms to address these constraints;
- (iv) To support development of the hard and soft infrastructure required to foster greater trade and investment;

- (v) To foster linkages between private sector participants in order to ensure expansion of markets, development of intra-regional supply chains, and integrated financial systems;
- (vi) To foster business sector involvement in CAREC initiatives by providing direct channels for communication with CAREC governments;
- (vii) To lay the groundwork for sustainable structures and institutional mechanisms to perpetuate development of public/private sector partnerships and private sector investment in regional cooperation projects.

C. Sector Scope

12. The CAREC BDF will examine priority investment opportunities and obstacles to investment in five sectors: energy (oil and gas); mining; banking and finance; agribusiness; and tourism and related services.

III. Capacity Building: the CAREC Institute

A. Rationale

13. One of the strongest contributions of the CAREC Program has been to increase understanding of the costs of trade and other barriers to development, and the benefits of regional cooperation initiatives to overcome these barriers. A number of background studies have provided the foundations for this enhanced understanding, and for identifying regional initiatives of mutual benefit for CAREC countries. Further, CAREC's steady schedule of regional dialogue through MCs, SOMs, sector committee meetings, and knowledge and business forums has contributed importantly to forging trust and networks among key officials and stakeholders.

14. Building on this success, the **knowledge/capacity building pillar** of the Strategic Framework for the Comprehensive Action Plan will combine the research/analysis strengths of the region and the six MIs, greatly increasing the capacity for designing and implementing mutually beneficial regional initiatives. Further, training for middle and senior level officials will be initiated, to form a cadre of officials skilled in regional cooperation processes. Outreach activities and business forums will broaden the inclusiveness of the CAREC Program. To coordinate these research, training and dialogue activities, steps will be taken towards formation of an independent CAREC Institute, with advisory supervision by eminent persons from the region and internationally.

15. In point form, activities related to the knowledge/capacity building pillar will include:

- Research networks combining expertise in the region and the six MIs
- Initiatives toward formation of the CAREC Institute
- Regional dialogue, outreach activities, and in-country workshops
- Policy research briefs, CAREC newsletter, and web site
- Business development forums and new business concepts (global value chains)
- Capacity building, advisory positions, training, and "best practices" workshops
- third-party, honest broker role of MIs, eminent persons

16. In support of the knowledge/capacity-building pillar, the CAP includes steps toward formation of the CAREC Institute. The Institute will initiate and management research, dialogue and training activities directly relevant to the CAREC Program.

B. Background and Objective

17. Under ADB TA 6158 and ADB TA 6288 (the later funded by PRC's Poverty Reduction and Regional Cooperation Fund), there is approximately \$1 million available for research activities and capacity building under the CAREC Program. These resources provide the basis for initiating the research, dialogue and training activities that will be the foundations for the CAREC Institute. Substantial additional funding is expected through co-financing.

18. Regional cooperation requires sustained, long-term commitment and willingness by all participants to identify and facilitate initiatives of benefit to themselves and to their partner countries. Top quality information and analysis is needed to assess the benefits and costs of regional initiatives, and to provide the basis for consensus and support by participating countries. High-level regular meetings and communication are necessary, together with well structured workshops/knowledge forums. Short, well-focused policy-research briefs should serve to guide these forums, and to help engage senior policy makers. Further, regional initiatives must be integrated with national development plans and public investment programs, requiring extensive domestic as well as regional coordination. The Comprehensive Action Plan should be a flexible rather than a static document, requiring annual inputs to reflect new interests and developments.

19. Regional cooperation also requires a cadre of middle and senior-level officials skilled in the analytical tools and negotiating processes necessary for formulating and implementing mutually beneficial regional initiatives.

20. Accordingly, the CAREC Institute will have three basic roles:

- **Research/analysis relevant to regional cooperation;** this requires development of research/analysis networks in the region, together with linkages to external experts and institutions; the networks of experts will address issues, concepts or new development possibilities of interest to CAREC countries; the research/analysis networks will also support the Strategic Management and Priorities Subcommittee of the SOM;
- **Fostering dialogue, to build understanding and interest in regional cooperation;** in addition to outreach activities (e.g., seminars/workshops), the Institute will publish and widely disseminate policy research briefing papers, designed to capture the interest of key stakeholders (e.g., political leaders, senior government officials, senior business representatives);
- **Training/capacity building,** to create a pool of highly qualified, competent middle and senior-level officials to promote and manage regional cooperation initiatives in Central Asia.

21. Building research networks in priority areas of cooperation will facilitate use of expertise in the region and help promote understanding and consensus. Sharing of information and joint analysis will encourage greater harmony in policy advice, contributing thereby to bilateral and multilateral regional cooperation initiatives. Further, research networks will contribute to strengthening institutional capacities in the region and offer a more constructive means for

tapping into international expertise. The CAREC Institute will work closely with the Central Asian Gateway Project based in Tashkent.¹¹

22. The CAREC Institute will act as a center of excellence for the region, helping to introduce international best practices, undertake sector studies to determine possible areas of comparative advantage, and to identify new market opportunities. It will also help organize trade fairs and business forums to promote trade and investment.

23. The CAREC Institute will support the participation of regional and international eminent persons in regional cooperation and integration. In particular, the Institute will support a senior representative with the following roles:

- Help strengthen links to SCO, EurasEC and other regional organizations
- Help strengthen CAREC outreach activities in Central Asian countries
- Help initiate implementation of CAREC Institute
- Help broaden donor participation in CAREC research, dialogue and training activities

23. Training activities, modeled in part after the Phnom Penh Plan of the Greater Mekong Subregion (GMS) Program of Economic Cooperation (see Box 1), will include:

- short courses (2-3) weeks, in partnership with leading education and training institutions, to strengthen the policy analysis and management capabilities CAREC officials;
- workshops (1-3 days) on special topics of particular relevance (e.g. negotiation; public private partnership in regional infrastructure);
- study tours to learn from “best practice experience” related to regional cooperation, public policy and management (e.g. GMS Program/Europe);
- Distinguished Speakers program on topics of particular relevance to CAREC.

C. Initiating the CAREC Institute

24. To facilitate management and integration with the overall CAREC Program, it is proposed that the CAREC Institute be linked to the CAREC Unit (based in Almaty and supported from ADB Headquarters, Manila). Until more resources can be mobilized, it is further proposed that the CAREC Institute be initiated on a small scale, with use of information-communication technologies (internet, web sites, video conferencing) to help economize on costs. Once sufficient funding is secured, the Institute will be established on an independent endowment/revenue generating basis, with advisory supervision by eminent persons from the region and internationally.

¹¹ The Central Asian Gateway Project was launched in November 2003 by the Center for Economic Research in Uzbekistan, with the support of the Government of Uzbekistan, donors and the UNDP. The Project networks research and media institutions in Kazakhstan, Kyrgyz Republic, Tajikistan and Uzbekistan. It is proposed to expand the network to include Afghanistan, Azerbaijan, Mongolia, PRC and the Russian Federation.

Box 1: The Phnom Penh Plan (PPP)

“If subregional cooperation is our common endeavor, then there is no better breeding ground for friendships and camaraderie among civil servants of the six GMS countries than the PPP.” ADB Vice President Liqun Jin, 2003

The Phnom Penh Plan for Development Management provides a common training forum for GMS officials (Cambodia, Lao PDR, Myanmar, Thailand, Viet Nam and Yunnan and Guangzi provinces of PRC).

The objectives of the PPP include:

- strengthen the capacity of GMS officials for managing development programs and plans;
- reinforce partnerships and strengthen cooperation among the GMS countries;
- develop institutions through partnerships with reputable capacity building partners;
- promote GMS-anchored research that will assist capacity-building and policy development interventions.

Since its inception in 2003, PPP has delivered 36 demand-based learning programs benefiting over 700 middle and senior GMS officials. The learning programs include governance, leadership, poverty reduction, private-sector participation, environment management, government and civil society participation, regional cooperation, negotiation, strategic management, health care financing, human resource management and e-governance. A Learning Resource Center has been established in the ADB Cambodia Resident Mission to promote GMS awareness and knowledge. A network of capacity building partners has been created and a GMS research framework and program has been established. A PPP Fellowship Program has also been established.

Funding for the PPP was initially \$1.3 million (\$800,000 from ADB and \$350,000 from NZAid). In 2005, further resource mobilization for the PPP was undertaken, with the result that as of June 2006 an additional \$4,073,000 is available for training and associated activities (ADB, \$800,000; NZAid \$850,000; Government of France \$1,923,000; PRC \$500,000). Two types of training programs will be offered in the next phase: in-depth training programs and short high impact courses for high level officials.

IV. Disaster Management¹²

A. Risk Profile of Central Asia

25. The Central Asian region is prone to a variety of natural disasters that occur frequently and on a very large scale, with potential to affect or kill large numbers of people. Earthquakes, landslides, and floods characterize much of the region, but drought, sandstorms, hailstorms, and snowstorms also cause periodic damage. While progress is being made, inadequate dam safety still creates risks from flooding, including the risk of hazardous mine tailings entering downstream water bodies.

¹² Much of the material in this paper is drawn from the *Central Asia Human Development Report. Bringing Down Barriers: Regional Cooperation for Human Development and Human Security*. 2005. New York: United Nations Development Programme; and *Enhancing Regional Cooperation in Infrastructure Development, Including That Related to Disaster Management*. 2006. New York: United Nations Economic and Social Commission for Asia and the Pacific.

26. A quantitative risk assessment undertaken in 2003¹³ by the World Bank confirms that natural disasters can have a significant consequence for the economic performance of Central Asian countries. More than 90% of the loss potential is from earthquakes, floods, and landslides. A quarter of the total expected loss is caused by events that are predicted to occur on average once every 20 years. Another 38% originate from events that have a return period of 20–25 years. Catastrophic events with an annual probability of occurrence of 0.5% (events expected to occur once in every 200 years) would have a major impact on already vulnerable economies. Expected economic losses from such events exceed 20% of GDP in Armenia, Azerbaijan, and Tajikistan; 10% of GDP in the Kyrgyz Republic; and 5% of GDP in Kazakhstan.

27. Evidence shows that the social and economic costs of natural disasters are increasing. From the 1970s to the 1990s, the number of people affected globally tripled while the decadal economic cost increased by a factor of \$5 billion to more than \$600 billion. More recently, global climate change has become recognized as an additional risk incubator. Increases in frequency and intensity of climatic hazard impacts could exacerbate trends in many vulnerable locations.

B. Disaster Preparedness and Management

National Preparedness

28. The Central Asian countries have ministries for emergency situations, which deal with policy aspects, provide training, manage state disaster reserve resources, and provide coordination among different levels of government in developing and implementing emergency plans. The People's Republic of China (PRC) has, since January 2005, a State Disaster Reduction Commission.

- **Legal Framework.** Each country has each own decrees, acts, and laws that serve as legal basis for disaster management.
- **Hazard/Risk Mapping.** Most countries have risk maps. Those in the Central Asian countries were prepared during the Soviet era, but their scale is not suitable for risk management activities. Most of these maps are outdated.
- **Disaster Preparedness Plans.** Countries in the region have made different levels of progress in developing disaster preparedness plans. The PRC has a State Natural Disaster Relief Contingency Plan. Kazakhstan has a National Disaster Preparedness Action Plan. The Kyrgyz Republic, with assistance from the Asian Development Bank (ADB), is preparing a disaster risk management (DRM)¹⁴ capacity-building program and is making safe storage sites for waste products from metal processing.
- **Structural Measures.** In the Central Asian countries, many protective structures remain from the Soviet era—such as dams, dikes for flood protection, and sediment control devices. These structures lack maintenance, which not only decreases their protective value but also can amplify a disaster when they collapse.

¹³ World Bank. 2004. *Preventable Losses: Saving Lives and Property through Hazard Risk Management. A Comprehensive Risk Management Framework for Europe and Central Asia*. Washington DC.

¹⁴ The accepted definition of disaster risk management (DRM) is that described by the United Nations' International Strategy for Disaster Reduction as "the systematic process of using administrative decisions, organization, operational skills and capacities to implement policies, strategies, and coping capacities of the society and communities to lessen the impacts of natural hazards and related environmental and technological disasters. This comprises all forms of activities, including structural and nonstructural measures, to avoid (prevention) or to limit (mitigation and preparedness) adverse effects of hazards."

- **Community Involvement.** General awareness for natural disasters, preparedness, and mitigation is very low. In the PRC, a community-based disaster reduction outreach campaign has been launched.

Regional and International Cooperation

29. The emergency policies of the five Central Asian countries currently include a regional mechanism through the relevant ministries. In 1993, an Interstate Council for Emergency Situations Regarding Natural and Man-made Disasters was established to coordinate disaster management policies.

30. Central Asian countries also cooperate with each other through a number of regional and bilateral agreements, including

- 1996 agreement between Kazakhstan, Kyrgyz Republic, and Uzbekistan on joint collaboration for the rehabilitation of tailing sites that have a transboundary impact.
- 1998 agreement between Kazakhstan, Kyrgyz Republic, Tajikistan, and Uzbekistan on the joint use of transboundary rivers, water bodies, and hydraulic infrastructure.
- 1999 joint program of action to rehabilitate tailing sites in the countries of the Central Asian Economic Community.

31. Most Central Asian countries participated in the Subregional Initiative for Disaster Risk Management organized by the United Nations Development Programme (UNDP) in 2003 in Iran, to consider DRM initiatives in Central Asia and neighboring countries, including two related subsequent meetings.

32. The PRC is a signing party to the Shanghai Cooperation Organization Agreement on Intergovernmental Mutual Assistance for Disaster Relief and sponsored the Asian Conference on Disaster Reduction, the first ministerial meeting of its kind in Asia.

33. Central Asian countries are parties to many international declarations and summit agreements that stipulate increased preparedness for natural disasters on a national and regional bases. For example, all Central Asian countries, except Turkmenistan, sent a delegation to the World Conference on Disaster Reduction held in January 2005 in Kobe, Japan, and became parties to the Hyogo Framework for Action 2005–2015 (HFA) to pursue "substantial reduction" of disaster losses during that period and which calls for increased international and regional cooperation.

34. Two good examples of regional cooperative arrangements are the Asian Disaster Preparedness Center (ADPC), a nonprofit organization based in Bangkok, set up in part by ADB in 1986; and the International Strategy for Disaster Reduction (ISDR). ADPC's main role is to enhance the national and regional disaster management capacities. It undertakes this through a variety of modes, including training programs, promoting and supporting the mainstreaming of DRM in development processes, identifying national and regional DRM issues, and assisting development of strategic solutions. The ISDR is the successor to the United Nations's international Decade of Natural Disaster Reduction 1990–1999. The decade was dedicated to promoting solutions to reducing risk from natural hazards. ISDR was created to move this momentum forward by fostering greater awareness, public commitment, knowledge, and partnerships to implement risk reduction measures of all kinds, at all levels, in all countries.

35. On the donor side, many agencies give assistance for preventive as well as humanitarian emergency actions. The Swiss Agency for Development and Cooperation has a regional proactive strategy in operation, while the European has a general humanitarian plan of action. Other agencies are providing country-specific assistance. All the multilateral development banks have policies for disaster assistance.

36. ADB has also been active in providing disaster assistance. For ADB, responding to disaster impacts in unprepared developing member countries (DMCs) means diverting badly needed development funds to replace social and economic infrastructure that has been lost or dislocated. Carefully prepared country strategies and plans can be destroyed literally overnight, resulting in a huge loss in effort and time. In 2004, ADB adopted a proactive Disaster and Emergency Assistance Policy (DEAP), which aims to integrate DRM into the development process of DMCs, build DMC disaster and hazard risk management capacity, and take disaster risk into account in preparing ADB country strategies and plans and projects. A key element of DEAP is institutionalizing DRM by identifying risks during ADB's country programming schedules and building risk reduction strategies into the project plan. Regarding postimpact recovery, the policy emphasizes (i) rehabilitating critical physical and social infrastructure; (ii) revitalizing basic services; and (iii) jump-starting economic productivity, all in a DRM framework. The principles underpinning DEAP and the action plans stemming from it are similar to the HFA to which ADB, like most nations in this region, is a signatory. ADB is, therefore, assisting DMCs meet their HFA goals.

37. In spite of these efforts, disaster preparedness remains inadequate in much of the region. At the national level, there are needs to update (and in some cases, initiate) disaster legislation, enhance (and in some cases, establish) the national focal agency, and strengthen interinstitutional and intergovernmental (national-regional-local) coordination. In addition, there are needs to improve risk mapping, preparedness planning, improve protective infrastructure, and increase awareness and preparedness in communities. The need for capacity building underlies effective future actions in these areas. Regional cooperation in many of these areas is also necessary, and while some measures are underway, the present situation indicates that more intense cooperation is desirable.

C. Strategy and Approach to More Effective Disaster Management

38. An analysis of what transforms a natural event into a human and economic disaster reveals that the fundamental problems of development in Central Asia are the very same problems that contribute to the region's vulnerability to the catastrophic effects of natural hazards. The principal causes of vulnerability in Central Asia include (i) the persistence of widespread urban and rural poverty, (ii) degradation of the region's environment from mismanagement of natural resources, (iii) inefficient public policies, and (iv) lagging and misguided investments in infrastructure. Development and disaster-related policies have largely focused on emergency response, leaving a serious underinvestment in natural hazard prevention and mitigation. It follows that the most effective way to reduce losses from natural disasters is to integrate disaster risk into overall economic and development processes, i.e., mainstreaming DRM.

39. To mainstream DRM at the national level, the following points comprise a useful general course of action:

- (i) The first overarching issue is to improve governance for DRM. Most countries in this region still deal with disaster risk through response-focused civil defense-

- type structures. Risk considerations have to be factored in into all aspects and levels of government and society.
- (ii) Disaster risk analysis should be undertaken for all new developments. This not only means ensuring that new development is located and built in such a way as to be more secure but also ensure that new development does not generate new risk.
 - (iii) Post-disaster recovery, if not undertaken correctly, too often rebuilds risk and creates the conditions for further and worse disasters in the future. The post-disaster period is, therefore, a unique opportunity to factor risk considerations into development.
 - (iv) Treating hazards as dynamic is important: hazard characteristics change, and with it so do the risks. For example, climate change is already altering the frequency, severity, and intensity of hydrometeorological hazards.

40. To give an example of the benefits of mainstreaming a DRM approach, the World Bank recently estimated that, on average, countries can save \$7 in disaster recovery costs for every \$1 spent on risk reduction measures.

41. **Infrastructure Investment.** Infrastructure¹⁵ is a key issue because infrastructure is basic not only for economic growth but also to bring the benefits of a higher economic performance to people living in rural and isolated areas as well as to enable them participate in mainstream economic activities. Moreover, damage to infrastructure can slow down response and recovery operations. Nevertheless, critical infrastructure—the systems, facilities, and networks that support health, safety, and well-being of citizens (e.g., utilities, transport, and health services)—is destroyed or incapacitated during disasters. Infrastructure damage is estimated to make up two thirds of all flood losses. About 70% of all damage from the December 2004 tsunami disaster¹⁶ was to infrastructure. Clearly, critical infrastructure needs to be protected from potential natural disasters. At the national level, mainstreaming DRM implies careful land-use planning of such critical facilities as power plants and major roads with consideration to possible occurrence of natural disasters that would help minimize damage. Attention is also needed to building code regulations and enforcement.

D. Future Regional Cooperation

42. Since many disasters transcend national borders, mitigation would clearly benefit from regional cooperation by sharing resources, experience, and expertise. However, the effectiveness of the existing national and regional mechanisms for natural disaster preparedness in Central Asia is limited due to inadequate funding and capacity, while international development partners, though quick to provide assistance in the event of disaster, have paid little attention to supporting prevention and disaster preparedness.

43. Similar to the Asia and Pacific region as a whole, disaster management in Central Asia has been badly neglected. ADB estimates that 1% (about \$40 billion) of the entire Asia and the Pacific region's gross national income of \$4 trillion is needed to put the needed disaster

¹⁵ The Asian Development Bank (ADB) uses the definition of infrastructure developed by the Task Team on Infrastructure for Poverty Reduction, which distinguishes "social infrastructure" (such as health, education, and culture) from "economic infrastructure" (such as transport, energy, information and communication technology, and irrigation, drinking water, and sanitation). See Development Co-operation Directive. 2006. *Guiding Principles on Using Infrastructure to Reduce Poverty*. Paris: Organisation for Economic Co-operation and Development.

¹⁶ The tsunami seriously affected India, Indonesia, Maldives, Sri Lanka, and Thailand. In total, it affected 11 countries.

management infrastructure in place.¹⁷ An additional \$15 billion is required to restore the infrastructure and economic momentum of countries in the region that are continuously devastated, much due to lack of appropriate disaster risk reduction measures.

44. While developing and mainstreaming national DRM systems are essential, regional initiatives are important. In a region subject to sudden-onset disasters that have wide geographical coverage (earthquakes are the classic example), and where much of the region's transport and communications infrastructure crosses several borders, the need for regional-level services is obvious. Conversely, failure to implement DRM in any one country can affect such infrastructure and, thus, the region as a whole.

45. Regional cooperation for DRM, including infrastructure development, is essential not only to cope with the impacts of disasters but also to help ensure that the region sustains economic growth. Regional cooperation in DRM in the 21st century is expected to respond to development needs in a more flexible manner than the past. Future regional cooperation is expected to focus on emerging natural hazards of increasing intensity or to be incorporated into the DRM process of regional and national development programs.

46. From an international development partner perspective, enhanced regional cooperation in DRM offers attractive opportunities to provide resources. Some partners (including ADB) have separate funds for regional versus individual country allocation. Thus, assistance in regional cooperation serves to enhance, not detract from, country assistance. International partners can assist countries in the region to meet their domestic needs and international obligations (e.g., HFA) through technical assistance and loan support for regional cooperation in such areas as the following:¹⁸

- (i) **Building Capacity, Training, and Public Support for Disaster Management and Mitigation.** To be successful, regional cooperation needs to build on a strong national institutional base.
- (ii) **Assistance in Development of National Disaster Management Plans.** Harmonization of such plans across the region would greatly enhance mutual understanding and sharing of resources during emergencies. This must be supported by enabling disaster management legislation.
- (iii) **Development of National Disaster Information Systems.** Monitoring and reporting on all data related to disasters is essential, not only of occurrences but also types of hazards, potential risks, and available resources and institutions. These also form the basis of public awareness campaigns and community involvement in disaster preparedness and mitigation.
- (iv) **Improving Legislative and Institutional Arrangements and Enhancing Political Will.** A cooperative approach to disaster management and mitigation among countries of the region would result in harmonized legislation, enabling cross-border or region-wide actions to proceed rapidly in the event of disaster.
- (v) **Integration of Disaster Risk Reduction into National Development Processes.** As noted, only by such integration can disaster risk management considerations influence

¹⁷ ADB. 2005. *Key Indicators of Developing Asian and Pacific Countries*. Manila.

¹⁸ This section draws from the experience and plans for regional cooperation on disaster management throughout Asia David Hollister. Priority Needs and Areas for Regional Cooperation in Disaster Management in Asia. Manuscript was prepared as a contribution to the first edition of the *Global Blueprints for Change* and for use in conjunction with the International Workshop on Disaster Reduction convened on 19–22 August 2001 in Reston, VA.

decisions of the planning bodies and be supported by adequate investment and expertise in a sustainable manner.

- (vi) **Scientific and Technical Inputs for Disaster Management** (including early warning). There is great scope not only for new research in disaster management in the region, but also for collation, interpretation, adaptation, and application of existing knowledge. Clearly, this would be most effective at the regional level and through regional institutions.

47. Establishment of a task force to develop a regional strategy and determine priorities from among the many DRM needs would be a most useful first step. A partnership of national stakeholders and international development partners would provide a firm basis for future assistance. In this way, bilateral donors, international agencies, and multilateral development banks would be able to coordinate and complement each other's activities toward the goal of optimizing DRM in the region.

V. Economic Corridors

A. Executive Summary¹⁹

48. The concept of "economic corridors" suggests a potentially useful mechanism to accelerate regional economic cooperation and development. An economic corridor is simply a geographic area where commercial activities are concentrated. Therefore such corridors must be firmly anchored in a clear commercial and economic rationale. Development of economic corridors expands the boundaries of traditional sector-based CAREC projects, e.g. a road project, to include a simultaneous focus on developing associated production, investment, and trade-related linkages within a well-defined geographic area. In this context, the development of economic corridors is also aimed at linking CAREC-based enterprises more effectively to international production and distribution systems (i.e. "global value chains") and world markets. Therefore a critical requirement for implementing economic corridor initiatives is an effective partnership between the public and private sectors. The role of economic corridors in the CAREC Program includes the following:

- Linking economic cooperation more directly to the central challenges of competitiveness within the framework of specific global value chains and production networks, e.g. agro-industry development;
- Contributing directly to the pressing concerns of employment and income generation, especially in lagging areas, by expanding the scope for market-driven economic activities;
- Providing a well-defined framework for activity-based cooperation among the CAREC governments, private sector (domestic and foreign), and Multilateral Institutions, and potentially widening the scope of cooperation in a narrower geographic space, e.g. to areas such as tourism, environmental management;
- Providing 'pilot projects' for reforms in both domestic ('behind the border') and cross-border rules, regulations and procedures (e.g. investment approval, trade facilitation related to specific value chains such as agro-industry) that may be scaled-up over time; and
- Expanding options for resource mobilization, particularly from the private sector, for subregional initiatives.

¹⁹ ADB. 2006. *Towards CAREC Economic Corridors: A Concept Note*, Senior Officials' Meeting, CAREC, April 2006, Urumqi, PRC.

VI. Environment

A. Rationale

49. Environmental degradation is one of the most pressing challenges in the region, which could hamper efforts to improve people's health and livelihood, and reduce poverty levels. Many environmental problems at the local and national levels are common among the CAREC countries and transboundary concerns associated with air pollution, environmentally unsound management of water resources, and unsustainable land management exist.

50. The major opportunities for regional cooperation are in cooperation in the management of shared environmental resources, such as international rivers, e.g. the Amu Darya and Syr Darya River Basin; and the mountain ecosystems that straddle many of the international borders. Another natural area for regional cooperation is in institutional strengthening to mechanisms to share information and undertake joint environmental monitoring. This is essential to overcome the limitations imposed by the scarcity of environmental information and knowledge, which is a major constraint on sustainable development planning and decision making.

51. There is a strong case for such cooperation and there are already a number of ongoing regional cooperative initiatives (see discussion below) that are addressing some of these problems. However, few of these initiatives have made much progress in linking environment with economic development, which is to say they have had limited impact on promoting sustainable development in the region. CAREC, with its primary objective to promote economic growth and raise living standards in its member countries by encouraging regional economic cooperation, provides an excellent opportunity to introduce the environmental sustainability dimension into economic and social development in the region. The CAREC program is concentrated on financing infrastructure projects and improving the region's policy environment in the priority areas of transport, energy; trade policy and trade facilitation. To ensure that these infrastructure projects do not have serious adverse environmental and social impacts, it will necessary to develop a mechanism for early integration of social and environmental issues into the development planning process, and to strengthen monitoring and evaluation capabilities.

B. Existing Regional Cooperation and Environment

52. There are a number of ongoing initiatives in regional cooperation on environment and natural resource in the CAREC countries:

- (i) the Aral Sea Basin Program, under the International Fund for Saving the Aral Sea, which comprises the Interstate Commission for Water Coordination and the Interstate Commission for Sustainable Development;
- (ii) the Interstate Agreement on Water and Energy Use in the Syr Darya, signed in 1998 by Kazakhstan, Kyrgyz Republic and Uzbekistan and acceded to by Tajikistan in 1999;
- (iii) in September 2001, formulation of a Regional Environmental Action Plan by the Intergovernmental Commission on Sustainable Development (working under the auspices of the International Fund for the Aral Sea Salvation); this represented a scaling up of the National Environmental Action Plans prepared by most CIS countries in the 1990s;
- (iv) the Central Asian Initiative for Sustainable Development, elaborated as part of the World Summit on Sustainable Development preparatory process and

- incorporated in the Summit's Implementation Plan and Partnership Initiatives; to date, however, this has not been backed by legal, financial or political mechanisms;
- (v) the concept of an International Water and Energy Consortium, approved by the Central Asian countries Heads of State in May 2004, the main purpose of which is to ensure optimal operation of reservoirs in accordance with water sharing and reservoir operation agreements, and to facilitate investment in water and hydropower facilities; while a draft Framework Agreement has been proposed, consensus has not yet been achieved concerning the concept and role of the consortium;
 - (vi) the Central Asian Countries Initiative on Land Management (CACILM) which is a partnership among Central Asian countries and funding agencies to support the development and implementation of national programming frameworks for more comprehensive and integrated approaches to sustainable land management directed toward the overall goal of combating land degradation and improving rural livelihoods. CACILM is embarked on a 10-year initiative that has a \$700 million investment program with \$100 million in grant co-financing expected from the Global Environment Facility.
 - (vii) other organizations involved in regional environmental issues include the Central Asian Mountain Information Network, the Central Asian Regional Environmental Center, and the Central Asian Hydro-meteorological Scientific Research Institute. The Shanghai Cooperation Organization also includes environmental matters.

C. Regional Cooperation on Environment Under CAREC

53. As discussed above, there are three broad areas²⁰ within which regional cooperation on environment makes good sense: (i) integrating environmental and social considerations into economic development planning; (ii) institutional strengthening in knowledge management and information sharing; (iii) cooperation in managing shared environmental resources.

54. At this stage of development, CAREC has a comparative advantage with respect to the first area—integrating environmental and social considerations into economic development planning. It can also assist with knowledge management and information sharing to overcome the scarcity of environmental information, which is a major constraint on sustainable development planning and decision making in most countries.

²⁰ It should be noted that the Asian Development Bank (ADB) has provide technical assistance to develop capacity in each of these three areas. Specifically, ADB technical assistance since 2000 has included the following:

- Regional Cooperation for Sustainable Mountain Development in Central Asia, 2000 (cofinanced by the Government of Switzerland);
- Regional Environmental Action Plan in Central Asia, 2000 (cofinanced by the Government of Finland);
- Combating Desertification in Asia, 2001;
- Support for the participation of Central Asian republics in the Third World Water Forum, Manila, and the Tashkent Forum on Combating Desertification;
- Improving Management of Shared Water Resources in Central Asia, 2003;
- Integrating Environmental Considerations into the Policies and Programs of the Central Asia Countries, Mongolia and Azerbaijan, 2003;
- Environmental Information Networking in Central Asia, 2004;
- Establishing a Regional Monitoring and Early Warning Network for Dust and Sandstorms in Northeast Asia (including Mongolia), 2005; and
- Central Asia Countries Initiative for Land Management, 2005.

55. Notwithstanding the many difficulties with current mechanisms for the cooperation in managing shared environmental resources, CAREC has no natural comparative advantage in these areas. The already existing mechanisms could be supported, but should not be duplicated and certainly not supplanted. At this stage, CAREC would have to consider initiatives on a case-by-case basis, selecting those that offer the likelihood of practical results with measurable benefits from a CAREC-based intervention.

56. **Integrating Environmental and Social Considerations into Development Planning.** As the CAREC program matures and the investment program grows, it will be essential that investments in all sectors are environmentally and socially sustainable. It may be appropriate to follow the Greater Mekong Subregion model in developing a "Strategic Environmental Framework" for CAREC.

57. **Capacity Building.** It will be necessary to establish various environmental and social databases to support decisions on development. It will also be necessary to identify environmentally sensitive areas or "hotspots" in the CAREC region. The development of information resources and design of ways to disseminate and use such information is currently underway through various projects.²¹ Diagnostic studies from these projects highlight the poor state of current environmental monitoring systems and advocate regional approaches to building capacity. Capacity building will also be needed in other aspects of environmental management including: (i) environmental impact assessment, (ii) environmental policy formulation, (iii) environmental standards, and (iv) environmental compliance and inspection. Some consideration should be given to assisting countries with meeting their responsibilities and taking advantage of opportunities under the multilateral environment agreements (i.e. United Nations Framework Convention on Climate Change, Convention on Biological Diversity, Convention on Combating Desertification).

58. **Managing Shared Environmental Resources.** Provided that CAREC involvement is seen to be desirable, CAREC initiatives could be undertaken to help improve water resource management and contribute to resolving or at least easing the situation in the water/energy nexus. The focus, at least initially, could be on irrigation practices and engagement of communities in water resource management. This approach would have to be integrated with existing programs to promote sustainable land management and reduce land degradation.

59. A cautious approach should be taken to transboundary water issues. At this stage, CAREC involvement would have been predicated on a strong call from CAREC countries to get involved.

60. Before embarking on projects in any of the above areas, analyses of recent and current initiatives²² by the governments, donor agencies, nongovernment organizations and others will be needed. Country consultations would be needed to determine priority interests.

D. Issues

²¹ ADB is funding regional technical assistance on Building Capacity in Environmental Information Management System in Central Asian Countries. The Central Asian Countries Initiative on Land Management will have Sustainable Land Management Information System to track key indicators over time.

²² In the case of water management, for example, at least six agencies (ADB, European Bank for Reconstruction and Development, European Commission, Islamic Development Bank, United States Agency for International Development, and the World Bank) are currently providing support to CAREC countries. ADB's Regional Cooperation Strategy and Program for Central Asia Regional Economic Cooperation, July 2004, lists 26 international agencies that have supported various aspects of water resource management in Central Asia.

61. **What is CAREC's Comparative Advantage?** Because of the many existing mechanisms for regional cooperation on environment, it is necessary to carefully examine the comparative advantage the CAREC has in any given aspect of environment. CAREC initiatives should support and not duplicate or supplant existing mechanisms. The better that CAREC activities can be focused on ensuring environmental sustainability of its own development program, the greater will be the comparative advantage. A careful examination in this aspect is needed.

62. **What is Overall Vision?** This question is related to overall scope of the proposed regional cooperation under CAREC. Is the vision limited to ensuring environmental sustainability of the CAREC investment program; or will it embrace the broader vision of ensuring harmonious cooperation in managing shared environmental resources?

63. **Which Areas Should be Focus?** Previous sections have presented potential areas for regional cooperation on environment. This is one view. A survey and analysis of countries' needs and perspective should be undertaken to better judge which areas provide the best opportunities for cooperation.

64. **Which Agency Should Take the Lead?** The question on whether one of the multilateral institution (MI) partners to CAREC is willing to take the lead in helping participating countries identify and implement regional environment activities must be addressed. The resource availability, and the level of commitment sufficient to achieve significant results must be credible; if sufficient technical and financial resources are not available from with the MI "six", consideration may need to be given to inviting another donor partner to participate.

E. Institutional Options

65. The institutional options under CAREC are limited to: (i) senior officials' meetings, which are charged with the coordinating responsibility to ensure the effective implementation of policy decisions made at the ministerial-level conference. (ii) ad hoc coordinating committees, which are established, as necessary, with the main responsibility to coordinate sectoral issues; (iii) working groups, which are responsible for preparing and implementing agreed priority regional projects.

66. **Option 1. Convene a High-level Meeting on Environment and Development.** This option could be either at the minister level or senior officials meeting. The objectives of this meeting would be to:

- (i) discuss how environmental and social dimensions can be better addressed in various projects and activities of the CAREC Program;
- (ii) examine current cooperation in managing shared resources; and
- (iii) identify a mechanism for future cooperation on environment under CAREC.

67. **Option 2. Establish an Ad Hoc Coordinating Committee on Environment.** This Committee would be given the initial mandate to develop a draft proposal on regional cooperation on environment. It would, among other things, examine:

- (i) the current problems with regional cooperation;
- (ii) provide a rationale for development of regional cooperation under CAREC;
- (iii) develop a vision and set of objectives;

- (iv) identify the focal areas for cooperation;
- (v) develop a suggested program of activities;
- (vi) recommend an appropriate institutional mechanism; and
- (vii) prepare a cost estimate and identify financing sources.

68. **Option 3: Establish a Working Group on the Environment.** One of the potential institutional mechanisms for operationalizing specific activities for regional cooperation on environment is the establishment of a formal Working Group on Environment. Here the Greater Mekong Subregion (GMS) model could be considered. Cooperation in environmental concerns is an important part of the GMS Program because natural resources provide the base for the subregion's socioeconomic development. When infrastructure projects threatened to have an adverse environmental impact, environmental assistance under the GMS Program was focused on promoting the earlier integration of social and environmental issues in the planning process, and on strengthening environmental monitoring and evaluation capabilities. The GMS Working Group on Environment was established to help ensure that environmental dimensions are addressed in various projects and activities of the GMS Program. The Working Group also coordinates the implementation of environment projects, including the development and implementation of a common framework (the Strategic Environment Framework) among GMS countries. The ultimate goal of the Strategic Environment Framework was to ensure that investments in all sectors are environmentally and socially sustainable.

69. However, it is premature to consider the establishment of a formal Working Group on Environment, and it may be long time before it is possible or desirable to establish a Strategic Environmental Framework. At this stage, it is prudent to consider these as only examples of successful mechanisms for regional cooperation on the environment.

VIII. Linking CAREC Business Enterprises to International Product Markets

“To produce a line of garments, the specifications are likely to be defined by a leading brand such as the US-based Levi; coordination of manufacturing turned over to a global ‘full package provider’ such as Li & Fung in Hong Kong; who might purchase South Korean yarn that would be woven and dyed in Taiwan; send the fabric to be cut in Bangladesh by a subcontractor; ship the pieces for final assembly to affiliates in China and Thailand, where the garments would be matched with Japanese zippers, and deliver the finished product to geographically dispersed affiliated retailers in North America and Europe. This set of firm-specific linkages, within the framework of the global apparel value chain constitutes an international production network.”²³

70. As with Levi in garments, so it goes with Dell in computers, Cisco in IT, Ford or Toyota in automobiles, and Carrefour or Tesco in foods. Global value chains (GVC) and associated international production networks (IPN) are emerging as the organizing framework for production, trade and investment in an increasingly broad spectrum of product groups such as apparel, electronics, computers/IT, automobiles, food processing, and increasingly even services--integrating an expanding set of geographic locations. This has important implications

²³ Based on Abonyi, G., *The New Face of Global Competition: Global Value Chains and International Production Networks*, Mekong Department, Asian Development Bank; Prepared for the Greater Mekong Subregion Investment Working Group Bangkok, Thailand; 6-7 July 2004.

for international business, for the export and investment decisions of firms, for the development strategies of countries, and therefore potentially for the focus and scope of regional cooperation in CAREC.

71. Global value chains and networks provide opportunities for firms—including SMEs—in developing economies to enter into large-scale export activities, and build new capabilities. Within the context of GVCs, regional and global markets increasingly involve exports of components instead of ‘complete end products’. As production systems become decentralized and more specialized, new market opportunities emerge for all types of firms, particularly for SMEs, to enter into export activities through specialization. Even small components can be produced if they are part of the sourcing structure of global or regional value chains and networks; that is, if firms are able to deliver a specified product in the right quantity, with the required quality, at the right time. However, in order to participate in such value chains and networks, firms must be able to meet an expanding range of product- and process-related standards, and within a framework of production-related linkages across borders.

72. Subregional cooperation can assist firms, particularly SMEs, in individual CAREC countries to take advantage of opportunities provided by global value chains and associated production networks to access regional and global markets. This involves building on, but moving beyond traditional areas of cooperation such as infrastructure and associated ‘software’. More fundamentally, it requires a change in perspective on the evolving nature of production, trade and investment in the region—of an awareness of the potential and the need for new types of cooperation among the CAREC countries.

73. Cooperation among the CAREC countries, particularly between governments and the private sector, can assist in the assessment of existing and potential cross-border production linkages in specific industries. This can help identify areas for cooperation within the framework of specific global value chains that could help strengthen the *joint* production capacity of the CAREC countries, and increase the potential locational attractiveness of the region as a whole for particular GVCs. Therefore an important pre-requisite for subregional cooperation within the framework of GVCs, is to identify possibilities for cooperation at the level of particular value chains, including identifying:

- *existing* cross-border value chain linkages that may be extended and strengthened, and
- *potential* subregional value chain linkages based on the comparative advantage of participating CAREC countries, and
- key success factors for developing such linkages.

74. In addition, cooperation in this context can include i. adopting a ‘subregional GVC mindset’; ii. taking a multi-country approach to value chain supplier development; iii. building ‘subregional (SME) clusters’; iv. strengthening cross-border logistics systems and linkages; and v. accelerating and extending cooperation in trade facilitation in the context of particular GVCs. The concept of economic corridors can provide pilot settings for this type of cooperation.

Appendix 4: Summary of In-country Workshops

A. Background and Objectives

1. ADB's capacity-building technical assistance (TA 6158) for the CAREC Program provides for support for in-country workshops. These workshops are designed to strengthen the constituency for regional cooperation, improve the capacity of the NFPs to coordinate more effectively, and to assist in preparing a comprehensive action plan. In regards to the latter objective, six workshops have been held to date

Tashkent, Uzbekistan	June 15, 2006
Dushanbe, Tajikistan	June 19, 2006
Bishkek, Kyrgyz Republic	June 23, 2006
Astana, Kazakhstan	June 27, 2006
Ulaanbaatar, Mongolia	July 25, 2006
Shan Xi Province, PRC	July 27, 2006

2. It is anticipated that workshops for Afghanistan and Azerbaijan will be held in early September.

3. The National Focal Points, assisted by the Domestic Advisors and the Regional Coordination Specialists for the CAREC Program, took responsibility for the workshop arrangements and invitations. Although of a common format, the agendas were tailored to the interests of the individual countries. Senior level officials were encouraged to attend and in many cases Deputy or Vice Ministers of finance and budget planning, transport, trade and energy were present, as well as senior officials from other ministries.

4. Dr. David Husband, Senior Advisor to CARECU, acted as the interlocutor for the workshops, drawing out views of the government concerning goals and objectives for the CAREC Program, the expected outputs and outcomes, and the priority investments and initiatives that should be undertaken. Following opening remarks by the NFPs, the Regional Coordination Specialists provided a context for the discussion through a short power-point presentation summary of the CAREC Program.

5. So as to maximize input by officials and to provide an informal forum for interchange, the workshops did not include invitations to country representatives of the MIs. As much as possible, Dr. Husband visited the MIs following the workshops to brief them on the results and to seek their views concerning the Comprehensive Action Plan.

B. Main Results/Messages of the Workshops

6. The main results/messages of the workshops included the following:

General results/messages:

- **the strong value accorded to the workshops by CAREC countries;** the workshops represented the first time ministries had gathered to discuss regional cooperation and the need for greater coordination among them so as to more effectively accomplish the goals, objectives and opportunities possible through

- enhanced trade and regional cooperation more generally; in-country workshops also help in formulating more integrated approaches to sector planning;
- **progress since 2002**; CAREC countries noted the pick-up in CAREC activities since the first Ministerial Conference; a good foundation of trust and confidence has been established; the next stage of the Program should be more strategic; country strategies should complement the Comprehensive Action Plan;
 - **the SCO and EurasEC are encouraging a wide variety of cooperation initiatives**; CAREC must complement rather than compete with these initiatives;
 - **importantly, the CAREC Program has helped increase understanding of the costs of trade barriers and the benefits of cooperation**; this is prompting CAREC countries to work together to solve bilateral and regional issues; CAREC should expand its research activities and network with research institutes in the region;
 - **the need for third-party advice and guidance**; CAREC governments appreciate advice from MI partners on how to address and seek solutions to the trade, water/energy nexus and other issues that hinder development and good relations in the region; there is great concern that water sharing agreements have broken down, and that self-serving policies are resulting in serious negative consequences for resource use and management; negotiations for a Water/ Energy consortium need to be concluded.
 - **the need for some form of financing mechanism for regional projects**, especially where the benefits accrue mainly to neighboring countries rather than the country directly involved, and where assigning the loan costs to the country would unfairly burden it; the Western Corridor project for Mongolia, linking the Russian Federation and PRC (Xinjiang UAR) illustrates the point; the GMS Program funding for the Northern Corridor linking PRC (Yunnan Province) and Thailand through northern Laos provides a solution, as PRC and Thailand each financed one-third of the cost of the Lao portion of the Corridor, with Lao PDR financing the remaining third.

Formulating the Comprehensive Action Plan

- **the goal of an economic union or Central Asian common market provides a context for the CAREC Program, but not an agenda**; rather, the agenda should be set by goals and objectives that are achievable through initiatives under the CAREC Program; these include an improved business climate in the region, greater understanding of the benefits of regional cooperation, and greater commitment by all stakeholders to accelerating regional cooperation in the transport, trade and energy sectors;
- **CAREC needs to be strategic in its approach**; CAREC initiatives should not be country-based, donor managed projects but, rather, responses – from a regional perspective – to the needs of the business sector;
- **practical measures are needed to help effectively connect business enterprises to internal and external market opportunities**; officials in all countries recognized the need to facilitate transit and general trade and other forms of regional integration;
- **the Comprehensive Action Plan should recognize the differing economic circumstances and resource endowments among CAREC countries, as well as differences in the reform process**; the debt positions of Kyrgyz Republic and Tajikistan limit the scale of regional projects in those countries; some 2 million of Tajikistan's 6 million population work in neighboring countries.

Institutional Considerations

- **the importance of mainstreaming regional cooperation;** the development plans and public investment programs of CAREC countries should be reflected in CAREC activities, in a manner that iterates in an ongoing manner with the MI pipeline of regional projects;
- **the institutional framework for the CAREC Program should make provision for strategic direction and priority setting by the countries and MI partners;** to be more strategic in its direction, the Program must do more than including country-based sector projects; a working group is needed whereby stakeholders can discuss integrated approaches to facilitating trade and business development in the region, and the resource prioritization in support of these approaches;
- **the importance of research, analysis and tracking of issues and developments highly relevant to the CAREC Program;** CAREC countries very much appreciate the background studies and sector analyses, and the wide-ranging UNDP/HDP report for Central Asia; CAREC countries would like to see greater coordination and continuation of this work; some countries lack the capacity to identify good regional projects and need assistance in undertaking the necessary research and analysis; also developments and bilateral and multilateral agreements outside of the CAREC Program should be monitored; these include establishment of the EurAsEC Development Bank by Kazakhstan and the Russian Federation, and loans totaling approximately \$1.2 billion by PRC to Kyrgyz Republic, Tajikistan, Uzbekistan and Mongolia for infrastructure projects;
- **internal coordination and coordination with neighboring countries is weak in some cases, hampering regional cooperation efforts;** more frequent workshops and other forms of capacity building are needed, especially to assist in preparation for the SOM and MC; role of the National Focal Point needs to be strengthened (e.g., Kazakhstan prior to reassignment to Ministry of Economy and Budget Planning);
- **attention is needed to ensuring proper representation at the sector committees, SOM and MC;** consistency of representation is important; while maintaining CAREC's informal structure, representatives of Foreign Affairs' Ministries should participate in the MC;
- **more contact is needed among sector experts;** currently, there is little if any continuous communication among CAREC sector experts, with the result that contact is largely limited to CAREC's sector committee meetings.

Stepping up the momentum:

- **the CAREC Program needs to demonstrate more results;** while officials urge greater progress under the CAREC Program, they recognize that patience and long-term commitment is needed;
- **“bold strokes” are needed to step up the pace;** most urgent is focus on east-west and north-south transport corridors; accession to WTO is critical to creating a common trade framework; a strategic framework for the CAREC Program, together with sector strategies, is needed to give direction;
- **broadening of the CAREC Program would contribute to momentum and building trust and confidence in regional cooperation;** while officials generally favor continued focus on transport, trade and energy, they also favor selected

initiatives in other areas - human development (training), the environment (resource management) and tourism (access and entry) are of interest;

- **success of the CAREC Program depends importantly on the strength of the policies of each of the participating countries;** the policies of some countries are counterproductive to regional cooperation.

The business/private sector perspective:

- **the need for a more integrated, business-oriented approach to regional cooperation;** officials expressed considerable interest in evolving business practices in Asia, especially in global value chains whereby production and distribution are broken into many sub-components, opening up niche market opportunities if transport and trade logistics as well as quality/quantity product assurances can be met;
- **economic corridors (i.e., geographic areas where commercial activities are concentrated) could serve as a means for spurring development in the region;** officials are looking for ways to focus government support for industry, while recognizing the pitfalls of trying to pick “winners”; economic corridors could provide the infrastructure, policy, regulatory and logistics framework necessary for development of areas of possible comparative advantage (e.g., the textiles and petrochemical industries);
- **activities in support of the private sector, especially SMEs, should be accorded greater attention;** investment forums are important, both as a means for attracting investment and as a way of building Central Asia’s international status;
- **chambers of commerce can play a useful role;** exchanges, a website, and shared training facilities would contribute to promoting business ties.

The trade perspective:

- **expected outcomes of trade facilitation** include broad application of the one-stop inspection principle, simplified systems of transit trade, establishment of a data and information exchange system, risk management and common audit/ accounting systems, and greatly improved transparency;
- **priorities for trade facilitation** include modernization of cargo manifests, resolving gaps in the legal framework for trade, and expansion of the TIR system;
- **country-based trade reforms** should be according to a shared standard or framework; anti-corruption measures re customs practices are needed in the region;
- **to be more competitive, an integrated approach is needed to strengthening transport, trade and transit support systems;** in particular, there is need for improved coordination between the trade policy and trade facilitation committees; also, there is lack of coordination among donor agencies concerning customs modernization;
- **the trade/investment interrelationship needs to be taken into account;** the business investment climate in the region must be strengthened; transparency, predictability and stability are fundamental elements of a sound business climate;
- **new economic approaches as a non-confrontational way of addressing policies of import substitution and border restrictions;** there is concern among some CAREC countries that they will be unable to diversify their economies beyond commodity trade due to intensive competition from PRC’s manufactured products; protectionist policies by some countries are disrupting trade for the region as a

- whole; a more universally open trade regime is needed; the MIs need to be more pro-active in helping to find solutions to this problem;
- **trade in services is becoming increasingly important;** in the case of Kyrgyz Republic, some 70 percent of tourism is accounted for by visitors from neighboring countries; intra-regional investment is reinforcing trade in services;
 - **software impediments to trade are at least as important as hardware (infrastructure) impediments;** frequent reference was made to cross-border problems, official and unofficial charges for transit trade, and other impediments to commercial transactions; very practical measures to facilitate trade would include large-scale scanners for customs posts where there are significant volumes of traffic;
 - **common software needs should be addressed in a more coordinated manner;** the WTO framework should provide the standards towards which all CAREC countries continue to reform; differences in ICT capabilities hamper the exchange of trade data and risk management techniques; training and capacity building are systemic needs;
 - **market analysis and information services are needed,** so as to assist SMEs in breaking into new export opportunities;
 - **interest in free trade zones in border areas;** Mongolia among others is promoting a number of free trade zones; the advisability and implications of these zones should be reviewed;
 - **issues for consideration:**
 - institutional adjustments may be needed in order to achieve trade objectives;
 - CAREC countries should draft their own action plans complementary to CAP;
 - operationalizing the performance indicators; evaluating progress will require a great deal of research and analysis.

The transport perspective:

- **the need for a forward-looking transport strategy,** that serves business competitiveness and that reflects the development strategies of the governments;
- **multi-modal transport corridors (road, rail and air) are a top priority;** the primary interest is reestablishing Central Asia as a land link between East Asia and Europe; the Central Asian Republics perceive themselves as Eurasian; PRC envisages three east-west corridors and one north-south corridor; links to South Asia through Afghanistan open the possibility of new markets and new export routes;
- **the importance of a cross-border transport agreement;** CAREC may need to be more proactive in this regard, as the SCO appears to be moving slowly in formulating such an agreement;
- **the outputs/outcomes of CAREC's transport and trade initiatives should be sharp reductions in the time and cost needed to ship goods between centers;** new market opportunities will open up as a result;
- **the need for realistic goals and objectives over the medium term;** transport investments take many years from planning to full implementation; policy reform is complex, especially when involving neighboring countries;
- **the importance of understanding the development plans and public investment programs of the CAREC countries, especially with regards to the transport sector;** in each case, the in-country workshop featured highlights of their government's development plans and public investment programs; for example, the Ministry of Transport for Kazakhstan noted a 1.3 trillion tenge provision over ten years for upgrading six transport corridors within the country;

- **the importance of bilateral transport agreements;** Kazakhstan has several bilateral agreements with PRC, including two new corridors; another example is the MOU signed between PRC and Kyrgyz Republic concerning a railway linking to Xinjiang UAR; Tajikistan has a strong interest in ensuring that its northern railway serves as the extension of the KR/PRC railway to Uzbekistan;
- **transit fees are a regional issue;** some countries are internalizing transport routes at great expense so as to avoid or minimize transit fees, undermining the benefits from regional cooperation; bilateral and/or multilateral agreements are needed;
- **domestic policies and regulations bear importantly upon regional cooperation;** the abolition and now reintroduction of licensing of transport vehicles in Kyrgyz Republic has led to confusion and inefficiency; further, the transport fund is now secure, with the result that road maintenance is deficient.

The energy perspective:

- **for the energy sector, the key outcome of the CAREC Program should be integrated energy markets for Central Asian countries and generalized energy security for all households;** many areas of the region lack secure or reliable electricity services, seriously hampering development and poverty reduction;
- **priority for establishing common electricity markets and to discouraging national self-sufficiency policies;** opportunities for more efficient supply of electricity through revitalization of the Soviet period grid system are being overlooked; Tajikistan has recently accepted a \$224 million concessional loan from EximBank of PRC that includes support for a HV 550 kV “North-South” transmission line with an approximate length of 350 km and preliminary cost of \$164 million; a more economic manner of supplying electricity to northern Tajikistan would be use of the existing power grid connecting to Kazakhstan and Kyrgyz Republic; modern technologies, a computerized recording system, and a proper legal framework are needed in order to realize common electricity markets;
- **restructuring of power utilities and policy reform is a necessary precondition in some cases to regional cooperation in energy;** some power, transmission and distribution utilities are essentially bankrupt; low electricity tariffs reflect concern about the social impact of marginal cost pricing; the work of the CAREC Members Electricity Regulators Forum (CMERF) is considered to be very important;
- **private sector participation in the energy sector should be extensive;** some countries (e.g., Kyrgyz Republic) lack the policy, legal and institutional framework necessary to develop the energy sector in partnership with the private sector;
- **the need for greater cooperation and “deal-making” in resource development and management, especially with regards to the energy sector;** the water/energy nexus continues to be a serious problem, dividing upstream and downstream countries; MIs should be more proactive in third-party efforts for formulating mutually beneficial solutions for rational utilization of the region’s water and energy potential; Tajikistan would like to see reactivation of the ADB project for upgrading the Tajikistan/Uzbekistan transmission line (and associated power trade agreement);
- **the importance of tracking and facilitating bilateral and multilateral agreements among CAREC countries;** bilateral agreements, such as those between Kazakhstan and PRC, may be the most effective way of oil and gas development; the four-country consultations on exports of surplus electricity from Kyrgyz Republic and Tajikistan to Pakistan and Afghanistan are of great importance;

- **strong interest in energy efficiency initiatives**, including through application of the Clean Development Mechanism of the Kyoto Protocol; improved energy efficiency (including through the CDM), power trade and exchange of international best practices would contribute to mobilizing investor resources; more than 40 percent of electricity generated in Kyrgyz Republic is lost due to poor transmission lines, theft and other causes.

Broadening of the CAREC Program

- **interest in including new sectors (e.g., tourism, environment, human development) in the CAREC Program**, but need for caution; other organizations are providing support and it would be presumptuous for CAREC to address human development and other very broad subjects; it would be best to proceed in a highly focused and project specific manner;
- **sector representatives made strong arguments in favor of expanding the CAREC Program:**
 - protecting the environment should be integral to the CAREC Program, since maintaining the natural resource base is vital to agriculture and the livelihoods of so many in the region; a study should be undertaken of the status of water resources in the region, together with an analysis of the implications of global warming and glacial melt;
 - tourism offers promising opportunities for CAREC countries, subject to greater cooperation in access (air routes, border crossings) and entry (visa issuance remains a serious problem, reflecting security concerns and lack of agreement among neighboring countries); Central Asia as a single-stop destination should be the goal; a multi-agency approach is needed to resolve the entry and access impediments to tourism;
 - agriculture trade impediments are very damaging to the welfare of rural communities, where poverty is most severe; a working group of the CCC could usefully address agricultural trade; animal disease control (e.g., brucellosis) is a serious problem throughout the region
- **economic interests should be the priority for CAREC;** the private sector/business enterprises should be the engine of growth.