



## Technical Assistance Report

Project Number: 39172  
November 2006

People's Republic of China: Logistics  
Development and Capacity Building in  
Xinjiang Uygur Autonomous Region  
(Financed by the Government of Spain)

Asian Development Bank

## CURRENCY EQUIVALENTS

(as of 15 October 2006)

Currency Unit	–	yuan (CNY)
CNY1.00	=	\$0.126
\$1.00	=	CNY7.90

## ABBREVIATIONS

ADB	–	Asian Development Bank
CAR	–	Central Asia republic
CAREC	–	Central Asia Regional Economic Cooperation
EA	–	executing agency
IA	–	implementing agency
IRU	–	International Road Transport Union
NDRC	–	National Development and Reform Commission
PRC	–	People's Republic of China
RETA	–	regional technical assistance
TA	–	technical assistance
XDRC	–	Xinjiang Development and Reform Commission
XUAR	–	Xinjiang Uygur Autonomous Region

## TECHNICAL ASSISTANCE CLASSIFICATION

<b>Targeting Classification</b>	–	General intervention
<b>Sector</b>	–	Industry and trade
<b>Subsector</b>	–	Trade
<b>Themes</b>	–	Sustainable economic growth, regional cooperation, capacity development
<b>Subthemes</b>	–	Promoting economic efficiency and enabling markets, institutional development

## NOTE

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

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## I. INTRODUCTION

1. During the 2006 country programming mission, the Government of the People's Republic of China (PRC) requested technical assistance (TA) from the Asian Development Bank (ADB) for trade logistics development and capacity building in Xinjiang Uygur Autonomous Region (XUAR). A fact-finding mission visited Urumqi during 21–23 May 2006 and reached an understanding with the Government on the impact, outcome, outputs, cost, financing arrangements, terms of reference, and implementation arrangements for the TA.<sup>1</sup> The design and monitoring framework is in Appendix 1.

## II. ISSUES

2. The recent rapid development of the PRC has significantly changed the economic situation in coastal regions but left inland regions behind. One of the reasons for the inability of inland regions to enjoy the same growth opportunity is lack of adequate transportation and trade logistics industry development—both for production and consumption activities, and for domestic and international trade. Inadequate logistics industry development also inhibited inland regions from maximizing economic benefits from regional trade facilitation agreements. Geographically, XUAR is an important link to central Asia. It has rich and diverse natural resources, and products with low factor costs for labor and land. The region also has sufficient energy resources and production capacity to facilitate industrial development. The main challenge that is holding the region back is its remote geographic location and the vast distances that separate it from major markets. The underdeveloped logistics industry of XUAR, both in terms of physical infrastructure and institutional capabilities, is a major impediment to domestic and regional trade.

3. During the 1950s and 1960s, XUAR had four border posts available for trade with the then Soviet Union, and annual trade volume reached about \$13 million in the mid-1960s. However, border trade came to a total halt in 1967 when the PRC severed the relationship with the then Soviet Union. Horgos and Turugart border posts did not resume operations until 1983. In September 1990, the railway connecting Alashankou and Druzhba of Kazakhstan was completed, forming a new Eurasia Continental Bridge. The collapse of the Soviet Union and the independence of the central Asian republics (CARs) in 1992 brought new opportunities for XUAR for regional and international trade. Since then, XUAR foreign trade has grown rapidly, with average annual growth of 28.5% during 2001–2005. Total imports and exports were \$7.9 billion or 24.3% of GDP (exports \$5 billion and imports \$2.9 billion)—the highest among PRC border provinces and regions in 2005. Kazakhstan ranked first (58.2% of total imports and exports) among the top five export markets for Xinjiang in 2004, followed by Kyrgyz Republic, Pakistan, Azerbaijan, and the Russian Federation. These countries absorb about 80% of Xinjiang's total exports. Major export items are light industry products such as processed food, footwear, textiles, and machinery. Major import items are mainly natural resources such as iron and steel, scrap metals, nonferrous metals (copper and aluminum), crude oil, and cotton.

4. XUAR has 17 class A border posts (2 of which are airports) and 11 class B border posts.<sup>2</sup> The top two border posts are Alashankou (total imports of \$3.9 billion and total exports \$2.9 billion in 2005) and Horgos (total imports of \$60.1 million and total exports of \$757.0 million), both of which connect to Kazakhstan. The third largest, Turugart, connects to the Kyrgyz Republic and is becoming significant (total imports of \$377 million and exports of \$478 million). To facilitate cross-border transportation and trade, the PRC signed cross-border

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<sup>1</sup> The TA first appeared in *ADB Business Opportunities* on 2 October 2006.

<sup>2</sup> Class A border posts are major posts approved by the State Council, which meet minimum requirements of transport volume. Class B posts are generally small in size and strategically less important. These posts are either not physically located on the border or operate only seasonally.

transportation agreements with Kazakhstan and the Kyrgyz Republic in 2005, and signed an international road transportation agreement with the Kyrgyz Republic and Uzbekistan in 1998. The PRC has joined the International Road Transport Union (IRU) and is preparing to access the Transports Internationaux Routiers convention.

5. XUAR has a reasonable transportation network of railways, roads, and airlines. However, it is not sufficient from a modern logistics operation point of view. The high transportation cost that results from long distance transportation makes commodities shipped from XUAR uncompetitive in other parts of the PRC.<sup>3</sup> The transportation network suffers from:

- (i) lack of adaptability because of lack of transportation trunk lines, and poor network layout and poor location of transportation hubs;
- (ii) low construction standard of the road and bridge network, which makes it difficult for heavy and large vehicles;
- (iii) undeveloped railway system that results in significant delays in rail transport;<sup>4</sup> and
- (iv) inadequate airport facilities.

6. The logistics industry can be broadly defined as a combination of different service providers, including parcel express companies, freight forwarders, transport lines, and contract logistics companies, as well as local transport operators, terminal facilities, and distribution centers. Similar to most parts of the interior of the PRC, the logistics industry in XUAR is in the very early stages of development. In recent years, a number of large enterprises in the transportation and commerce sectors are gradually moving into logistics services. For example, the Xinjiang Department of Crude Oil spun off its material supply company and transformed it to a logistics company that provides services to the general public. A preliminary survey shows four types of enterprises in XUAR that are engaging in logistics services:

- (i) Enterprises transformed from state-owned traditional transport and warehousing enterprises, such as XUAR Xinshitong Logistics which has been transformed by merging two trucking companies and is now engaging in container and parcel delivery operations.
- (ii) Newly established sector logistics companies owned by private individuals. Many of these are in their infancy but one or two sizable ones provide transport, warehousing, storage, and procurement services, such as Afanti Logistics which has 28 subsidiaries and 80 transport routes).
- (iii) Various logistics parks, most of which are wholesale or retail centers that provide space for lease for wholesalers or retailers. Some also provide limited intercity transport services.
- (iv) Traditional transport and warehousing enterprises, which belong to various sector government administrative bodies, still dominate the logistics market. However, lack of coordination among administrative bodies causes poor service quality and management inefficiency.

7. XUAR's logistics industry faces a number of challenges in both physical and institutional infrastructure, and has become a bottleneck for XUAR's international trade and economic development. Regarding physical infrastructure, (i) lack of investment and upgrade makes XUAR's railway system unable to meet transportation demand in the short or medium term; and (ii) poor management, low level of containerization, and lack of investment in logistics hubs

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<sup>3</sup> Lack of rail transport capacity causes coals and other primary commodities to be shipped mostly by road. Coal produced in Xinjiang can only be shipped no further than Gansu as high transportation costs make it uncompetitive compared with coals from Shanxi and Shaanxi.

<sup>4</sup> Most are single rails connecting prefectures and counties, and one railway (i.e., Lanxin line) linking Xinjiang to the rest of the PRC.

make the efficiency of road transportation system low. Institutionally, XUAR's logistics industry demonstrates the following weaknesses:

- (i) **Lack of third party logistics.** Although large in number, there is virtually no third party logistics company in operation since most existing logistics companies have been converted from transport and warehousing enterprises and remained captive. The level of logistics specialization is low and the scope of business is limited—only 15% of logistics companies have operations outside XUAR and less than 2% outside the PRC. As a result, the majority of XUAR's manufacturing enterprises cannot find third party logistics services for sourcing raw materials and for shipping and distribution of parts and completed products.
- (ii) **Lack of logistics platform and poor technological and management standards.** There are no comprehensive service and information networks. Logistics information has not been integrated to benefit the whole industry and virtually no logistics companies use a professional logistics management information system.
- (iii) **Lack of effective policy and administrative framework.** Many sectoral government administrations cover logistics issues, including railway, road transportation, airlines, commerce, and customs. The lack of a unified coordinator and administrator makes multi-region, multi-sector, and multimode transport logistics operations difficult. For example, up to 50–70% of trucks and railway wagons return empty because of lack of information and coordination.
- (iv) **Lack of well-trained professionals.** There is only one university level program for high-level logistics professionals in XUAR. A certification process and continued training with the logistics industry is also lacking.

8. The Government of the PRC recognized that logistics industry development is key for upgrading its industries from “resources intensive” to “resources efficient” industries. Logistics industry development has been included for the first time in the 11<sup>th</sup> Five-Year Plan (2006–2010).<sup>5</sup> The National Development and Reform Commission (NDRC) and the China Association of Materials Procurement and Logistics are developing a logistics sector strategy for the 11<sup>th</sup> Five-Year plan.<sup>6</sup> A joint committee on logistics development has been set up, comprising 13 government ministries and agencies with a secretary located at NDRC.

9. XUAR local government has also made the development of logistics centers one of its top development priorities. This would involve the construction of logistics infrastructure, as well as development of a logistics platform that links logistics providers, customs, and other relevant parties interactively. During the 11<sup>th</sup> Five-Year plan period, XUAR will need to enhance cooperation with CARs to ensure continued growth of trade, which is expected to reach \$18 billion in 2010.

10. ADB has been supporting regional trade facilitation between XUAR and CARs since the late 1990s through a formal Central Asia Regional Economic Cooperation (CAREC) process, where XUAR has been an active participant. The first batch of work focused on customs cooperation, where two regional TAs (RETAs) and five loans in various countries are currently

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<sup>5</sup> The plan states that the Government will encourage: (i) adoption of modern logistics technologies and promote contracting out logistics operations of enterprises in order to integrate procurement, production, product sales, and recycling operations of enterprises; (ii) development of specialized third party logistics; (iii) establishment of a standardized logistics framework; (iv) development of new logistics technologies, including information and communication technology; and (v) integration of basic infrastructure for logistics through constructing a large logistics hub and developing regional logistics centers.

<sup>6</sup> The plan divides the PRC into seven logistics zones; XUAR, together with a number of western provinces and Xian, is included in the northwestern zone.

being implemented.<sup>7</sup> Logistics development plays a key role for regional trade facilitation, which is an important element of ADB's Regional Cooperation and Integration (RCI) Strategy.

### III. THE TECHNICAL ASSISTANCE

#### A. Impact and Outcome

11. The impact is that XUAR becomes an effective national and regional trade center. The outcome is that a strategy is adopted and implemented to develop the logistics industry in XUAR.

12. XUAR requires better regional integration, reduced transportation costs, and removal of other related physical and institutional inefficiencies to become an effective national and regional trade center. The logistics development strategy will cover issues such as such policy reforms, infrastructure development, provision of public financial resources and private sector participation, and institutional capacity building.

#### B. Methodology and Key Activities

13. The TA will prepare (i) a strategy to develop the logistics industry in XUAR; (ii) a master plan to implement the strategy; and (iii) a preliminary list of investments to support the strategy. The strategy will focus on policy, institutional, and financial issues regarding logistics industry development. The master plan for logistics industry development will pay particular attention to the public infrastructure and logistics platform, including a single window for customs clearance and an over-the-counter dealing system for logistics, as well as capacity building. The list of investment projects will include public investment and public-private sector partnership projects for the XUAR government to consider. The analytical work of the TA will focus on the following:

- (i) strategy for developing the regional logistics system with a matching transportation network centered around Urumqi;
- (ii) selection, allocation, and definition of functions of logistics hubs, both for class A and class B;
- (iii) logistics service requirements at border posts—including logistics centers, logistics related basic infrastructure, and logistics companies—in improving efficiency of the customs clearance;
- (iv) containerization issues, such as demand, cost and benefits, and multimode transport of containers;
- (v) improvement of the road transportation network, including market demand, organization of the shipping industry, and methods to lower the ratio of return with an empty load;
- (vi) functioning and architecture of the logistics platform, including a general market information system for demand and supply as well as a specialized system for logistics operators; and interface with customs and financial service providers;
- (vii) improvement of the efficiency of financial services for logistics operations, particularly focusing on cross-border financial services;

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<sup>7</sup> ADB. 2002. *Technical Assistance to the Kyrgyz Republic for Trade Facilitation and Customs Cooperation*. Manila; ADB. 2004. *Technical Assistance for Trade Facilitation and Customs Cooperation Program (Phase II)*. Manila; ADB. 2002. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kyrgyz Republic for Regional Trade Facilitation and Customs Cooperation Program (Kyrgyz)*. Manila; ADB. 2002. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kyrgyz Republic for Regional Trade Facilitation and Customs Cooperation Program (Tajikistan)*. Manila; ADB. 2004. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kyrgyz Republic for Regional Customs Modernization and Infrastructure Development (Kyrgyz)*. Manila; ADB. 2004. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kyrgyz Republic for Regional Customs Modernization and Infrastructure Development (Tajikistan)*. Manila; and ADB. 2006. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kyrgyz Republic for Mongolia Customs Modernization Project*. Manila.

- (viii) foreign direct investment in the logistics industry in XUAR, its impediments and policies; and
- (ix) institutional capacity building for the logistics industry, public education, vocational training, job markets, and funding, as well as the establishment of logistics training centers.

### **C. Cost and Financing**

14. The total cost of the TA is estimated at \$600,000 equivalent. The Government has requested ADB to finance \$425,000 equivalent. The TA will be financed on a grant basis by the Government of Spain and administered by ADB. The Government will provide the remaining \$175,000 of local currency costs in kind to cover office accommodation, counterpart staff, transportation, and other related services. Detailed cost estimates are in Appendix 2.

### **D. Implementation Arrangements**

15. NDRC's Department of Regional Economy will be the Executing Agency (EA) to provide overall guidance and coordination at the national level. The Xinjiang Development and Reform Commission (XDRC) will be the Implementing Agency (IA). A leading group will be set up, comprising senior officials of XDRC, Xinjiang Finance Bureau, Customs Administration and Quarantine Bureau, Department of Foreign Trade and Economic Cooperation (DOFEC), administrations of railway, road transportation and airlines, and other relevant agencies, chaired by XDRC senior officials, to ensure proper working level coordination as development of trade logistics will involve many agencies. The IA will provide the necessary office space, counterpart staff support, transportation, and other services to the consultants and will arrange meeting appointments for the consultants with relevant agencies and organizations. A project office will be set up at the Regional Economic Development Division of XDRC.

16. The TA will engage one international and four national consultants for a total of 15 person-months (3 person-months each), including a logistics specialist, regional cooperation economist, transportation specialist, public investment specialist, and logistics platform specialist. A separate budget will engage additional international and national resource persons for specific technical areas during TA implementation, as the need arises. The terms of reference for consultants are in Appendix 3. Consultants will be selected and engaged on an individual basis in accordance with ADB's *Guidelines on the Use of Consultants by Asian Development Bank and Its Borrowers*. Equipment will be purchased in accordance with ADB's *Procurement Guidelines* and will be handed over to the EA/IA on completion of the TA. Overseas training will be organized in ADB member countries with an advanced logistics industry, targeting key government officials to give them first-hand experience of live operations.

17. The TA is expected to begin in January 2007 and end in December 2007. The consultants will submit (i) inception reports 3 weeks after commencement of their services, (ii) interim progress reports every quarter during TA implementation (except the last quarter when the draft final and final reports are due), (iii) a draft final report before the conclusion of the contract, and (iv) a final report 2 weeks after incorporating comments from the EA and ADB. All reports must be submitted in English. Workshops will be organized periodically to invite comments from international and domestic experts and disseminate report findings.

## **IV. THE PRESIDENT'S DECISION**

18. The President, acting under the authority delegated by the Board, has approved ADB administering technical assistance not exceeding the equivalent of \$425,000 to the Government of the People's Republic of China to be financed on a grant basis by the Government of Spain for the Logistics Development and Capacity Building in Xinjiang Uygur Autonomous Region of the PRC, and hereby reports this action to the Board.

## DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<b>Impact</b> XUAR becomes an effective national and regional trade center	<ul style="list-style-type: none"> <li>• Streamlined policy environment and improved infrastructure for effective development and efficient operation of logistics industries</li> <li>• Healthy growth in trade volumes and varieties of products transported through XUAR</li> </ul>	<ul style="list-style-type: none"> <li>• Trade statistics and reports by customs and statistics office</li> </ul>	<b>Assumption</b> <ul style="list-style-type: none"> <li>• The XUAR government remains committed to implement the strategy</li> <li>• Public and private financial resources are made available</li> </ul>
<b>Outcome</b> A strategy is adopted and implemented to develop the logistics industry in XUAR	<ul style="list-style-type: none"> <li>• Strategy is adopted by higher level government authorities before 30 September 2007</li> <li>• Investment plan is approved by planning agencies with appropriate funding support before 30 September 2007</li> </ul>	<ul style="list-style-type: none"> <li>• Formal circulars issued by XDRC endorsing the strategy</li> <li>• TA completion report</li> </ul>	<b>Assumption</b> <ul style="list-style-type: none"> <li>• The strategy and investment plan is accepted by XDRC and higher authorities of the Government</li> </ul>
<b>Outputs</b> <ol style="list-style-type: none"> <li>1. Strategy to develop logistics industry in XUAR</li> <li>2. Master plan to implement the strategy</li> <li>3. Preliminary list of investments to support the strategy</li> </ol>	<ul style="list-style-type: none"> <li>• Draft strategy submitted before 30 April 2007 and accepted by XDRC before 30 June 2007</li> <li>• Draft master plan submitted before 30 June 2007 and accepted by XDRC before 30 September 2007</li> <li>• List of investment projects submitted before 30 September 2007 and accepted by XDRC before 31 December 2007</li> </ul>	<ul style="list-style-type: none"> <li>• Progress reports by consultants and the executing and implementing agencies</li> <li>• Supervision by review missions</li> </ul>	<b>Assumptions</b> <ul style="list-style-type: none"> <li>• Acceptance and implementation of sound recommendations by relevant government agencies</li> <li>• Timely availability of required data, and good participation of stakeholders</li> </ul>
<b>Activities with Milestones</b> <ol style="list-style-type: none"> <li>1.1 Review existing policy and regulatory environment for logistics industries and linkage of XUAR's logistics industry compared with other parts of the PRC in the first quarter of 2007.</li> <li>1.2 Formulate a strategy for the development of the regional logistics system with a matching transportation network centered on Urumqi in the second quarter.</li> <li>1.3 Recommend a program for human resources development for the logistics industry in the second quarter.</li> <li>2.1 Identify logistics service requirements at border posts, including logistics centers, logistics related basic infrastructure, and logistics companies in the second quarter 2007.</li> <li>2.2 Select the location and define the functions of key logistics hubs in the third quarter 2007.</li> <li>2.3 Define the functions and architecture of the logistics platform, including a general market information system for demand and supply, as well as a specialized system for logistics operators, and interface with customs and financial service providers in the third quarter 2007.</li> <li>3.1 Identify major bottlenecks in XUAR's transportation network in the first quarter 2007.</li> <li>3.2 Evaluate the feasibility of construction of transportation hubs and container ports in the second quarter 2007.</li> <li>3.3 Prepare and assemble financial analysis data to provide a quantitative and qualitative examination of the proposed investment in the third quarter.</li> </ol>			<b>Inputs</b> <ul style="list-style-type: none"> <li>• grant of Government of Spain and administered by ADB: \$425,000 equivalent</li> <li>• Government in kind support: \$175,000</li> <li>• In kind contribution of other stakeholders</li> </ul>

ADB = Asian Development Bank, TA = technical assistance, XDRC = Xinjiang Development and Reform Commission, XUAR = Xinjiang Uygur Autonomous Region.

**COST ESTIMATES AND FINANCING PLAN**  
(\$'000)

Item	Total Cost
<b>A. Government of Spain Financing<sup>a</sup></b>	
1. Consultants	
a. Remuneration and Per Diem	
i. International Consultants <sup>b</sup>	120.0
ii. National Consultants <sup>c</sup>	125.0
b. International and Local Travel	20.0
c. Reports and Communications	0.0
2. Equipment <sup>d</sup>	0.0
3. Training, Seminars, and Conference	
a. Facilitators (Interpreters and Translators)	10.0
b. Domestic Workshop	30.0
c. Overseas Training	40.0
4. Miscellaneous Administration and Support Costs	10.0
5. Contingencies	70.0
<b>Subtotal (A)</b>	<b>425.0</b>
<b>B. Counterpart Financing</b>	
1. Office Accommodation and Transport	75.0
2. Remuneration and Per Diem of Counterpart Staff	60.0
3. Contingencies	40.0
<b>Subtotal (B)</b>	<b>175.0</b>
<b>Total</b>	<b>600.0</b>

<sup>a</sup> Administered by the Asian Development Bank.

<sup>b</sup> \$40,000 is earmarked for additional international specialists and will be identified during implementation of the technical assistance (TA) as the need arises.

<sup>c</sup> \$20,000 is earmarked for additional domestic specialists and will be identified during TA implementation as the need arises.

<sup>d</sup> Equipment to be purchased includes notebook computers, fax machines, scanners, data storage devices, and photocopiers. Upon completion of the TA, equipment will be transferred to Xinjiang Development and Reform Commission.

Source: Asian Development Bank estimates.

## **OUTLINE TERMS OF REFERENCE FOR CONSULTANTS**

1. International consultants will be primarily responsible for introducing international experiences and best practices, providing advisory services on key technical issues, disseminating lessons learned, and providing recommendations to policy makers. National consultants will be responsible for all technical aspects of implementation of the technical assistance (TA).

### **A. International Consultants (3 person-months)**

#### **1. Team Leader and Logistics Industry Specialist (3 person-months)**

2. The consultant will assume the role of team leader and be responsible for overall management of TA implementation, timely delivery of good quality interim and final reports, recruitment and management of resource persons in various technical tasks, and organizing workshops and training activities. The consultant should possess deep knowledge of and sufficient experience of the logistics industry in the People's Republic of China (PRC) and other countries at a similar stage of development. Specifically, the consultant will:

- (i) review existing policy and the regulatory environment for logistics industries not only in XUAR but also in the northwestern region and nationwide;
- (ii) review the linkage between the development of XUAR's logistics industry compared with other parts of the PRC, particularly the northwestern PRC;
- (iii) stipulate clearly the development objectives for XUAR's logistics industry;
- (iv) analyze roles that the logistics industry can play for trade facilitation and for development of the Eurasia Continental Bridge;
- (v) identify a range of physical, procedural, and institutional weaknesses in all aspects of logistics operations;
- (vi) formulate a development strategy for XUAR's logistics industry;
- (vii) recommend how to streamline, rationalize, and coordinate logistics development policies and procedures;
- (viii) recommend a program for human resources development for logistics industry including institutional capacity building activities, public education, vocational training, job markets and funding, as well as establishment of logistics training centers;
- (ix) identify logistics service requirements at border posts, including logistics centers, logistics related basic infrastructure, and logistics companies in improving the efficiency of customs clearance;
- (x) make decisions on the selection, allocation, and definition of functions of logistics hubs, both for class A and class B, based on submission of project proposals from local government agencies; and
- (xi) recommend a policy for attracting foreign direct investment in the logistics industry in XUAR.

### **B. National Consultants (12 person-months)**

3. National consultants with in-depth country and sector knowledge and good contacts with the Government and enterprises will be recruited. The national consultants will help the international consultants quickly become familiar with their tasks by translating various documents into English; researching and compiling a set of government policies, regulations, and procedures adopted; and ensuring that the output of the international consultants is appropriate. The national consultants are expected to possess sufficient experience in their relevant fields.

- 1. Regional Cooperation Economist (3 person-months) will:**
  - (i) analyze the trend of regional cooperation in logistics operations among XUAR and central Asia;
  - (ii) assess major impediments to efficient logistics services, transport arrangements, customs procedures, and trade support services within XUAR and central Asia;
  - (iii) recommend measures for improvement of efficiency of financial services for logistics operations, particularly focusing on cross-border financial services;
  - (iv) analyze impacts of logistics industry on overall development of XUAR's economy;
  - (v) review existing policy and regulatory environment for logistics industries nationwide and in XUAR; and
  - (vi) quantify value added from key development projects in logistics.
  
- 2. Transportation Specialist (3 person-months) will:**
  - (i) work together with logistics industry specialist in developing an overall strategy on removing transportation constraints for logistics industry development in XUAR;
  - (ii) identify major bottlenecks in XUAR's transportation network;
  - (iii) evaluate feasibility of construction of transportation hubs and container ports;
  - (iv) recommend strategies for XUAR to benefit from the PRC's accession to Transports Internationaux Routiers; and
  - (v) formulate a strategy for XUAR to benefit from containerization and address issues of demand and supply, cost and benefits, and multimode transport of containers.
  
- 3. Public Investment Specialist (3 person-months) will:**
  - (i) perform preliminary financial analysis for potential public investment projects in logistics industry; in particular, (a) identify and confirm objectives and suitability of investments, (b) prepare and assemble financial analysis data to provide a quantitative and qualitative examination of the proposed investment, (c) assess the adequacy of the funding plan, (d) forecast for a period covering up to at least the end of the fifth year of the projects operation, and (e) calculate the financial internal rate of return; and
  - (ii) perform economic analysis to ensure sustainability of developmental effects, adequate incentive for all stakeholders, and fair distribution of benefits.
  
- 4. Logistics Platform Specialist (3 person-months) will:**
  - (i) formulate a development strategy for XUAR's logistics platform;
  - (ii) identify functioning and architecture of the logistics platform, including a general market information system for demand and supply, as well as a specialized system for logistics operators; and interface with customs and financial service providers;
  - (iii) analyze suitability of telecommunication networking;
  - (iv) specify a mechanism for development and operationalize the logistics platform; and
  - (v) advise on training programs.