

STATE CUSTOMS COMMITTEE  
REPUBLIC OF UZBEKISTAN

PREPARATORY STUDY REPORT  
ON  
THE PROJECT FOR THE INSTALLATION OF X-RAY SCANNING  
EQUIPMENT AT THE CHECK POINTS OF UZBEKISTAN BORDERS  
WITH THE NEIGHBORING COUNTRIES  
IN  
THE REPUBLIC OF UZBEKISTAN

DECEMBER 2009

JAPAN INTERNATIONAL COOPERATION AGENCY

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UNICO INTERNATIONAL CORPORATION



## PREFACE

In response to a request from the Government of the Republic of Uzbekistan, the Government of Japan decided to conduct a preparatory study on the Project for the Installation of X-ray Scanning Equipment at the Check points of Uzbekistan Borders with the Neighboring Countries and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA sent to Uzbekistan a study team from July 6 to 31, 2009.

The team held discussions with the officials concerned of the Government of Uzbekistan, and conducted a field study at the study area. After the team returned to Japan, further studies were made. Then, a mission was sent to Uzbekistan in order to discuss a draft basic design, and as this result, the present report was finalized.

I hope that this report will contribute to the promotion of the project and to the enhancement of friendly relations between our two countries.

I wish to express my sincere appreciation to the officials concerned of the Government of the Republic of Uzbekistan for their close cooperation extended to the teams.

December 2009

Izumi Arai  
Vice-President  
Japan International Cooperation Agency



December 2009

## Letter of Transmittal

We are pleased to submit to you the preparatory study report on the Project for the Installation of X-ray Scanning Equipment at the Check points of Uzbekistan Borders with the Neighboring Countries in the Republic of Uzbekistan.

This study was conducted by UNICO International Corporation, under a contract to JICA, during the period from June 2009 to December 2009. In conducting the study, we have examined the feasibility and rationale of the project with due consideration to the present situation of Uzbekistan and formulated the most appropriate basic design for the project under Japan's grant aid scheme.

Finally, we hope that this report will contribute to further promotion of the project.

Very truly yours,

Wataru Shiga  
Project manager,  
Preparatory study team on the Project for  
the Installation of X-ray Scanning  
Equipment at the Check points of  
Uzbekistan Borders with the Neighboring  
Countries,  
UNICO International Corporation



## **SUMMARY**





## SUMMARY

### Background of the Project

The Republic of Uzbekistan, after attaining independence in 1991 as a result of the disintegration of the former Soviet Union, while introducing the market mechanism through passage of bills for elimination of price controls on products and for privatizing governmental corporations, also put in place national control of currency convertibility and adopted high trade barriers as a means of protecting domestic industry, thereby keeping the pace of realizing the policy of economic liberalization at a moderate level. The nation's income greatly depends on Customs revenue, and the nation's financial balance is maintained by means of a high level of tariffs on imported goods. The economy achieved annual growth averaging more than 7% during 2004 to 2008, and in 2007 and 2008 the growth rate was high, at 9.5%. This comes from the high prices for the country's main imports, gold, natural gas, and agricultural products (especially cotton). According to the World Bank statistics, the nation's GDP (2007, nominal) was \$22.0 billion, and the per capita GNI (nominal), at \$730, placed Uzbekistan in the 150th position in the world ranking, whereby the World Bank classifies the country as a LIC (low income country).

Review of the GDP components shows Uzbekistan to be a classic example of an agricultural country in terms of industrial structure; whereas arable land amounts to no more than 10% of the total land area, agriculture contributes 30% of the GDP, and provides 40% of all employment. In recent years, however, as a result of a shift in policy to emphasis on industry the share of agriculture has gradually declined. In 2007, primary industry had a share of 24% in GDP; secondary industry had 32.6% and tertiary industry 43.4%. The country is well endowed with mineral resources: gold, silver, copper, coal, uranium, natural gas and petroleum are produced and particularly in the case of gold Uzbekistan is seventh largest producer in the world. In the industrial sector, the government has placed emphasis on development of domestic industry (particularly automobiles, clothing, telecommunications and food processing), and there is significant foreign investment in these areas.

Uzbekistan is landlocked; since none of its neighbors have ocean ports, imports reach the country via overland transport through those countries. Being centrally located in Central Asia, Uzbekistan is subject to inflow of various illegal goods and materials that enter from or via Afghanistan, Tajikistan, Turkmenistan, or other neighboring countries. It is estimated that 92% of the world's heroin originates in opium cultivated in Afghanistan, and in 2006 the heroin seized by authorities in Central Asia is said to be four times greater than that seized in the past ten years. These illegal goods are sent from Afghanistan to very many countries of the world, in part by way of the "northern route," through Central Asia (including Uzbekistan) to Russia and Europe, so that drugs enter Uzbekistan, causing the Uzbekistan Government to identify a number of border Customs check points as high-risk points, and to adopt policy measures to control traffic in drugs.

Further, in keeping with the increasing flows of goods accelerated by improvement of the transport network within the Central Asia region, the importance of rapid clearing of Customs at border crossings has risen. Because of differences in the border infrastructure of the countries involved,

trucks carrying freight have to form long lines at Customs, and there is considerable congestion of rail freight. With regard to Uzbekistan Customs, the issues requiring highest priority are the unification of relevant laws and regulations, need for greater transparency, reduction of the time needed for freight to clear Customs, improvement of efficiency, intercepting illegal and degraded goods, and coping with a decline in the rate of duty collection that is related to growth of the underground economy.

### Request for Assistance

Subsequent to the September 11, 2001 terrorist attacks on the U.S.A., the World Customs Organization (WCO), in consideration of the necessity of dual policies of ensuring the security of international trade and the smooth flow of trade, prepared a document, the Framework of Standards to Secure and Facilitate Global Trade, in June 2005.

In view of the expression by the Uzbekistan Government of interest in acceding to this Framework, in March 2008 the WCO dispatched an expert to study capacity building at the SCC, and as a result of field study it was recommended to the SCC that in order to improve the nonintrusive inspection arrangements at border check points where risk of entry of contraband was high, X-ray scanning equipment should be acquired, on an urgent basis. The recommendation extended to specifics of the overall improvement of customs examination at check points. This has raised the issue of financing the procurement of needed equipment. Against this background, the Uzbekistan Government has sought grant aid from Japan for the acquisition of equipment that the SCC had identified as needed at the top-priority check points.

In response to the request, the Japan International Cooperation Agency (JICA) dispatched a team for a preparatory survey in January 2009. On the basis of the above, the preparatory survey report recommended, in view of the magnitude of freight flows and the risk of entry of illegal goods and materials at Customs check points, and with reference to the existing arrangements and methods of inspection, that the high risk check points be supplied with the necessary equipment of appropriate specification (ex. Large or medium-sized X-ray scanning equipment).

### Summary of study results, and the content of the project

In order to reconfirm the contents of the request and to justify the project component and conditions for project implementation, following the preparatory survey in January 2009, JICA sent a preparatory study team in July 2009, and as a result the following was confirmed.

#### Large-sized X-ray equipment (Mobile type)

One set each for Ayritom, Oybek, and Alat check points (total 3 sets)

#### X-ray equipment for rail wagons

One set each for Galaba and Khojadavlat check points (total 2 sets)

In response to the request of the Uzbekistan Government as described above, and in consideration of the contents of WCO recommendations, SCC's IT Plan, and relevant Presidential Decree, in addition to the review of existing drug trafficking routes and records of drug detections at

the border check points and in the relevant regions with high risk borders, and in consideration of the current situation of transported goods with regard to their quantity, contents, and packaging, the Team consulted with related entities in Japan regarding the needs and rationale of the project and the following decision was made.

Japan's Inputs to the Project

| Customs check point               | Equipment                                       | Quantity | Rationale  |
|-----------------------------------|---|----------|--|
| Ayritom Customs Complex (Road)    | Large-sized X-ray Scanning Unit, mobile type    | 1        | On the border with Afghanistan, it is acknowledged that the Customs here is the frontline of counterterrorism measures. Needs and relevance are identified from the information provided.  |
| Galaba Railway Check Point (Rail) | Large-sized X-ray Scanning Unit, for rail cargo | 1        | The site being the intersection of the two rails from Afghanistan and Tajikistan, it is acknowledged that the Check Point here is also the frontline of counterterrorism measures. Needs and relevance are identified from the information provided. |
| Oybek Customs Check Point (Road)  | Large-sized X-ray Scanning Unit, mobile type    | 1        | On the border with Tajikistan, it is acknowledged that the Customs here is another frontline of counterterrorism measures. Needs and relevance are identified from the information provided.   |

Although Alat Customs Complex is on the border with Turkmenistan and is located on the high-volume North-South corridor, the study team could not identify the urgent risk of illegal goods inflow there due to lack of empirical information, and thus the check point there was not justified to be included in the project. As to Khojadavlat Railway Check Point, the need to improve customs inspections is acknowledged but arrangements for inspections were observed inadequate and few seizures have been made. Also, it is being placed at a lower priority on the Uzbekistan side, and thus the suitability of large-sized inspection equipment is judged low. Therefore, it was not justified to include Khojadavlat Railway Check Point in the project.

Duration of project implementation and estimated project cost

In the event that this project is implemented with support of Japanese Grant Aid, the consultant would carry out the tasks of review of the specifications and other aspects of the equipment, and supervision of the tender, while the supplier would procure the equipment.

The project is implemented in two separate years, subject to approval of the Government of Japan, the implementation of the first phase (first year) for procurement of mobile type large-sized X-ray scanning equipment would last about 14.3 months and the second phase (second year) for procurement of that for rail cargo would last about 18.2 months.

In the event that the project equipment is supplied on a Grant Aid basis, the following are the

estimated expense to be borne by the Uzbekistan side.

Expense of the Uzbekistan Side (JPY 9.74 million)

Foundation work (for X-ray scanning equipment and X-ray shielding walls), Earth filling work, Vehicle registration fee (for mobile type X-ray scanning equipment), Others (bank commission)

The annual increment to be provided for in the Uzbekistan side in the event that the equipment is procured as stated in this study report, the cost being for operation and maintenance of the equipment, is estimated at about JPY 47.09 million including those charges of electric power, fuel, and replacement parts. This is equivalent to 32% of the annual customs inspection charges collected at the border check points for truck traffic volume of fiscal 2008. This is the estimated cost for annual replacement parts from the third year onward after the equipment is placed in use. It is thought that, as long as there is anticipation of increase in traffic volume at the relevant check points at the time the equipment is provided, the SCC would be able to secure sufficient budget to meet this expense.

**Verification of appropriateness of the project**

The following gives the effects that are expected if the planned items of equipment are provided to the relevant check points.

|                                       |   |
|---------------------------------------|---|
| Present Status and Problems           | <ul style="list-style-type: none"> <li>• Drugs, weapons and other illegal items are passing through Uzbekistan and the region along the borders with Afghanistan and Tajikistan, whereby they are being transported to various countries.</li> <li>• Inspection at Uzbekistan Customs check points is being performed by manual, visual means, requiring much time and hampering the efficient, smooth flow of goods.</li> </ul>  |
| Cooperative Measures                  | <p>One large-sized X-ray scanning unit (vehicle-mounted type) is to be provided for use at each of Ayritom and Oybek check points where road freight is examined, and one large-sized X-ray scanning unit for railway wagons is to be provided for use at the Galaba railway check point.</p>   |
| Direct Effects; Extent of Improvement | <ul style="list-style-type: none"> <li>• The present manual/visual inspection for detailed examination of a truck cargo that requires 3-5 hours can be accomplished in 20-30 minutes. Assuming 10,000 trucks are to be examined in one year's time, it is estimated that the time requirement, now 30,000-50,000 hours, would be slashed by about 90% to 3,300-5,000 hours.</li> <li>• Transit freight that can be inspected using the X-ray equipment would be increased greatly (from zero to more than 100 vehicles a day).</li> <li>• A substantial increase in discovery and seizure of illegal items can be expected.</li> <li>• By introducing X-ray scanning for inspection of all the cargos, the Customs</li> </ul> |

|   |  |
|---|--|
|   | <p>database will be improved measurably, and more effective risk management will become possible.</p> <ul style="list-style-type: none"> <li>• The soft component, by facilitating the widespread use of large-sized X-ray scanning equipment that would be tied into the Customs information system, will contribute to more efficient work by about 100 Customs officers and to more effective inspections.</li> </ul>   |
| Indirect Effects;<br>Extent of<br>Improvement | <ul style="list-style-type: none"> <li>• Increased preventive effect is expected over the inflow and outflow of illegal goods at the relevant Customs check points.</li> <li>• Entry of socially undesirable items will be curtailed, contributing to improved welfare of the citizens and stabilization of society.</li> <li>• Economic effects would be obtained through the decrease in time required for Customs inspections, decrease in transport costs, and increase in flow of goods resulting from gains in international competitiveness.</li> </ul> |

While being highly important geopolitically, Uzbekistan confronts challenges which it cannot easily face alone: poverty, trafficking in drugs and weapons, and the threat of international terrorism. In this context, Japan's assistance to Uzbekistan has emphasized cooperation for the development of a market economy and progress in democratization. It can be understood that the proposed project would contribute to development of a market economy, promote regional cooperation, and be of value in connection with counterterrorism and drug control issues. It is conceived both that this project addresses issues of great urgency within the context of these areas of emphasis, and that it is appropriate to provide the equipment available for inspection of freight at the border check points as this would be indispensable if the more efficient flow of goods and prevention of contraband entry are to be achieved. The direct benefits of implementing this project would accrue to the SCC and those parties involved in the transportation sector. Indirect benefits would be enjoyed through the improvement of the level of national welfare, a contribution to the stabilization of society, and through other mechanisms.

Moreover, it is possible for the proposed equipment to be operated and managed using the financial, human, and technological resources of Uzbekistan. There would be no adverse influence on the environment or society. It is therefore deemed possible to implement this project under Japan's Grant Aid scheme.



## TABLE OF CONTENTS

**Preface**

**Letter of Transmittal**

**Summary**

**Contents**

**Project Site Map**

**List of Figures & Tables**

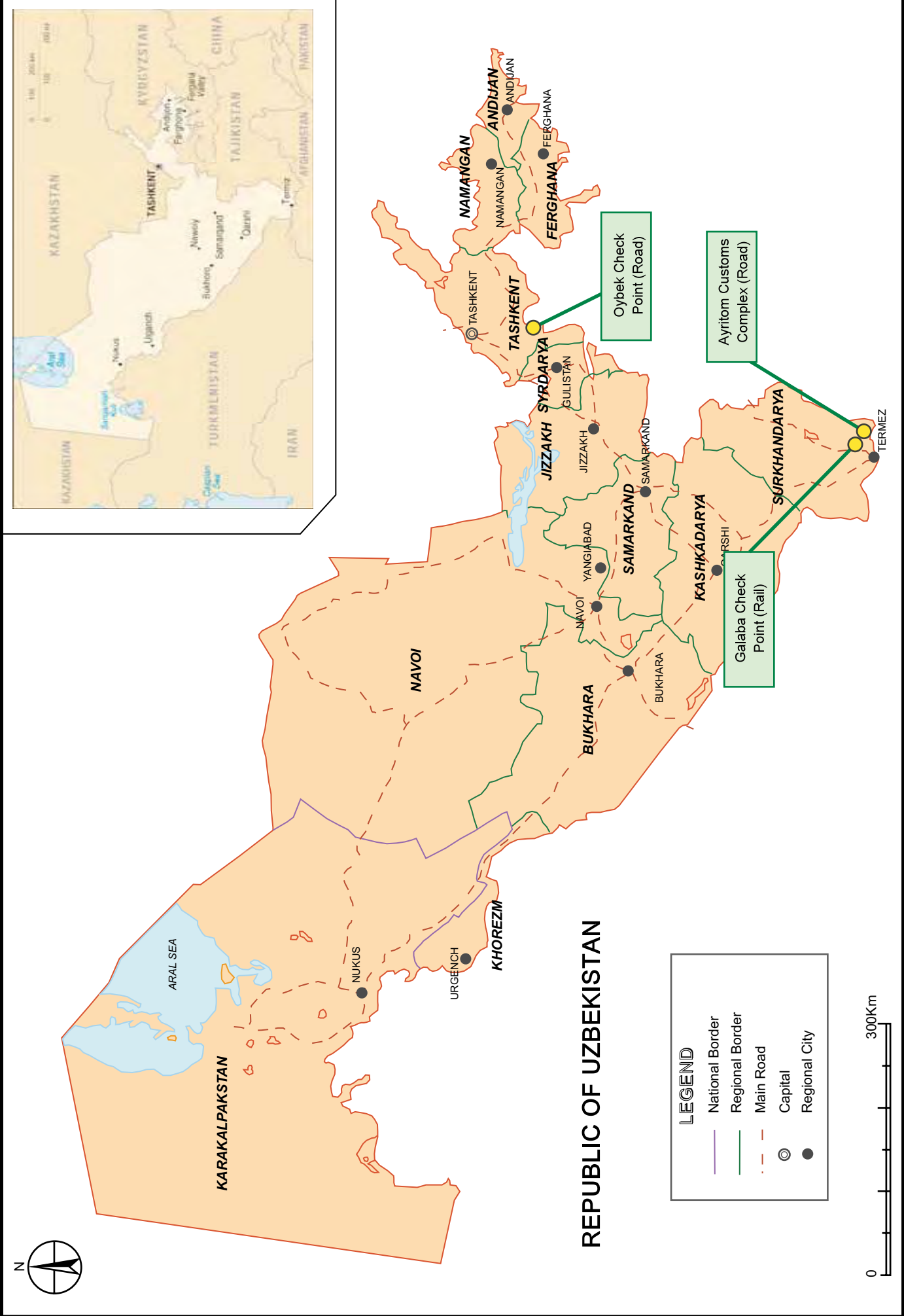
**Abbreviations**

|                  |  |      |
|------------------|--|------|
| <b>Chapter 1</b> | <b>Background of the Project</b> .....                 | 1-1  |
| 1-1              | Background Situation .....                             | 1-1  |
| 1-2              | Conditions regarding the Project .....                 | 1-4  |
| 1-3              | Environmental and Social Considerations.....           | 1-5  |
| <b>Chapter 2</b> | <b>Contents of the Project</b> .....                   | 2-1  |
| 2-1              | Basic Concept of the Project .....                     | 2-1  |
| 2-1-1            | Target of the Project .....                            | 2-1  |
| 2-1-2            | Outline of the Project.....                            | 2-3  |
| 2-2              | Basic Design of the Requested Japanese Assistance..... | 2-6  |
| 2-2-1            | Design Policy.....                                     | 2-6  |
| 2-2-2            | Basic Plan (Equipment Plan).....                       | 2-9  |
| 2-2-2-1          | Overall Plan .....                                     | 2-9  |
| 2-2-2-2          | Equipment Plan .....                                   | 2-15 |
| 2-2-3            | Basic Design Drawing .....                             | 2-25 |
| 2-2-4            | Implementation Plan .....                              | 2-30 |
| 2-2-4-1          | Implementation Policy.....                             | 2-30 |
| 2-2-4-2          | Implementation Conditions .....                        | 2-31 |
| 2-2-4-3          | Scope of Works .....                                   | 2-32 |
| 2-2-4-4          | Consultant Supervision.....                            | 2-33 |
| 2-2-4-5          | Quality Control Plan.....                              | 2-33 |
| 2-2-4-6          | Procurement Plan.....                                  | 2-33 |
| 2-2-4-7          | Operational Guidance Plan.....                         | 2-35 |

|   |            |
|---|------------|
| 2-2-4-8 Soft Component Plan.....  | 2-36       |
| 2-2-4-9 Implementation Schedule .....                                     | 2-39       |
| 2-3 Obligations of the Recipient Country.....                             | 2-41       |
| 2-4 Project Operation Plan.....   | 2-41       |
| 2-5 Project Cost Estimation .....   | 2-43       |
| 2-5-1 Initial Cost Estimation .....                                       | 2-43       |
| 2-5-2 Operation and Maintenance Cost.....                                 | 2-44       |
| 2-6 Other Relevant Issues .....   | 2-45       |
| <br>  |            |
| <b>Chapter 3 Project Evaluation and Recommendations.....</b>              | <b>3-1</b> |
| 3-1 Effects of the Project.....   | 3-1        |
| 3-2 Recommendations .....   | 3-2        |
| 3-2-1 Recommendations to the Uzbekistan Side.....                         | 3-2        |
| 3-2-2 Technical Cooperation, and Coordination with Other Donors.....      | 3-4        |
| <br>  |            |
| <b>[Appendices]</b>   |            |
| <br>  |            |
| Appendix-1 Member List of the Study Team.....                             | A1-1       |
| Appendix-2 Study Schedule.....  | A2-1       |
| Appendix-3 List of Parties Concerned in the Recipient Country.....        | A3-1       |
| Appendix-4 Minutes of Discussion (Preparatory Study) .....                | A4-1       |
| Appendix-5 Minutes of Discussion (Explanation of Draft Basic Design)..... | A5-1       |
| Appendix-6 Soft Component Plan.....                                       | A6-1       |
| Appendix-7 References .....   | A7-1       |



# PROJECT SITE MAP





## LIST OF FIGURES & TABLES

| No.              | Title   | Page |
|------------------|---|------|
| <b>Chapter 1</b> |   |      |
| Table 1-1        | Initial Assistance Request  | 1-3  |
| Table 1-2        | Equipment Plan Contained in the Preparatory Report (Suggested by Japan)                 | 1-4  |
| Table 1-3        | Climate of Termez (Surkhandarya Province)   | 1-5  |
| Table 1-4        | Climate of Tashkent   | 1-5  |
| <b>Chapter 2</b> |   |      |
| Fig. 2-1         | Flow of Border Control in Uzbekistan  | 2-10 |
| Fig. 2-2         | Customs Inspections and X-ray Scanning  | 2-13 |
| Fig. 2-3         | Information Flow for Inspection of Road Freight   | 2-14 |
| Fig. 2-4         | Information Flow for Inspection of Rail Freight   | 2-15 |
| Fig. 2-5         | Operation System for Large-sized X-Ray Scanning Equipment for Truck Cargo (Mobile Type) | 2-21 |
| Fig. 2-6         | Operation System for Large-sized X-ray Scanning Equipment for Rail Cargo                | 2-22 |
| Fig. 2-7         | Relative Locations of the Project Sites   | 2-25 |
| Fig. 2-8         | Project Sites in Surkhandarya Region  | 2-26 |
| Fig. 2-9         | Project Site in Tashkent Region   | 2-26 |
| Fig. 2-10        | Ayritom Customs Complex – Conceptual Layout Plan  | 2-27 |
| Fig. 2-11        | Galaba Railway Check Point – Conceptual Layout Plan                                     | 2-28 |
| Fig. 2-12        | Oybek Customs Check Point – Conceptual Layout Plan                                      | 2-29 |
| Table 2-1        | The Request by the Uzbekistan Government  | 2-4  |
| Table 2-2        | Japan’s Inputs to the Project   | 2-5  |
| Table 2-3        | Radiation Sources   | 2-16 |
| Table 2-4        | X-ray Scanning  | 2-17 |
| Table 2-5        | Types of X-ray Scanning Equipment for Truck Freight                                     | 2-18 |
| Table 2-6        | Types of X-ray Scanning Equipment for Rail Freight                                      | 2-19 |
| Table 2-7        | Equipment Plan  | 2-23 |
| Table 2-8        | Location of the Project Sites   | 2-25 |
| Table 2-9        | Implementation Schedule, Phase 1  | 2-40 |
| Table 2-10       | Implementation Schedule, Phase 2  | 2-40 |
| Table 2-11       | Staffing at Customs Check Points  | 2-42 |
| Table 2-12       | Estimated Cost of Operation and Management  | 2-44 |
| <b>Chapter 3</b> |   |      |
| Table 3-1        | Expected Effects of the Project   | 3-1  |



## ABBREVIATIONS

|           |   |  |
|-----------|---|--|
| ADB       | : | Asian Development Bank   |
| BOMCA     | : | Border Management Programme in Central Asia  |
| CIS       | : | Commonwealth of the Independent States   |
| DAC       | : | Development Assistance Committee (of OECD)   |
| E/N       | : | Exchange of Notes  |
| EU        | : | European Union   |
| GDP       | : | Gross Domestic Product   |
| GNI       | : | Gross National Income  |
| ICRP      | : | International Commission on Radiological Protection                                      |
| IT        | : | Information Technology   |
| WISP      | : | Welfare Improvement Strategy Paper   |
| JICA      | : | Japan International Cooperation Agency   |
| LAN       | : | Local Area Network   |
| MeV       | : | Mega Electron Volt   |
| MFERIT    | : | Ministry of Foreign Economic Relations, Investment and Trade                             |
| MOD       | : | Minutes of Discussions   |
| MOF       | : | Ministry of Finance  |
| mSv       | : | Milli Seevert  |
| NCDC      | : | National Information and Analysis Centre for Drug Control under the Cabinet of Ministers |
| OECD      | : | Organization for Economic Cooperation and Development                                    |
| SCC       | : | State Customs Committee  |
| TIR       | : | Transit (Transport) International Routier  |
| UIFA      | : | Uzbek International Forwarders Association   |
| UNDP      | : | United Nations Development Programme   |
| UNODC     | : | United Nations Office for Drug Control and Crime   |
| UzAvtoYul | : | State Joint Stock Company “UzAvtoYul”  |
| WB        | : | World Bank (IBRD)  |
| WCO       | : | World Customs Organization   |



**CHAPTER 1 Background of the Project**





## Chapter 1 Background of the Project

### 1-1 Background Situation

The Republic of Uzbekistan, being landlocked, must receive all imports carried by ship after the goods are transported overland through adjacent countries. Most of the goods transported in the Central Asia region are moved by rail or road, and transport from outside the region is via the Siberia Landbridge (Far Eastern Russia – Central Asia – Europe), the China Landbridge (China’s far eastern region – Central Asia), the European route, the Turkish route, or the Iranian route. Together with the increase in the flow of goods originating within the region and outside of it and via these routes, there has been an increase in the inflow of contraband from sources including Afghanistan, Tajikistan, and Turkmenistan. It is reported that 92% of the heroin in circulation in the world in 2007 comes from poppies grown in Afghanistan. In 2006, the quantity of heroin seized in Central Asia had quadrupled in 10 years<sup>1</sup>. This illegal substance is sent from Afghanistan to all parts of the world, and the flow of drugs to Russia and Europe is by means of the Northern Route – that is, through Central Asia, including Uzbekistan. A part of the drugs is offloaded in Uzbekistan, causing the Uzbekistan Government to consider this to be a high risk matter, requiring heightened surveillance at the border.

Speedy work by Customs inspectors at relevant points on the border is needed, in order to cope with the increase in the flow of transported goods that has resulted from the improvement of transport networks in the Central Asian region. However, the lack of harmonization of Customs procedures and Customs infrastructure of the countries concerned is resulting in queuing of trucks at Customs check points and congestion at rail freight stations. To deal with this situation, the State Customs Committee (SCC), with the cooperation of the UNDP, formulated its “Business Strategy of the Republic of Uzbekistan for 2007-2010”, and, having initiated reform of Customs administration as a core policy, is working at legal reforms (unification of relevant laws), organizational reform, improved control of Customs inspectors, and coordination and harmonization with the standards of the World Customs Organization (WCO), as measures to improve the overall management and operation of the Customs system.

Related to this are measures for the modernization of the equipment used by Customs officers, through acquisition and deployment of IT equipment as stipulated in the State Customs Committee Order No. 135, “The Concept of Information Technology Policy of the State Customs Committee of the Republic of Uzbekistan (August 27, 2006; “Information Technology Policy”). Introduction of new technology is mandated with the objectives of reforming Customs procedures, improving Customs inspection efficiency, and promoting improved control and management of information in the Customs system. Further, in order to support this policy of computerization of the Customs system,

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<sup>1</sup> “World Drug Report”, UNODC, 2007

study has been made of the use of large-sized X-ray scanning equipment as one aspect of the use of diverse inspection equipment and in addition, technology for overall improvement of the inspection system has been studied, including the improvement of Customs infrastructure.

As recommended by the President of Uzbekistan, the SCC, in its Information Technology Policy, called for (1) building a unified Customs information system (an online database) and (2) expansion and improvement of check points by such measures as installation of large-sized X-ray scanning equipment and radiation detectors so as to enable nonintrusive inspection of 100% of the subject goods. The nation seeks to improve check points at 163 locations (105 border check points, 58 external economic activities check points) among which 16 border check points are identified as deserving the highest priority. SCC plans to introduce large-sized X-ray scanning equipment at these 16 border check points.

Subsequent to the September 11, 2001 terrorist attacks on the U.S.A., as a result of inquiries especially by the 12-nation High Level Strategic Group (of which the U.S.A. and Japan are members) of the WCO regarding the dual policies of ensuring the security of international trade and the smooth flow of trade, the WCO prepared a document, the “Framework of Standards to Secure and Facilitate Global Trade”, in June 2005. This Framework is composed of the following four core elements:

- 1) Harmonization of the advance electronic cargo information requirements on inbound, outbound and transit shipments.
- 2) Each country that joins the Framework commits to employing a consistent risk management approach to address security threats.
- 3) The Framework requires that at the reasonable request of the receiving nation, based upon a comparable risk targeting methodology, the sending nation's Customs administration will perform an outbound inspection of high-risk containers and cargo, preferably using nonintrusive detection equipment such as large-sized X-ray scanning equipment and radiation detectors.
- 4) The Framework defines benefits that Customs will provide to businesses that meet minimal supply chain security standards and best practices.

In view of the expression by the Uzbekistan Government of interest in acceding to this Framework, in March 2008 the WCO dispatched an expert to study capacity building at the SCC, and as a result of field study it was recommended to the SCC that in order to improve the nonintrusive inspection arrangements at border check points where risk of entry of contraband was high, X-ray scanning equipment should be acquired, on an urgent basis. The recommendation extended to specifics of the overall improvement of customs examination at check points. This has raised the issue of financing the procurement of needed equipment. Against this background, the Uzbekistan Government has sought grant aid from Japan for the acquisition of equipment that the SCC had identified as needed at the top-priority check points.

The initial request from the Government of Uzbekistan was as follows.

Table 1-1 Initial Assistance Request

| Location     | Customs Checkpoint                    | Requested X-Ray Equipment   |
|--------------|---------------------------------------|---|
| Bukhara      | Alat Customs Complex (Road)           | <ul style="list-style-type: none"> <li>• Mobile equipment: 2</li> <li>• Road-vehicle-mounted equipment: 1</li> <li>• Rail wagon inspection equipment: 1</li> </ul> (Total: 4 units) |
| Bukhara      | Khojadavlat Customs Checkpoint (Rail) |   |
| Surkhandarya | Ayritom Railway Checkpoint (Rail)     |   |
| Surkhandarya | Ayritom Customs Complex (Road)        |   |

In response to the request, the Japan International Cooperation Agency (JICA) dispatched a team for a preparatory survey in January 2009; the team confirmed the following, as a result of discussions regarding the request with officials at the related government offices.

- 1) Uzbekistan being a landlocked country, import and export goods must pass through at least one country from or to a port of entry, and is a country of importance from the viewpoint of overland transport of goods in Central Asia. Further, because of the high risk of illegal goods and materials such as drugs and weapons entering the country, it is important to Uzbekistan that the detection of such entry be improved, in addition to the importance of improving the efficiency of freight transport.
- 2) Because at present Customs inspections at border check points are not being performed effectively, there is inadequate detection of illegal goods and materials concealed in freight and vehicles.
- 3) It is believed to be highly necessary and appropriate to deal with these conditions by acquiring X-ray scanning equipment (medium- and large-sized) for use by Customs at the most important border check points.

On the basis of the above, the Preparatory Survey team recommended, in view of the magnitude of freight flows and the risk of entry of illegal goods and materials at Customs check points, and with reference to the existing arrangements and methods of inspection at Customs check points, that the following sites be supplied with the equipment shown.

Table 1-2 Equipment Plan Contained in the Preparatory Report (Suggested by Japan)

| Customs Office Site    | Transport Mode | Equipment and Quantity             |
|------------------------|----------------|------------------------------------|
| Alat, Bukhara*         | Road           | Medium-sized X-ray equipment: 2-3  |
| Khojadavlat, Bukhara*  | Rail           | Medium-sized X-ray equipment: 1-2  |
| Galaba, Surkhandarya   | Rail           | X-ray equipment for rail wagons: 1 |
| Ayritom, Surkhandarya* | Road           | Large-sized X-ray equipment: 1     |
| Ayritom, Surkhandarya* | Rail           | None                               |
| Surkhandarya River     | River port     | Medium-sized X-ray equipment: 1-2  |
| Oybek, Tashkent        | Road           | Large-sized X-ray equipment: 1     |

\* Initial site request by Uzbekistan

This preparatory study was done with the conditions stated above. The revised, final request by the Uzbekistan Government and contents of the proposed Japanese assistance are given in Chapter 2.

## 1-2 Conditions Regarding the Project

The Republic of Uzbekistan is landlocked, and has to the north Kazakhstan, to the east Kyrgyzstan and Tajikistan, to the southwest Turkmenistan, and to the south Afghanistan. The total land area is 447,400 square kilometers (about 1.2 times the size of Japan) and dimensions are 930 kilometers north to south, 1,400 kilometers east to west. The climate is continental, with wide variation from hot to cold; precipitation is limited; the country is relatively dry. The country's two great rivers, the Amu Darya and the Syr Darya, arise in the Tien Shan Mountains in the east and drain into the Aral Sea in the northwest; their basins are relatively flat, dry steppes; in the central part of the nation is the well-known Qizilqum desert. The capital city, Tashkent, is at 41degrees 20 minutes N and is at the elevation of 420-500 meters. There, the climate is continental, with a wide variation of daytime temperatures. The project sites are all in dry, outlying regions: Ayritom and Galaba (Surkhandarya Region) in the south on the Afghanistan border, and Oybek (Tashkent Region) on the border with Tajikistan. Ambient temperatures range from -25 to +45 degrees Celsius.

Climatic conditions in Termez and Tashkent are summarized in the following tables.

Table 1-3 Climate of Termez (Surkhandarya Province)

| Month                             |            | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  |
|-----------------------------------|------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Mean Temperature °C               | Daily Min. | -1.5 | 0.7  | 6.1  | 12.3 | 16.3 | 19.0 | 20.7 | 18.3 | 12.9 | 8.3  | 3.9  | 0.7  |
|                                   | Daily Max. | 9.3  | 12.1 | 18.3 | 25.8 | 32.2 | 37.4 | 39.1 | 37.1 | 32.2 | 25.2 | 18.3 | 12.1 |
| Mean Total Precipitation (mm)     |            | 23.4 | 20.2 | 37.7 | 26.2 | 9.3  | 0.8  | 0.1  | 0    | 0.1  | 3.3  | 8.8  | 17.4 |
| Mean Number of Precipitation Days |            | 9.4  | 9.4  | 10.8 | 8.9  | 4.6  | 0.8  | 0.4  | 0.2  | 0.3  | 2.7  | 4.3  | 8.7  |

Source: The Centre of Hydrometeorological Service at Cabinet of Minister's of Republic of Uzbekistan  
(UZHYDROMET)

Table 1-4 Climate of Tashkent

| Month                             |            | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  |
|-----------------------------------|------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Mean Temperature °C               | Daily Min. | -3.1 | -1.5 | 4.2  | 9.9  | 13.7 | 17.7 | 19.4 | 17.2 | 12.4 | 7.2  | 3.3  | -0.3 |
|                                   | Daily Max. | 5.8  | 7.9  | 14.3 | 21.8 | 27.4 | 33.2 | 35.7 | 34.0 | 28.7 | 21.0 | 14.2 | 8.5  |
| Mean Total Precipitation (mm)     |            | 54.5 | 46.8 | 72.3 | 63.6 | 32.0 | 7.1  | 3.5  | 2.0  | 4.5  | 34.1 | 45.0 | 53.4 |
| Mean Number of Precipitation Days |            | 13.7 | 12.3 | 13.8 | 12.9 | 10.2 | 5.1  | 2.9  | 1.9  | 3.2  | 8.1  | 10.2 | 12.8 |

Source: The Centre of Hydrometeorological Service at Cabinet of Minister's of Republic of Uzbekistan  
(UZHYDROMET)

### 1-3 Environmental and Social Considerations

Because X-rays are to be used for improvement of the inspection of goods entering the country, caution is required in order to ensure the safety and health of humans in the vicinity of the equipment when it is in use. On the occasion of the Preparatory Survey in January 2009 it was suggested that adverse effects could be avoided by taking the following measures:

- Anticipated influences or effects of the use of radiation consist of (1) the risk of exposure of humans to the radiation and (2) social considerations (the understanding of the local population).
- Examination of transported goods by use of large-sized X-ray scanners involves the release of a relatively large amount of energy, and any interruption of the power supply would stop the generation of X-rays.
- Because the X-ray equipment will be installed within the bonded area of Customs stations, it will be essential to bar members of the general public from entering the premises.
- The X-ray equipment must be used in compliance with the ICRP and laws and regulations of the Uzbekistan Government, and safety measures to protect Customs officers, drivers, and others are essential.
- Measures to block X-rays will be undertaken whenever required.

Discussions were held on the occasion of the present study to reconfirm that content of the applicable Uzbekistan laws and regulations and to examine such matters as the operation of the equipment by the SCC with a view to assuring human safety. These discussions identified as those in need of protection at the times when X-rays are being generated to be the Customs examiners, Customs officials, neighborhood residents and, in the case of goods transported by rail, station employees, locomotive engineers, and train personnel, and in the case of road transport, drivers. It was confirmed that the following measures were required to be taken at the times of X-ray use.

- On behalf of local residents, a wall or fence is to be installed around the designated area and measures are to be taken to prevent entry.
- Access to the designated area by railway employees and Customs officers is to be limited to those persons duly authorized by the person in charge.
- Exposure of railway employees is to be prevented by operation of the equipment on/off control switch by the operators of the equipment (but note that the radiation released at any one time is 4-5 $\mu$ Sv which by itself is not harmful to humans).
- To protect drivers of road vehicles, the equipment operators are to be required to confirm that the drivers are outside the designated areas at times when the equipment is used.
- Equipment operators are to be given periodic examinations to determine whether they have been exposed to radiation.
- Survey meters are to be installed at the periphery of the designated areas and periodic measurements of radiation are to be made.

It is believed that by adoption of the above measures, impact, on the local society and on individuals concerned of the use of radiation from large-sized scanning equipment as would be provided by this project, will be prevented.

The above summary of study findings are reflected in the following chapters.

## **CHAPTER 2 Contents of the Project**





Chapter 2 Contents of the Project

2-1 Basic Concept of the Project

2-1-1 Overall Goal and Target of the Project

(1) Overall Goal and Project Objectives

On the basis of the report by the WCO, the SCC drafted a program for updating of Customs activities and increasing the equipment available at check points, and is now in the process of implementing the program. The present project has been planned as one part of that effort, and has the following overall goal and objectives.

1) Basic Concept of IT Policy (2006)

As recommended by the President of Uzbekistan, the SCC, in its “Information Technology Policy”, called for (1) building a unified Customs information system (an online database) and (2) expansion and improvement of check points by such measures as installation of large-sized X-ray inspection equipment and radiation detectors so as to enable nonintrusive inspection of all the subject goods. The nation seeks to improve check points at 163 locations (105 border check points, 58 external economic activities check points) among which the following border check points are identified as deserving the highest priority.

- Road locations 53
- Railway locations 13
- Mobile units 26
- Airport locations 12
- River locations 1

Of the border check points, 14 of the combined total of 66 road and rail check points have been identified as having the highest priority. Of them, the following five (in order of priority) are the most important of all.

- Ayritom (Road)
- Galaba (Rail)
- Oybek (Road)
- Alat (Road)
- Khojadavlat (Rail)

Further, the following nine are assigned second-highest priority.

- Uzbekistan (Rail)
- Yallama (Road)
- Daut Ata (Road)
- Karakalpakiya (Rail)
- Sariosiyo (Rail)
- Sariosiyo (Road)
- Chukursay (Rail)
- Dustlik (Road)
- Andarkhan (Road)

## 2) Recommendations by the WCO Experts

Uzbekistan has expressed intent to accede to the Framework of Standards as defined by the WCO and consequent to that, a study of the status of the Uzbekistan Customs inspection system was made, in March 2008, by an expert dispatched by the WCO. The expert affirmed that nonintrusive inspection equipment and radiation detectors for cargo (such as large-sized X-ray scanning equipment) were needed at the following 11<sup>1</sup> Customs check points, through which 95% of Uzbekistan's imports and exports pass.

Bekabad (Rail), Chukursay (Rail), Daut Ata (Road), Karakalpakiya (Rail), Khojadavlat (Rail), Alat (Road), Ayritom (Rail), Ayritom (Road), Kudukli (Rail), Sariosiyo (Road), Yallama (Road)

Galaba and Oybek are not identified in the above-mentioned WCO report. It is believed that Galaba being adjacent to Ayritom is a substitute for Ayritom (Rail) because the danger that high-risk freight may pass through there is formidable and the volume of freight there is high because of access there by trains both from Afghanistan and Tajikistan (though the containers from Afghanistan are transported vacant due to the bilateral agreement). Further, Oybek is at the Uzbekistan terminus of the new Dushanbe-Khojand-Chanoq road, that is nearing completion, and in view of the likelihood of a large-scale increase in future traffic there, a Cabinet resolution has identified it as a check point requiring improvement of equipment on an urgent basis.

From among the 16 border check points in the SCC's Information Technology Policy, selection has been made of those for road transport, that are consistent with WCO Framework of Standard for trade facilitation, are on the major highways (including part of the Asian Highway), that are suitable for Central Asia regional cooperation and are at border check points where there is high risk of inflow of illegal goods. The same criteria were used in identifying the check points

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<sup>1</sup> There were originally 10, but Bekabad was later added.

performing rail freights inspections, where there is a relatively high volume of goods transported, or the prospect for a substantial increase in the future, and where the location is close to high-risk borders.

### 3) Objectives of the Present Project

The SCC has been planning to make use of risk management techniques, computerize Customs work, ensure preemptive protection through post-clearance audit and valuation, and improve the effectiveness and efficiency of inspections by installation of X-ray scanners. The reasons for these plans are the SCC's intention to acquire a modern Customs system so as to speed up Customs procedures as one means of facilitating trade flows, and to improve ability to interdict the flow of socially harmful goods and contraband that have come to be widely distributed in the region.

Within this context, the present project has the objective of detecting and preventing the entry of contraband, by the installation of large-sized X-ray equipment for inspection of freight and vehicles at high-risk border check points.

#### 2-1-2 Outline of the Project

The project seeks to contribute to achievement of the above-mentioned objectives of the SCC by furnishing the required large-sized X-ray inspection equipment (vehicle-mounted) and rail freight inspection equipment, for use at high-risk border check points. If the proposed X-ray inspection equipment to be provided by this project is properly operated and used at the high-priority check points, it will be possible to effectively and efficiently conduct Customs inspection, and prevent the entry of drugs, weapons, and other illegal materials.

##### (1) Confirmation of the Request by the Uzbekistan Government

The content of the request made by the SCC consequent to the Preparatory Study is as follows (see attached Minutes of Discussions).

Table 2-1 The Request by the Uzbekistan Government

| Customs office                         | Equipment                                       | Neighboring country     | Quantity | Priority |
|--|---|-------------------------|----------|----------|
| Ayritom Customs Complex (Road)         | Large-sized X-ray Scanning Unit, mobile type    | Afghanistan             | 1        | A        |
| Galaba Railway Check Point (Rail)      | Large-sized X-ray Scanning Unit, for rail cargo | Afghanistan, Tajikistan | 1        | A        |
| Oybek Customs Check Point (Road)       | Large-sized X-ray Scanning Unit, mobile type    | Tajikistan              | 1        | B        |
| Alat Customs Complex (Road)            | Large-sized X-ray Scanning Unit, mobile type    | Turkmenistan            | 1        | B        |
| Khojadavlat Railway Check Point (Rail) | Large-sized X-ray Scanning Unit, for rail cargo | Turkmenistan            | 1        | C        |

Concerning the equipment requested for Alat and Khojadavlat, in response to a proposal made by the Japanese team after the Preparatory Survey in January 2009 that medium-sized units be installed at two nearby locations (check points at Karakul and Bukhara No. 2 Station), the Uzbekistan Government decided that they were not needed, and the SCC did not request any medium-sized X-ray units.

In addition, in response to the suggestion made by the Preparatory Survey team concerning a medium-sized X-ray scanner for the check point on the Termez River Port, as it was then found that arrangements were under way for the supply of equipment (vehicle-mounted X-ray inspection equipment, surveillance equipment, generators, etc.) by the UNODC's project, "Strengthening Termez River Port Check Point on the Uzbek-Afghan Border", this site was not included in the proposed project.

(2) Proposed Project Inputs of Japanese Side

In response to the request of the Uzbekistan Government as described above, and in consideration of the contents of WCO recommendations, SCC's IT Plan, and relevant Presidential Decree, as well as the review of existing drugs and weapons trafficking routes and records of drug detections at the border check points and in the adjacent regions with high risk borders, and in consideration of the current situation of transported goods with regard to their quantity, contents, and packaging, the Team consulted with relevant ministries in Japan regarding the needs and rationale of the project and the following decision was made.

Table 2-2 Japan's Inputs to the Project

| Customs check point                    | Equipment                                       | Quantity | Rationale  |
|--|---|----------|--|
| Ayritom Customs Complex (Road)         | Large-sized X-ray Scanning Unit, mobile type    | 1        | On the border with Afghanistan, it is acknowledged that the Customs here is the frontline of counterterrorism measures. Needs and relevance are identified from the information provided.  |
| Galaba Railway Check Point (Rail)      | Large-sized X-ray Scanning Unit, for rail cargo | 1        | The site being the intersection of the two rails from Afghanistan and Tajikistan, it is acknowledged that the Check Point here is also the frontline of counterterrorism measures. Needs and relevance are identified from the information provided. |
| Oybek Customs Check Point (Road)       | Large-sized X-ray Scanning Unit, mobile type    | 1        | On the border with Tajikistan, it is acknowledged that the Customs here is another frontline of counterterrorism measures. Needs and relevance are identified from the information provided.   |
| Alat Customs Complex (Road)            | Large-sized X-ray Scanning Unit, mobile type    | 0        | Although the site is on the border with Turkmenistan and is located on the high-volume North-South corridor, the Team could not identify the urgent risk of terrorism due to lack of empirical information, and was thus not justified.              |
| Khojadavlat Railway Check Point (Rail) | Large-sized X-ray Scanning Unit, for rail cargo | 0        | Need to improve Customs inspections is acknowledged, but arrangements for inspections being inadequate, few seizures have been made; the suitability of large-sized inspection equipment is low.   |

Further, in addition to supply of the equipment, a soft component service is proposed to be included in the project in order to ensure a smooth initial operation of the equipment.

## 2-2 Basic Design of the Requested Japanese Assistance

### 2-2-1 Design Policy

#### (1) Policy Concerning Conditions of the Natural Environment

All of the selected project sites have continental climate conditions that cause wide fluctuation in temperature. At some locations the maximum recorded temperature in summer approached 50 degrees Celsius while winter temperatures reached near -30 degrees Celsius. Because the equipment to be provided will be used outdoors, equipment planning must anticipate these ambient conditions for the equipment and its peripherals.

#### (2) Policy for Selection of the Planned Equipment

The process of selection of the equipment for this project was made with considerations given below.

- The equipment must be what is indispensable for inspection of large-sized imported freight shipments and inspection of vehicles at border check points.
- The equipment must be effective for the detection of the presence of drugs, weapons, and other illegal items.
- The equipment should not present any special problems in connection with the precise location of installation or use, or in connection with structural or utilities issues.
- It should be possible to deploy employees for operation and management of the equipment.
- It must be feasible for the Uzbekistan Government to bear the expense of construction necessary for installation and use of the equipment.

#### (3) Policy Regarding Specifications and Grade of the Equipment

Concerning the specifications and grade of the planned equipment, and other aspects of its procurement, design work proceeded according to the following policies. Basically, one piece of equipment is to be provided for each of the selected border check points, and planning was done separately for each mode, namely road and rail transport.

- Equipment shall be so selected as to meet the needs of Customs inspection (type of cargo, frequency of inspection)
- Technical level of the equipment shall conform to the operational skill of customs inspectors.
- Specifications are to conform to what is in use internationally, and the equipment design is to conform to laws and regulations of Uzbekistan.

- Such spare parts as deemed necessary are to be procured, with the cost of such parts for an initial two-year period to be included in the project cost.

(4) Policy Regarding Procurement Conditions

The manufacturer of the equipment is to have a representative in Uzbekistan in order to provide capacity for maintenance and repair service as well as the supply of spare parts and supplies. Further, in addition to the supply of equipment and installation works the following items shall be included in the project.

- One year warranty by manufacturers after handover of the equipment
- Guidance on operation of the equipment as well as its management by manufacturer's engineers after the installation works
- Translation of operation manuals and repair manuals (into Russian or Uzbek)

(5) Policy Regarding Procurement Conditions

There are six known manufacturers of the type of equipment that has been planned, in OECD/DAC members countries including Japan. As a result of sending inquiries to each company, five of them provided price information and technical information (excluding one Japanese company). There is no manufacturer of this equipment in Uzbekistan. Therefore, the scope of possible supplies was made to include manufacturers in countries other than Japan and Uzbekistan.

(6) Policy Regarding the Preparatory Works

In the case of large-sized X-ray scanning equipment for rail freight, depending on local site conditions, it would be necessary to undertake construction as described below, for installation of the equipment. Because the locations will be within the precincts of rail stations of the national railway company, the construction would be undertaken by either the construction department of the railway company or of the SCC, or by a qualified contractor registered with one or the other. It would be necessary for the Uzbekistan Government to decide on the party to do the construction shortly after the decision is made to proceed with the project.

- Foundation works (foundations for the main units, control rooms, X-ray shielding walls, including replacement of a part of existing rails, etc.)
- Earth filling works

(7) Policy Regarding Project Period

The situation will vary according to the manufacturer in question, or the country of manufacture,

but even though there would be a moderate difference between the case for mobile type units as compared to that for rail cargo inspection, the time needed from placing of an order to delivery of large-sized X-ray scanning equipment at the sites would be 9 to 10 months. However, this does not take into account transport conditions or possible delays in clearing Customs. It is presumed when installation work and start-up guidance by the manufacturers' experts is included that about 10 to 12 months will elapse between the Exchange of Notes (E/N) and acceptance of the equipment. When the soft component is added, the total construction period for the project becomes as long as 14 months.

Under the circumstances, the procurement will be separated into two packages, i.e., mobile type equipment package and a rail cargo type equipment package, in 2 fiscal years. In such a case the relatively short time requirement for mobile type units would mean those units would be procured during the first fiscal year and the rail cargo type unit would be procured in the following fiscal year.

#### (8) Policy for Operation and Management of the Equipment

The SCC is already operating small-sized X-ray scanners (for passengers' carry-on luggage) and medium-sized scanners (for inspection of general freight), and has established its internal support system for the operation and management of these equipment, with the IT department at the center of the system. At present, training programs are held as needed for employees for operation of X-ray scanners and for improvement of analysis of X-ray images. In the event that X-ray scanners are provided by this project, it will be necessary to provide additional training in usage of the equipment. In addition to the guidance provided at start-up time by technical experts dispatched by the manufacturers, the soft component provided by a consultant will be included within the scope of the Grant Aid.

#### (9) Policy for Ensuring Safe Use of Radiation

Equipment that uses X-rays, in general, is made to comply with recommendation ICRP 60 and 130 issued by the International Commission on Radiological Protection (ICRP). This calls for a maximum exposure, for equipment operators, of 100mSv over a five-year period (even in the case of a 50-year employment period, a lifetime total would be only 1Sv), and for a maximum of 1mSv in a given twelve-month period for the general public. In view of the possibility that these levels may be exceeded, ICRP request the establishment of a designated area around the point of origin of the radiation and/or installation of protective barriers/walls.

Radiation safety standards in Uzbekistan are provided by Cabinet Resolution No. 120-II (August 31, 2000). Article 8 of this law designates the Ministry of Health and other ministries together with the SCC as the implementing entities for safety management of radiation in Uzbekistan, and requests for the following procedures to ensure safety. Under this law, moreover, international



agreements concerning safety management of radiation is given priority over domestic law. At the present time the SCC has not established its own regulations regarding management and control of radiation, and a system for certifying operators and managers of radiation equipment. It is planned that such regulations for management and control of radiation will be drawn up in the future by the committee which is established under the IT Department of SCC, which is responsible for the operation and management of equipment, and through consultations with the Ministry of Health and others.

On the basis of these conditions, the technical specifications and planned methods of use of the equipment have been determined in accordance with ICRP standards.

#### 2-2-2 Basic Plan (Equipment Plan)

The study team examined in detail the proposed content of the project, referring to results of site surveys and discussions in Uzbekistan on the request for equipment and on that basis, prepared the basic plan as stated below.

##### 2-2-2-1 Overall Plan

###### (1) Current Border Control and Inspections in Uzbekistan

The work of border control in Uzbekistan is conducted by SCC as well as by the State Border Guards Committee, Ministry of Foreign Affairs, Ministry of Agriculture, and Ministry of Health, acting within their specific areas of concern. The administrative flow of inspections of goods and people passing the border is as in the following diagram.

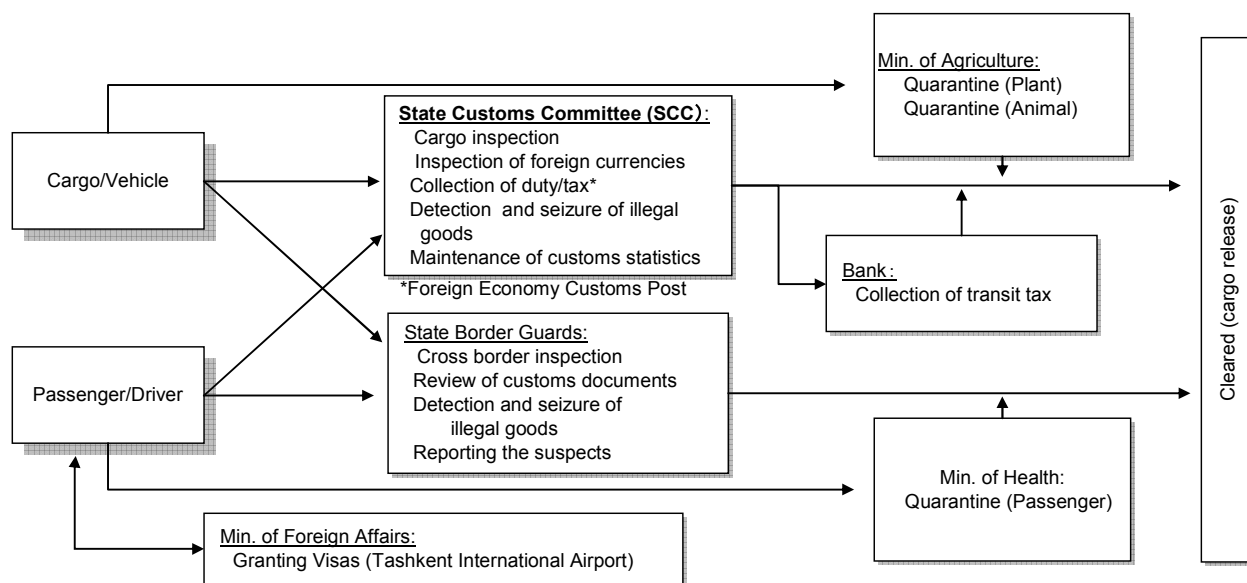


Fig. 2-1 Flow of Border Control in Uzbekistan

(2) Customs Inspection Work by the SCC

At present Customs inspection in Uzbekistan is done according to the system described below, and the overall plan of the project has been prepared on this basis.

1) The SCC Risk Control System

The SCC uses a risk management system for Customs inspections. Its categories of risk, risk analysis and dealing with risk are as follows.

The risk categories are: products, country, importer/exporter, transporter, and customs agent.

Risk analysis is done by use of the Customs Inspection Department database. This includes a list of violators of Customs law. When a violation is found an investigation is made and a fine is levied according to the degree of the violation and if it is made for the first time by the party concerned that party is added to the list.

Arrangements for dealing with risks at the moment of submission of declaration by the person, listed as an infringer, consist of checking the vehicle registration number and the other data from Customs database. After the check, the results are communicated to the relevant customs check point, and decision on a type of customs examination is made on the basis of damaged amount of previous violation.

2) The Unified SCC Data Management System

The SCC's IT Department at present uses a unified data management system made up of the following nine subsystems.

- Cargo manifest control system
- E-reporting system
- Motor vehicle freight transport control system
- Rail freight transport control system
- Bank payment control system
- Bonded area freight control system
- Import/export entity network (One Window) system
- Violation records system
- Import/export declaration document control system

Apart from the above there also is a system for control of records of monitoring radiation, the monitoring being done by use of portal monitors. The unified system is actively used by Customs offices, all of which have online access to it.

### 3) Import/Export Goods Inspection Arrangements

There is 100% inspection of transported goods, whether it is being done by rail, truck, van, smaller vehicles and whether it is for import, or export, without hindering the flow of legal commerce and persons. In particular, inspections of import and export goods are done meticulously, particularly for the following.

| Category | Main inspection targets  |
|----------|--|
| Imports  | Undeclared goods, improperly declared goods, weapons, explosives, etc., radioactive materials, drugs (heroin, opium, hashish, etc.), counterfeit goods |
| Transit  | Radioactive materials, drugs, weapons and explosives   |
| Exports  | Antique art objects, licensed goods  |

### 4) Present Inspection Ratios

| Category | Imports   | Exports  | Transit  |
|----------|---|--|--|
| Truck    | All truck-transported goods are manually inspected at border check points or adjunct facilities | All export goods at external economy customs is inspected manually before loading on trucks or railway cars, and a seal is affixed after passing inspection. At the border Customs officials inspect samples and check documentation | No inspection of TIR goods when entering or leaving the country; document check only is performed at Customs (Exceptions: dutiable goods valued above USD50,000, and alcohol and tobacco products) |

|               |  |  |               |
|---------------|--|--|---------------|
| Rail          | All goods in containers are examined at the destination station            | Same as above  | Same as above |
| Small vehicle | All vehicles are inspected, manually, at passenger terminals at the border | All vehicles are inspected, manually, at passenger terminals at the border | --            |
| Passengers    | All passengers and carry-on baggage are inspected at Customs offices       | All passengers and carry-on baggage are inspected at Customs offices       | --            |

5) Inspection Techniques (Present)

All goods are inspected according to the unified Customs information system; dogs are used to detect drugs.

|               |  |
|---------------|--|
| Truck freight | Radiation detection systems (using portal monitors) are installed at almost all border check points. At the border, there are designated areas for unloading of goods for inspection, and holding areas for vehicles.                          |
| Rail freight  | Radiation detection systems (using portal monitors) are installed at almost all border check points. Inspections are done manually, at the destination stations of wagons carrying imports or exports.   |
| Passengers    | Radiation detection systems (using portal monitors) are installed at almost all border check points. Small-sized X-ray scanners are used for examination of carry-on baggage at passenger terminals (most equipment are at least 10 years old) |

6) Types of Transported Goods

|         |  |
|---------|--|
| Imports | Consumer goods, electronics, machinery, etc.   |
| Exports | Cotton, farm products, metals, petroleum, automobiles, etc.                              |
| Transit | Automobiles, consumer goods, building materials, foods, home appliances, petroleum, etc. |

7) Vehicles Used for Transport (Trucks, railcars)

|          |   |
|----------|---|
| Trucks   | 3-ton vans to 38-ton trucks (European standard)   |
| Railcars | No more than 25m (L) x 2.5m (W) x 4.2m (H) [general specifications for railcars]. Height may be 5.3m (in special cases 5.5m) when railcars were made to former Soviet standards. Non-electrified. |

(3) Flow of Border Inspection Work

The planned equipment would be added to the existing arrangement for border inspections and function within the existing flow of work, but add an extremely important function. This addition of large-sized X-ray scanning equipment would be as shown in the following diagram.

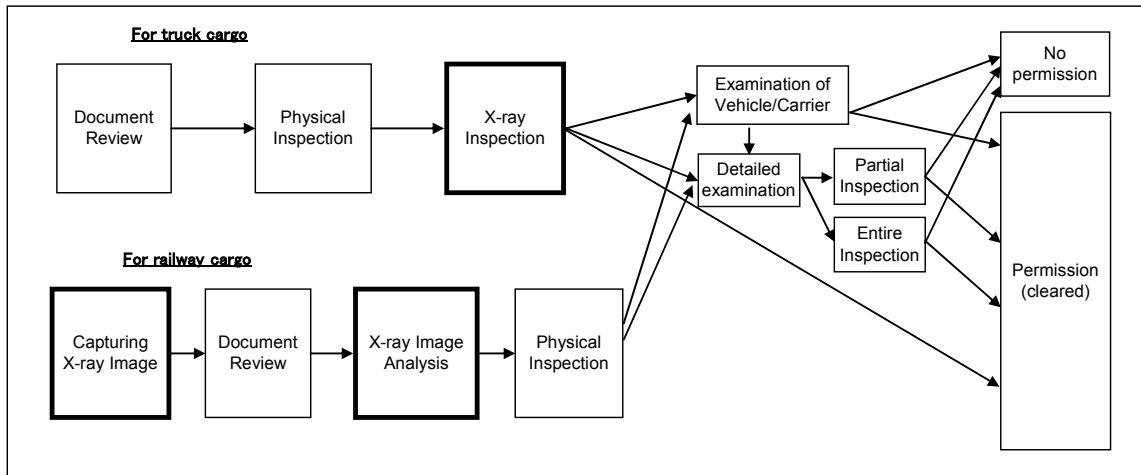


Fig. 2-2 Customs Inspections and X-ray Scanning

As shown by the above figure, that the work of X-ray scanning is positioned differently in the cases of road freight inspection and rail freight inspection must be reflected in the equipment planning.

1) Flow of X-ray Inspection of Road Freight

Inspection of freight carried by trucks broadly stated consists of: [document screening – visual check] → [X-ray scan] → [opening for inspection; inspection of vehicle body]. The information involved prior to and after X-ray inspection fits into the flow of work as shown in Fig. 2-3.

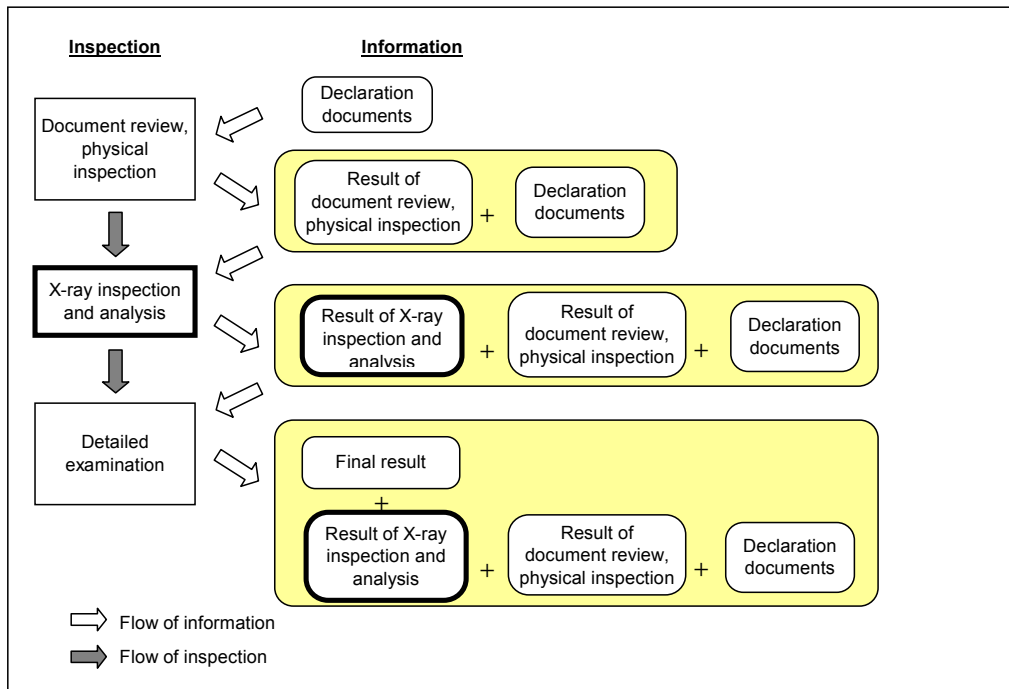


Fig. 2-3 Information Flow for Inspection of Road Freight

As shown by the above diagram, in order for an X-ray scan to be made, there is need for [declaration documentation, results of document review, results of physical inspection] and after the scan [results of X-ray inspection and analysis] are added to the process of information flow.

## 2) Flow of X-Ray Inspection of Rail Freight

Inspection of railcar freight broadly stated consists of [X-ray imaging plan] → [document review] → [X-ray inspection] → [physical inspection; detailed inspection]. The important characteristic of X-ray inspection of railcars is that trains consist of a large number of wagons and information is available in advance on the make-up of the train and the railcars and contents. Therefore, the procedure must be for image capture, followed by document check, followed by image analysis. The information involved prior to and after X-ray inspection fits into the flow of work as shown in Fig. 2-4.

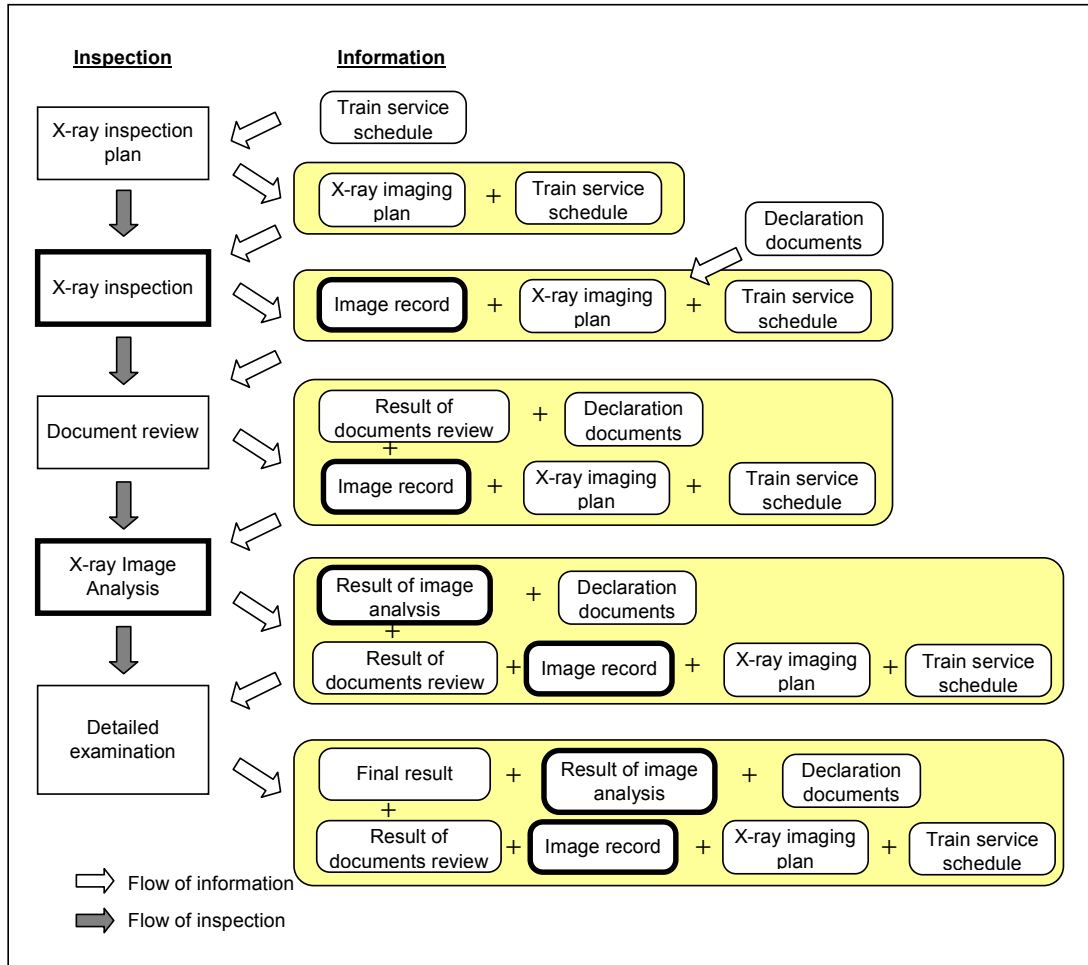


Fig. 2-4 Information Flow for Inspection of Rail Freight

As can be seen from the above diagram, image information for trains is organized as X-ray imaging plan and train service schedule. Then, documents are checked while making reference to the image record, X-ray imaging plan and train service schedule. X-ray image analysis is done wagon by wagon, by use of the result of document review, declaration documents, image record, and X-ray imaging plan and train service schedule. Results of image analysis are added and work advances to the next stage.

#### 2-2-2-2 Equipment Plan

The Equipment Plan was prepared on the basis of the design policy and overall plan as described above. The equipment was studied in terms of general technical specifications, method and function of inspection, and components of the equipment. The identification of required characteristics of the equipment was made with attention also given to the relation of the equipment to the work of

Customs inspections.

(1) General Technical Specifications

Study of the general technical specifications for the equipment was made from the viewpoint that freight would be inspected by use of radiation. Equipment currently in use for inspection of freight has the following categories, according to differences in radiation type. Study was made on the basis of the features of each category.

Table 2-3 Radiation Sources

| Category     | Features   | Judgment |
|--------------|--|----------|
| Gamma rays   | Similar to X-rays, the precision of penetration is high but because radioactive material is used to generate the radiation the material must be renewed and such material is not readily available in Uzbekistan. This type is not suitable for the project.   | ×        |
| Neutron rays | Penetration is greater than that of X-rays and although there are some applications already of the use of neutron radiation, in terms of technology there are many subjects still at the study stage. Depending on the strength of the neutron beam, the exposed (examined) materials may become radioactive, and at present it is not realistic to consider this for the project. This type is not suitable for the project.  | ×        |
| X-rays       | X-rays have the ability to penetrate materials but have the penetrating power varies according to the density, thickness, and atomic number of the material and the identification of the examined material are based on this. The precision of detection is on the order of that of gamma rays, but the equipment can be shut down by shutting off its power, meaning that it can be operated relatively safer. This is the type most commonly used for Customs inspections. This type is suitable for the project. | ○        |

There are at present about 80 small-sized and several medium-sized X-ray scanners in use in Uzbekistan and in consideration of technical compatibility too, it was decided to plan on use of X-ray equipment.

Use of X-rays was studied also on the basis of the results of the comparison of radiation sources summarized above. Results of this are presented in Table 2-4.



Table 2-4 X-ray Scanning

| Detection Method | Summary  | Judgment |
|------------------|--|----------|
| Penetration      | This method enables determination of the nature of examined material by visual representation of differences in the penetration made by the rays. This is the standard method used for Customs inspections. This type is recommended for the project.  | ○        |
| Backscattering   | The surface of examined material is depicted visually through the detection of radiation scattered from it. The energy of X-ray radiation is relatively low and hence safe, but since penetration is limited to 10mm (of steel); this method is not suitable for examination of freight that is inside of steel frames. Because of this, back scattering is not used for examination of railcar freight. Technology in use is protected by patents and there is only one company offering equipment using this method, meaning that competitive bidding could not be done. This type is not recommended for the project. | △        |

According to the SCC, the reason for introducing the use of X-ray scanners at border check points in Uzbekistan is that there have been reported cases of modified vehicle bodies concealing illegal goods and therefore that non-intrusive examination of transit freight is needed. Detection equipment that uses penetration is indispensable for this, and inasmuch as the backscattering method matches only one of the reasons, the decision was made to use X-ray penetration.

(2) Type and Functionality of Inspections

1) Inspection Types

There are three types of equipment for inspection of freight carried by truck. This number would increase if provision is made for options, but the study was done on the basis of standard equipment from manufacturers. Results are as in Table 2-5.

Table 2-5 Types of X-ray Scanning Equipment for Truck Freight

| Type                        | Summary  | Facility  | Features  | Judgment |
|-----------------------------|--|---|---|----------|
| Gantry                      | Equipment in the form of a gate is moved overhead by a gantry crane mechanism.   | Generally the equipment is installed inside a structure; the structure also serves as a barrier to radiation. High precision is required of the level and distance between the rails. | High initial investment cost, as a structure must be built to house the equipment, which increases expenses of SCC. This type is not recommended for the project.                             | △        |
| Portal                      | The vehicle is driven through a gate.  | Special equipment is not required but for the sake of safety inspection is done in a designated area.   | The equipment is relatively simple but inspection of the driver's cab is not possible because of need to protect the driver from radiation. This type is not recommended for the project.     | △        |
| Mobile<br>(Vehicle mounted) | The truck to be examined is positioned in specified spot and is examined by means of a moving vehicle on which the equipment is mounted. | Special equipment is not required but for the sake of safety inspection is done in a designated area.   | Almost no installation cost; because it is easy to move the equipment it can be used on a where-needed basis (permitting a high rate of operation). This type is recommended for the project. | ○        |

Considering that the objective of Customs inspections by SCC is to inspect the entire vehicle, it was determined that the portal type of equipment would not be suitable. Moreover, since the SCC intends to examine import, export and transit freight, a gantry type installation was not considered as it would considerably complicate the movement of vehicles and potentially cause confusion in the movement of import and export shipments, endangering the proper conduct of inspections. Use of vehicle-mounted type of equipment was selected because it would not require a major change in the line of movement of vehicles, requires a relatively small working area, and does not require modification of existing structures or sites at Customs stations.

X-ray scanning equipment for railcars does not come in integrated form but consists of the X-ray generating equipment and a detector which are positioned on opposite sides of the track, and

a room (control room) nearby where the operator works. Gate and tower types are available, depending on the manufacturer; their features are compared in Table 2-6.

Table 2-6 Types of X-ray Scanning Equipment for Rail Freight

| Type  | Summary  | Equipment   | Features   | Judgment |
|-------|--|---|--|----------|
| Gate  | A gate-like arm is provided over the track and on both sides and radiation generator and a detector are installed.           | Construction of a wall as a radiation barrier is desirable because of high output by the radiation generator. There is need for an operator's room. | Structural strength is provided by use of a gate design. As the gate straddles the track it must be tall enough for all trains to pass under it. This type is recommended for the project. | ○        |
| Tower | A radiation generator is installed on one side of the track and on the opposite side there is a tower containing a detector. | Construction of a wall as a radiation barrier is desirable because of high output by the radiation generator. There is need for an operator's room. | Much attention is required to construction of the foundation for the tall tower. No need for consideration of the height of trains. This type is recommended for the project.              | ○        |

Although there thus are differences between the gate and tower types, there is little difference between them in terms of functionality. It is considered that both types are acceptable for the project. Initially, study was also made on the use of mobile type equipment for inspection of railcars but this option was not pursued once it was found that no manufacturer was offering equipment having sufficient height for this application. The method of installing equipment on a gate or tower varies from maker to maker, and dimensions also vary. Although they are fundamentally similar in terms of a protective wall in compliance with ICRP 60, there are differences in regard to X-ray exposure and safety. Because the SCC has adopted the policy of "safety first," a shielding wall is planned to be included in the procurement of equipment.

## 2) Equipment Functionality

Study of the functionality of equipment concentrated on the power of penetrating the object being examined. As a result of a field study on the present Customs inspection scheme in Uzbekistan by the WCO in 2008, it was recommended that X-ray equipment for inspection of vehicular and rail freight should have the power of penetrating 240mm (steel). The radiation energy of X-ray scanners is in the range of 3-9MeV, depending on the equipment, and penetration of 240mm would require 3-4MeV. There would be no problem in the use of equipment providing

3-4MeV in the case of inspection of truck-laden freight but railway wagons themselves have heavy steel frames. Also in view of past instances of modification of rolling stock axles in order to conceal drugs, it was judged that equipment that would provide enough power to penetrate 300mm of steel was needed; this corresponds to the X-ray scanner providing 6MeV or more. The equipment will be required to have the range needed to detect modification of axles.

### (3) Equipment Configuration

In addition to giving attention to the sustained, normal use of the planned equipment at the border check points, study was made of the safety aspect of radiation. In general terms, the equipment consists of the X-ray unit and radiation blocking equipment. Because the X-ray unit must be linked to the unified Customs information system for bidirectional transmission of data, study of the X-ray unit was made within the context of the information system, and planned as follows.

- With regard to inclusion in the information system it is required that when inspection is being done using X-rays it has to be possible to reconcile Customs documents with analyzed images from the X-ray unit, and the relevant packing list. It also must be possible to generate printed images for use when trucks are opened for inspection or when truck bodies are inspected, so equipment that can display images at the spot where a truck is opened or the truck body is examined is to be provided. Computers will be provided for this purpose, but external USB memories will be used for transfer of the image data.
- Because relatively strong radiation is released when the X-ray scanners are in use, it will be necessary to block radiation so that none at all leaks from the intended object of inspection. A system for safe operation is thus necessary, as well as devices to ensure safety. The anticipated system for equipment operation is shown in Figs. 2-5 and 2-6 and study of protective measures was based on these systems. Attention was given to compliance with ICRP 60.

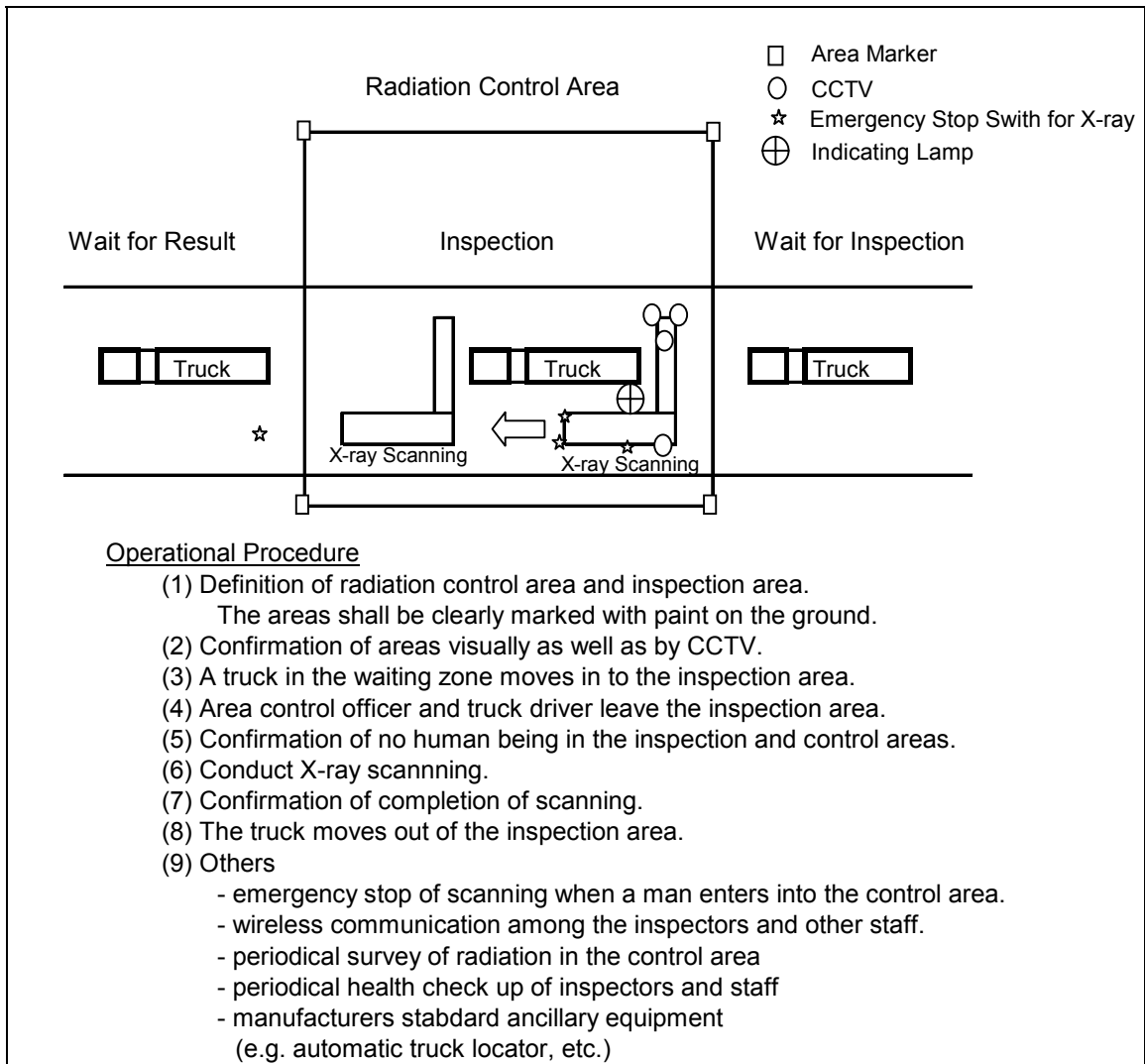


Fig. 2-5 Operation System for Large-sized X-Ray Scanning Equipment for Truck Cargo (Mobile Type)

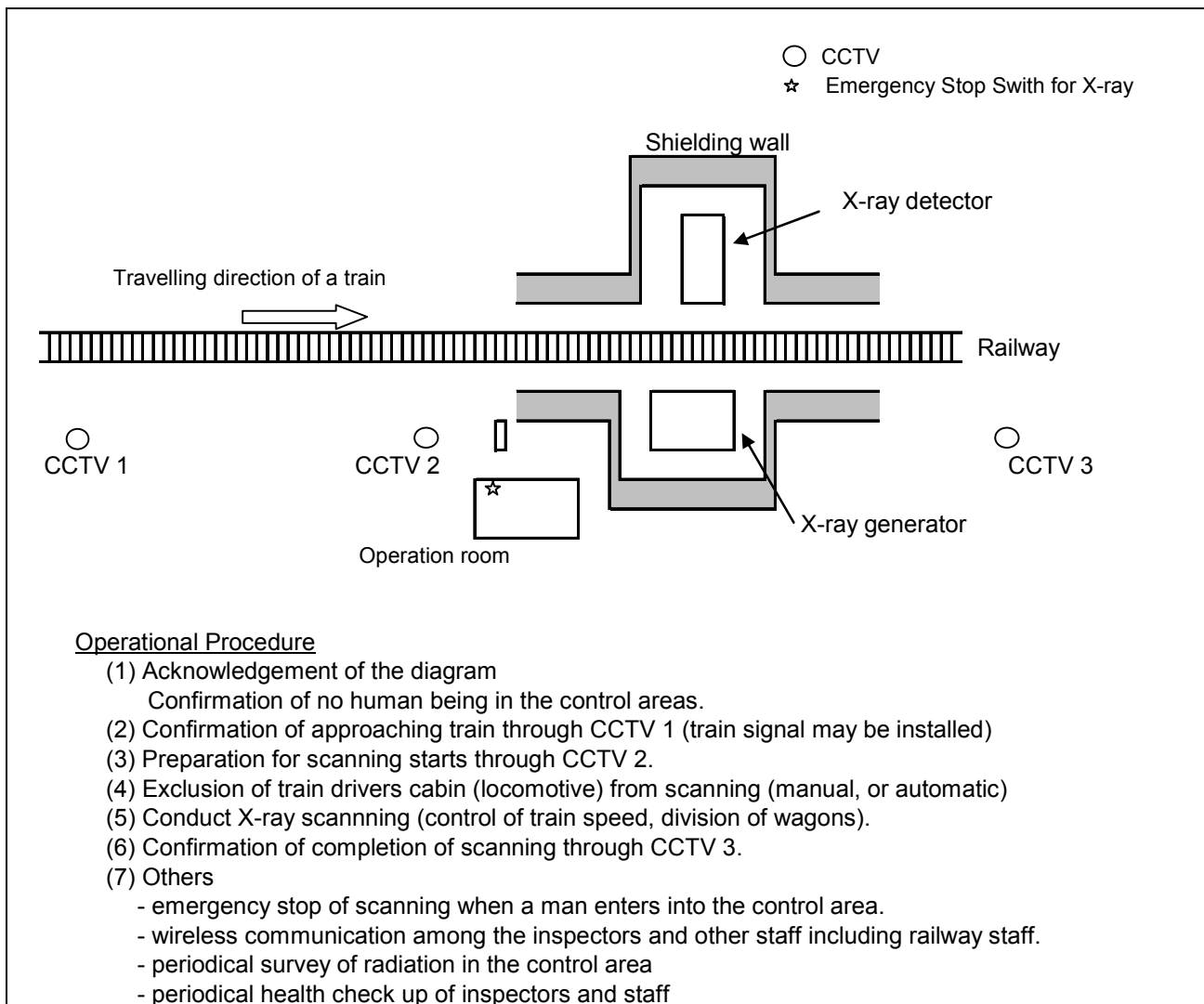


Fig. 2-6 Operation System for Large-sized X-ray Scanning Equipment for Rail Cargo

The Equipment Plan, based on the foregoing, is as shown on the following pages.

Table 2-7 Equipment Plan

| <b>Large-sized X-Ray Scanning Equipment, Mobile Type</b>                                 |   |
|--|---|
| Component  | Function and Summary Specifications   |
| X-ray scan   |   |
| Vehicle  | X-ray device, operator's room, and control room combined as one unit<br>Operator's room: two seats<br>Control room: comfortable with two or more seats<br>Speed capability of more than 80km/h  |
| X-ray device   | X-ray source with capacity for X-rays that penetrate at least 240mm (steel) and<br>X-ray detector capable of scanning within the height of 0.4m to 4.7m, and with 4.8m clearance<br>Preparation of equipment to require less than 30 minutes                |
| Computer system  | Capable of working with documents<br>Display monitor of 19inches or greater<br>At least two display monitors<br>Ability to store at least 10,000 cases of data<br>Provided with operation monitoring system<br>Capable of printing output in color          |
| X-ray shielding  |   |
| CCTV system  | The CCTV system must be so installed that there are no blind spots within the area designated for radiation use; there must be at least two CCTV monitors and the system must be so made as to enable monitor images to be transmitted to outside the area. |
| Emergency-stop system  | Several emergency switches must be provided where scanning personnel can easily have access to them.  |
| Safety light   | Light must be on from time presence of the vehicle is detected and during the X-ray scan.   |
| Dosimeters   | The devices must enable detection of a radiation level in the control and operator's rooms above a predetermined limit, must measure radiation in the periphery of the designated area for radiation use, and measure exposure of scanning personnel.       |
| Exposure limit   | Maximum of 1mSv/year at control room and operator's room seats, and outside the designated area.  |
| Wireless system  | The system must enable wireless communication between the control room, operator's room and one other location.   |
| Ambient conditions: Temperature range, -30 to +50 degrees Celsius; humidity maximum 98%. |   |

continued/

| <b>Large-sized X-ray Scanning Equipment, for Rail Cargo</b>                              |  |
|--|--|
| Component  | Function and Summary Specifications  |
| X-ray scan   |  |
| X-ray source   | Capacity for X-rays that penetrate at least 300mm (steel)  |
| X-ray detector   | Capable of scanning within the height of 5.3m from the axles   |
| Computer system  | Capable of working with documents<br>Display monitor of 19inches or greater<br>At least two display monitors<br>Ability to store at least 10,000 cases of data<br>Provided with operation monitoring system<br>Capable of printing output in color |
| Control room   | Must have width of about a 20-foot container<br>Adequate for five persons to be at work at one time<br>Air conditioned   |
| Emergency power supply   | Backup supply capability for all power requirements during X-ray scanning, with additional 10% design capacity   |
| X-ray shielding  |  |
| Protective wall  | Wall must provide protection so that workers outside of it are not exposed to more than 1mSv a year  |
| CCTV system  | Capable of detecting an approaching train, breach of the protective wall, exit over the wall   |
| Locomotive, caboose protection switch  | System to have capability of stopping X-rays from reaching the locomotive or caboose   |
| Emergency-stop system  | Several emergency switches must be provided where scanning personnel can easily have access to them.   |
| Safety light   | Light must be on from time presence of the vehicle is detected and during the X-ray scan.  |
| Dosimeters   | The devices must enable detection of a radiation level in the control room above a predetermined limit, must measure radiation in the periphery of the designated area for radiation use, and measure exposure of scanning personnel.              |
| Exposure limit   | Maximum of 1mSv/year at control room and operator's room seats, and outside the designated area.   |
| Wireless system  | The system must enable wireless communication between the control room, operator's room and one other location.  |
| Ambient conditions: Temperature range, -30 to +50 degrees Celsius; humidity maximum 98%. |  |



### 2-2-3 Basic Design Drawing

The project sites for assistance under the Grant Aid Scheme are to be as follows.

Table 2-8 Location of the Project Sites

| Location (Region) | Customs Office                    | Distance from Tashkent |
|-------------------|-----------------------------------|------------------------|
| Surkhandarya      | Ayritom Customs Complex (Road)    | Approx. 710km          |
| Surkhandarya      | Galaba Railway Check Point (Rail) | Approx. 861km          |
| Tashkent          | Oybek Customs Check point (Road)  | Approx. 100km          |

A site location map is provided at the beginning of this report.

The relative locations of the sites and conceptual plans for equipment location at the sites are shown in the following figures.

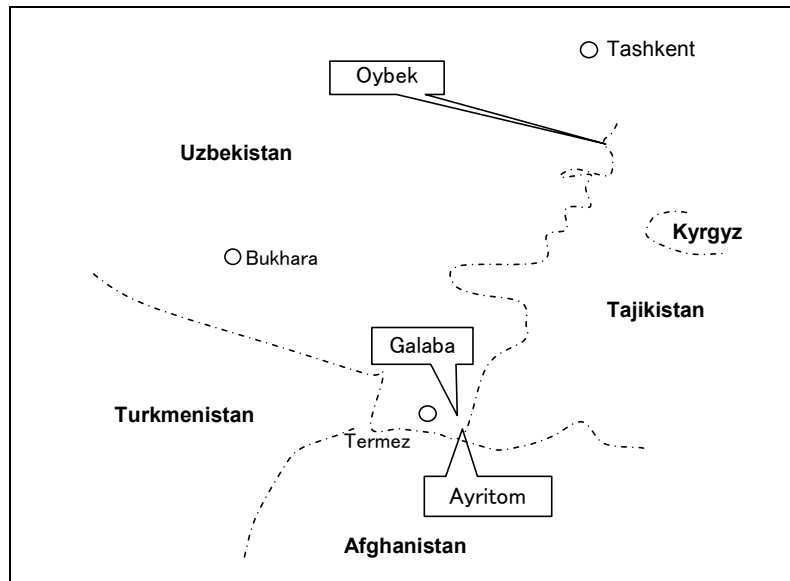


Fig. 2-7 Relative Locations of the Project Sites

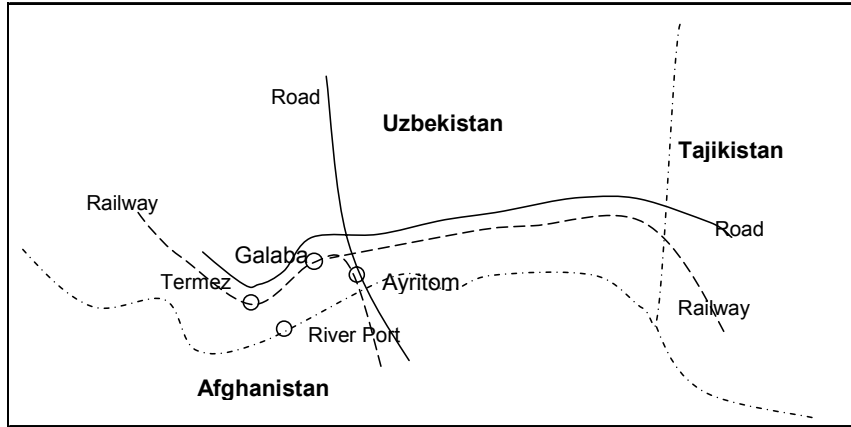


Fig. 2-8 Project Sites in Surkhandarya Region

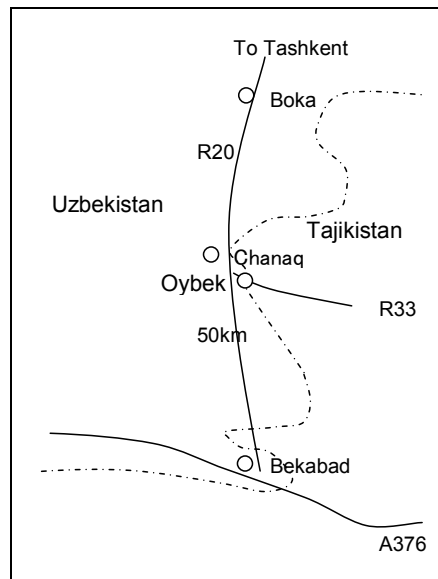


Fig. 2-9 Project Site in Tashkent Region

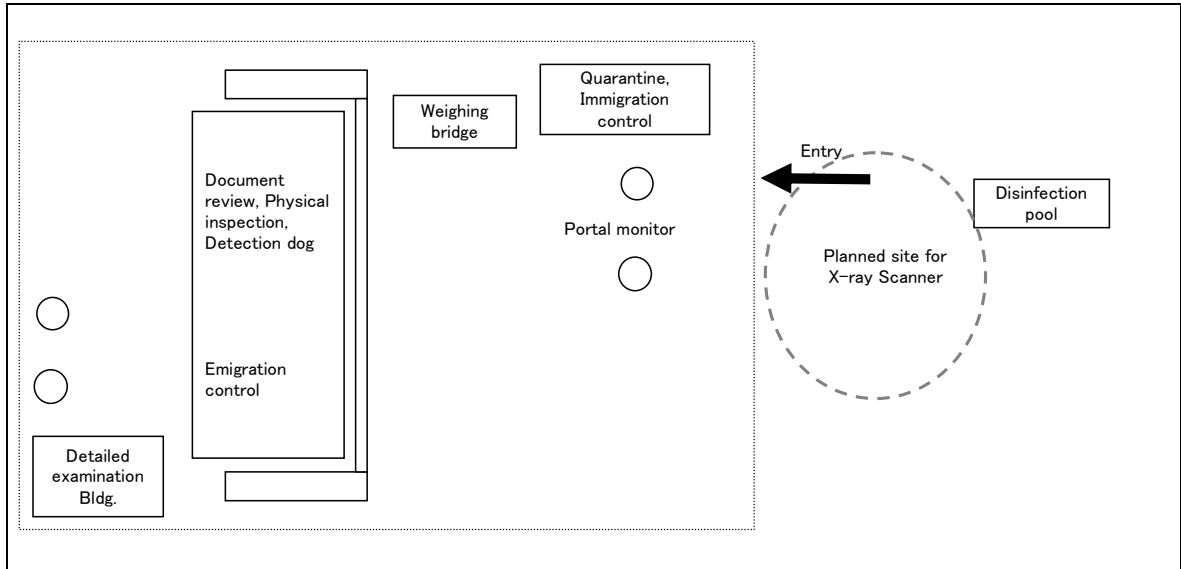


Fig. 2-10 Ayratom Customs Complex – Conceptual Layout Plan

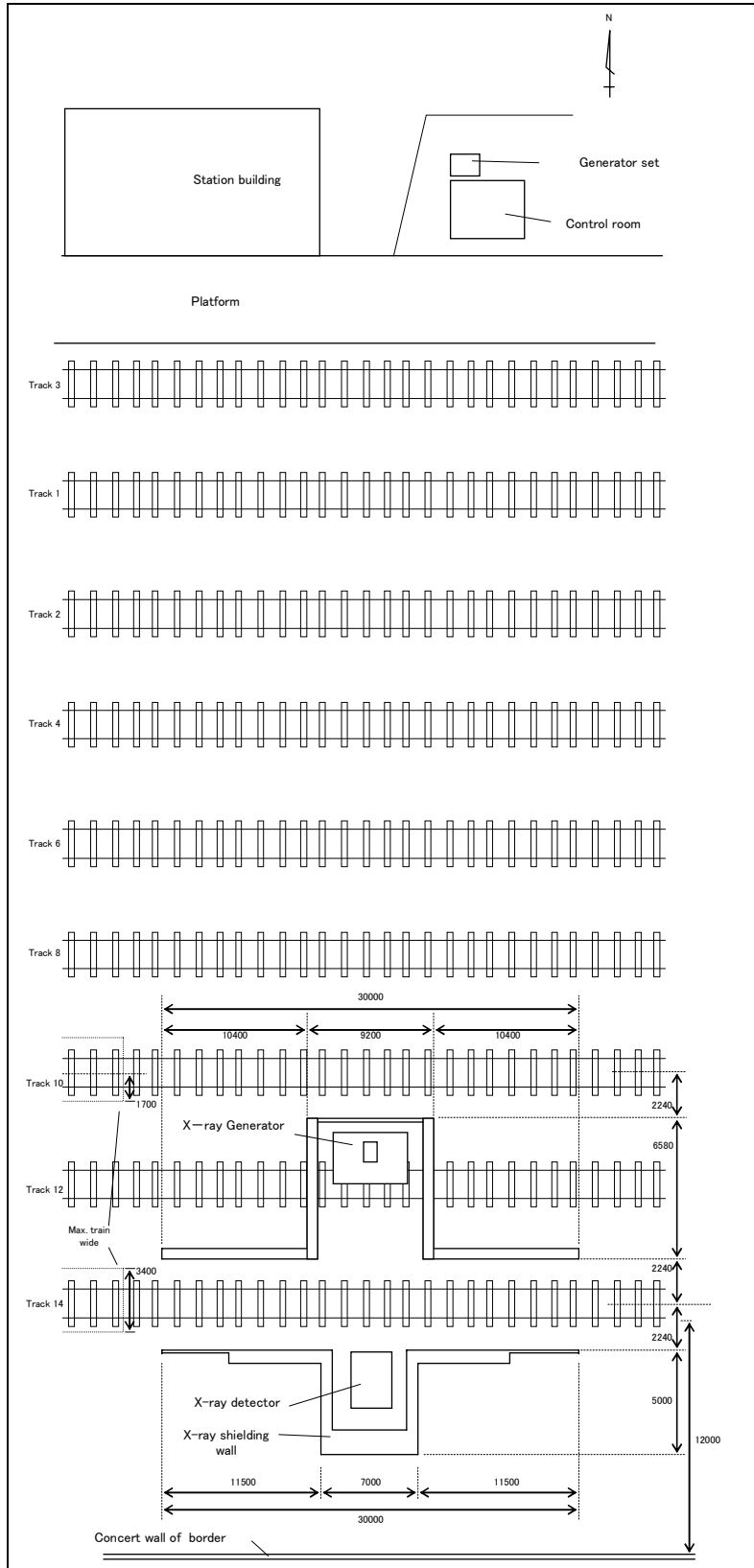


Fig. 2-11 Galaba Railway Check Point – Conceptual Layout Plan

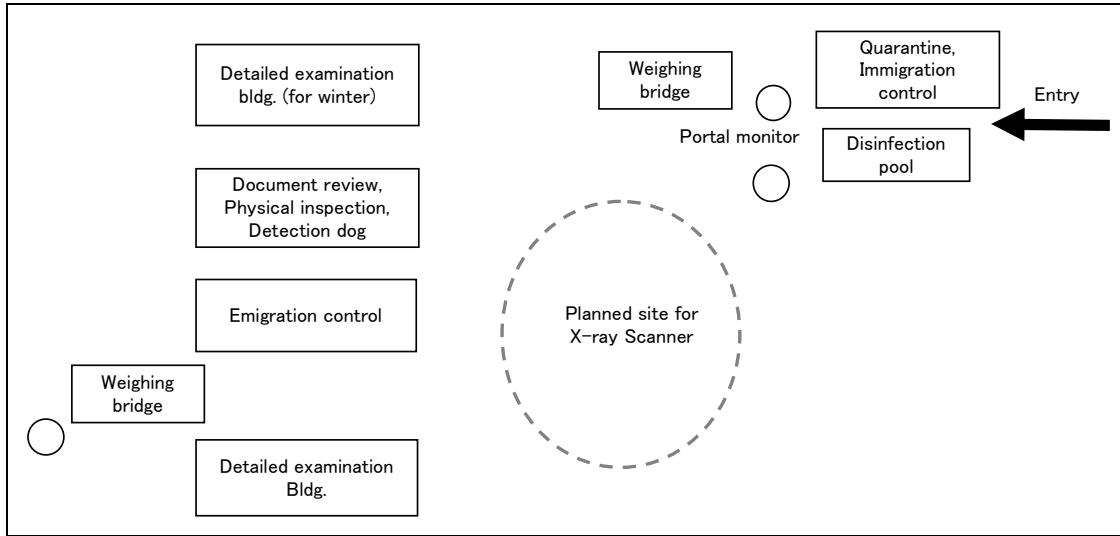


Fig. 2-12 Oybek Customs Check Point – Conceptual Layout Plan

## 2-2-4 Implementation Plan

### 2-2-4-1 Implementation Policy

With consideration given to the prospects for implementation of the project within the Grant Aid Scheme of the Japanese Government, the following policy has been identified.

First, after signing the Exchange of Notes (E/N) between the two governments, within the period provided for in the Notes in an expedient manner the content of the project is to be confirmed, the selection of equipment suppliers by means of a tender is to be made, and after delivery and installation the equipment is to be inspected and accepted.

Second, there is to be efforts to ensure smooth and close communication and exchange of information between the responsible division of the Uzbekistan Government and its Implementing Agency, the Consultant, and the Supplier, on behalf of smooth implementation of the project.

On the basis of the above, after this project is approved by the Japanese Government and signing the E/N, the Consultant engaged by the Uzbekistan Implementing Agency will confirm the project design and initiate the procurement process. Further, a Japanese supplier will be named as a result of a competitive tender in accordance with the Notes, and this supplier will procure and install the equipment. The Implementing Agency, Consultant, and Supplier would be as follows.

#### (1) The Implementing Agency

The Uzbekistan responsible government agency and implementing agency for the project is to be the SCC. As signer of the contract for the project, on the basis of the Notes, the SCC will contract with the Consultant, sign the procurement contract with the Supplier, and strive for effective implementation of the project through cooperation with the Consultant and the Supplier.

#### (2) The Consultant

Promptly after the E/N, the SCC is to sign an agreement with a Japanese consultant for the supervision of procurement. The agreement will become effective after verification by the Japanese Government. The Consultant will perform the following on the basis of this agreement.

##### 1) Detailed Design and Supervision of the Tender

Final approval of the project details (equipment specifications, quantities, etc.); preparation of tender documents; supervision of the tender; evaluation of bids; technical support for the Uzbekistan Government.

## 2) Supervision of Procurement

Guidance, advice and coordination relative to the Supplier; inspection of the equipment before packing and/or loading aboard ship; advice and guidance to facilitate delivery of the equipment, installation, trial operation, start-up assistance and operation of the equipment. To be present at the meeting for acceptance of the equipment by the Implementing Agency; to provide oversight of execution of the contract with the Supplier.

## 3) Soft Component

To ensure smooth start-up of actual use of the equipment the Consultant will provide technical support to the Uzbekistan Implementing Agency on the basis of a soft component plan to be prepared separately.

### (3) The Supplier

In accordance with the E/N and the “Guidelines of the Japanese Grant Aid for General Projects and Fisheries”, Uzbekistan is to contract with a Japanese supplier for the supply of project equipment subsequent to selection of the Supplier by means of a competitive tender. This contract will become effective after verification by the Japanese Government. The Supplier is to provide the following on the basis of this contract.

1. Procurement of the equipment, and transport of the equipment to Uzbekistan and the project sites.
2. Installation of the equipment, and guidance for initial and subsequent operation of the equipment.

#### 2-2-4-2 Implementation Conditions

Close, smooth communication between the Implementing Agency, Consultant and Supplier is necessary in order to ensure the swift and efficient transport and installation of the equipment, and each party must fulfill its obligations and roles. In particular, the following points require caution in the implementation of this project.

##### (1) During Delivery of the Equipment

In connection with the importation of the equipment, the Ministry of Foreign Economic Relations, Investment and Trade must take measures in accordance with the provisions of the E/N so that the equipment, to be provided as Grant Aid by the Government of Japan, are exempted from relevant taxes and duties. The SCC, as the Implementing Agency, must hold advance discussions with

related parties of its government and take necessary measures so that no problems occur that might delay the process of equipment procurement.

(2) At the time of Installation

In connection with the installation, trial operation, start-up guidance and guidance for operation at the project sites, the SCC and responsible officials at the border sites where the equipment is to be installed at Customs check points are to hold discussions so as to ensure that these tasks do not interfere with the normal conduct of Customs operation. Further, when the Supplier delivers the equipment to each site and undertakes construction work related to the installation, the Supplier is to both ensure the work is performed safely and with due regard to Customs property.

### 2-2-4-3 Scope of Works

Responsibility is to be shared by the Japanese and Uzbekistan sides in regard to procurement and installation of the equipment, as follows.

#### Undertakings of the Japanese side

- Procurement of large-sized X-ray scanning equipment
- Transport to Uzbekistan and the project sites of the procured equipment
- The following installation work;
  - ◇ X-ray shielding wall
  - ◇ Peripheral fence for the controlled safety areas (as needed)
  - ◇ Surveillance monitors
  - ◇ Gate for determining railcar dimensions (as needed)
  - ◇ Wiring for power and signals (connecting the distribution boards, X-ray source, X-ray detector, operator's room, emergency power supply, surveillance monitors, gates for determining railcar dimensions, etc.)
- Coordination at the time of trial operation, and start-up and operation guidance
- Consultation tasks related to confirmation of design, preparation of tender documents, supervision of the tender, and supervision of procurement by the Supplier
- Implementation of the soft component service by the Consultant

#### Undertakings of the Uzbekistan side

- Construction of foundations for the equipment
- Earth filling works and site preparation
- Registration of vehicles (mobile type X-ray equipment)



#### 2-2-4-4 Consultant Supervision

The Japanese Consultant is to provide advice, recommendations and coordination in a fair manner, on the basis of the policy and practices of the Grant Aid Scheme of the Japanese Government and the report for the Preparatory Study (basic design study) during each stage of the implementation design and supervision of procurement so as to ensure their smooth completion. The Consultant, at the stage of detailed design, is to review the detailed specifications of the equipment to be procured, and is to prepare the tender documents, hold the tender in the name of the Implementing Agency as well as, at the stage of supervision of the procurement, undertake confirmation of the work of the Supplier and provide the Uzbekistan side with technical support for approval drawings of the equipment. In addition, the Consultant is to have technical personnel present at the time of pre-shipment inspection of the equipment to ensure smooth procurement. On the occasion of installation and acceptance inspection of the equipment at project sites, the Consultant will provide supervision and when the installation is complete and all contractual work has been confirmed as satisfactorily accomplished, will obtain the approval of the Uzbekistan side and complete its work.

#### 2-2-4-5 Quality Control Plan

In order to assure quality control for the project, the Consultant is to undertake its work while giving due attention to the following, during the period of supervision of procurement.

- Review of specifications of the equipment to be procured
- Review of pre-shipment inspection report
- Securing inspection by a third party of the equipment before being loaded aboard ship, and review of shipping documents
- Review of documents related to equipment installation
- Thorough management of safety at the time of installation
- Acceptance inspection upon completion of all work by the Supplier

In order to ensure proper performance of the work of the Supplier, the Supplier is to obtain Performance Security, and is to make thorough efforts at quality control.

#### 2-2-4-6 Procurement Plan

##### (1) Procurement Method

As a general principle provided for by the E/N, the equipment to be procured is to be of

Japanese or Uzbekistan manufacture. However, being as the planned equipment is not made in Uzbekistan, in order to ensure a competitive tender it is considered necessary to accept tender participation by bidders from countries other than Japan, including the members of the OECD/DAC (e.g., the U.S.A., U.K., France, and Germany). For this reason, the tender is to be open to third-country prospective suppliers, as requested by the Implementing Agency. Products of such makers are not normally sold in Uzbekistan and it is not possible to obtain the products domestically.

In view of the need for periodic inspection and maintenance of the equipment, and a stable supply of replacement parts and materials, it is desirable that there be a suitable representative office or agent of manufacturer in Uzbekistan or a neighboring country to serve as a contact point for after-service.

## (2) Method of Transport

After procurement of equipment in Japan, the U.S.A. or Europe, it is to be transported by multi-mode means to Uzbekistan via the Russia route, the China route, the Iran route, the Europe route etc. The relevant conditions for these are as follows.

### 1) Russia Route

The equipment would be landed at a Russian Far East port (Nakhodka or Vostochniy), and be carried by the Siberian railroad through Kazakhstan to Tashkent. From Japan to Tashkent by this route normally requires 30-40 days. Use of this route has an advantage in that it is possible to trace the container being transported while it is being moved on the Siberian Railway.

### 2) China Route

The equipment would be landed at Lianyungang or Tianjinshingang, and transported overland through China and Kazakhstan to Tashkent this route normally requires 25-35 days from Japan to Tashkent. The times required and cost are both less than via the Russia route. The location of containers in transit in China can be traced on a point to point basis. Because the gauge differs in China and Kazakhstan the equipment would have to be transferred from one container to another.

### 3) Iran Route

The equipment would be landed at Bandar Abbas on the Persian Gulf and then carried by trailer truck. In general 30-40 days are required to Tashkent. It is difficult to trace the movement of containers after they reach Bandar Abbas. Because the overland transport leg of this route is long the accompanying risk is high.

### 4) Europe Route

Transport would be from any West European country overland via Poland, Belarus, Russia and Kazakhstan. Difference of gauge requires offloading and reloading between Poland and Belarus. Usually this route requires 25-30 days.

Freight from the U.S.A. would be loaded aboard ship on the West Coast and travel by either the Russia or China route after crossing the ocean; the transport time required would be two or three weeks longer than for freight originating in Japan.

Whichever route is used, after the freight arrives at Uzbekistan it would have to clear Customs and travel overland to the final destination; this will require about two weeks.

Whichever route is used, the Supplier will have to decide at its own initiative the proper crating and packing of the equipment, taking into consideration the season and other conditions. In the event that importation must be done on an urgent basis, rather than travel by ship and overland, with cost determined by the volume, the equipment would have to be sent by air.

### (3) Installation Plan

Both the X-ray scanning equipment mobile type and for rail freight are special as equipment, and the work of installation, trial operation and initial adjustment all require use of specialized techniques and techniques proprietary to the makers of the equipment and must be done under the direct supervision of technicians from the makers of the equipment. The required operators would be obtained from the Uzbekistan installation company or others by the equipment makers.

Management of the installation work would be done by either the equipment Supplier or a specialist dispatched by a maker of the equipment.

#### 2-2-4-7 Operational Guidance Plan

Guidance for the initial operation and regular operation of the equipment would be provided by engineers sent to Uzbekistan by the makers of the equipment. They would provide guidance on (1) the operation of the large-sized X-ray scanning equipment, (2) the manipulation of the equipment, and (3) the maintenance of them. Special items concerning operation of large-sized X-ray scanning equipment are the need for guidance for improvement of image analysis in order to determine if contraband is present, and operation while taking into account shielding from radiation exposure. It will be necessary to fully ensure an adequate period for training by the equipment makers, and provide training in the principles underlying the major items of the equipment, the basic functions of the equipment, how to handle the equipment, and so on.

The initial and regular operation guidance by the Supplier or equipment manufacturers would take place at the same time as installation work.

#### 2-2-4-8 Soft Component Plan

Based on the “Soft Component Guideline” of JICA, the need for inclusion in the project of a soft component was studied from the viewpoint of assuring a smooth start-up and sustained expected results. The following plan was made.

##### (1) Background

Engineers from the equipment manufacturer can provide basic guidance for initial operation and regular operation, but in order to achieve greater capability and performance it is necessary to integrate the new equipment with the unified Customs information system. Technical support is needed for creating the arrangements for this, and for acquisition of basic technology. In the event that this project is implemented, the SCC would have to acquire the following technology.

- Improvement of Customs works (integration with the existing information system)
- Operation of large-sized X-ray scanning equipment (operation and maintenance)
- Improvement of image analysis technology (techniques for discovery of contraband)

##### 1) Improvement of Customs Works

At present the SCC is using a unified information system and is now studying the matter of building a new system that would include the large-sized X-ray scanning equipment. It would be necessary to obtain advice from the standpoint of building a new system. For example, the SCC cites dealing with the need for changing the framework for transit freight as one of the objectives of acquiring the scanners, because if in the future countries where such freight originates acquire large-sized X-ray scanning equipment it would become possible to significantly improve inspection of transit freight, since it will become possible to compare the body of vehicle and goods at the time they leave one country and when they enter Uzbekistan. The soft component assistance shall focus on the improvement of Customs works in line with the future development plan of SCC.

##### 2) Operation of Large-sized X-ray Scanning Equipment

No problem or difficulty is anticipated regarding operation of the large-sized X-ray scanning equipment at the outset, as the equipment maker will provide engineers to provide guidance at this time. The SCC, however, has a personnel rotation system that transfers staff at intervals of one year to two years, so it is necessary to have a manual for equipment operation, in order to assure sustained use of the equipment. The SCC requires advice for the compilation of such a manual. Especially because of the need to conform to ICRP 60, in connection with protection from exposure to radiation, and because the specifics of equipment use are not yet determined, it is

necessary to build a system that accommodates all relevant requirements.

### 3) Improvement of Image Analysis Techniques

Image analysis consists of the fundamentals and applications. Training by engineers sent to Uzbekistan by the maker would be satisfactory in connection with fundamentals. That is, it is possible to acquire familiarity with the fundamentals of image analysis through the process of practicing the use of software (for edge enhancement, density range adjustment, black-white reversal, zoom, etc.) to process raw images (images that show by differences in color variation in the penetration of X-rays). Training in the application of the equipment and software, however, requires guidance in theory and practice by technicians who are experienced in this; the application involves judgment of the nature of materials by analyzing images, discovering discrepancies relative to documentation, discovering tampering with the chassis, and more.

A soft component was planned in order to deal with these technical issues.

## (2) Effects

The effects anticipated as a direct result of the soft component service, from the three areas of support, are as follows.

### 1) Improvement of Customs Works

- Joint use of Customs information will facilitate the discovery of smuggled and contraband goods
- Data for smuggled and contraband goods will be unified throughout the nation
- Future plans for the Customs system will be made clearer

### 2) Operation of Large-sized X-ray Scanning Equipment

- Greater effectiveness of equipment use will become possible
- There will be thorough-going protection from X-rays for Customs officials using the scanning equipment as well as other Customs officials and workers in the general area

### 3) Improvement of Image Analysis Techniques

- Customs inspections (discovery of smuggled and contraband goods) will become more precise

## (3) Activities

### 1) Improvement of Customs Works

Support will be provided for integrating the operation of large-sized X-ray scanning

equipment in the existing unified Customs information system, and how to work with pre-scanning information and information obtained by scanning, from the viewpoint of system building. Specifically, a Working Group for “Combination of the Unified Information System and Large-sized X-ray Scanning Information” (provisional name) will be established and the project team will perform the necessary research, analysis and design. The IT Department of the SCC would be the locus of this activity. The present project does not call for providing large-sized X-ray scanning equipment at all Customs stations on the border, and there is a challenge in that the present speed for data transmission is 128kps, but cooperation will be provided through the stage of design.

The specific activity is a study of Customs work, the unified information system, and large-sized X-ray scanning equipment as they are related to each other:

- Processing of information required prior to X-ray scans and information obtained by scanning; processing of information for inclusion in the unified information system
- Preparation of a manual for Customs inspectors (on use of the X-ray equipment)
- Recommendations concerning the unified information system

The working relationship will be that of direct support by consultants to the Implementing Agency.

The duration for this will be four weeks (one week for study, one week for analysis, and two weeks for design, writing and reporting).

## 2) Operation of Large-sized X-ray Scanning Equipment

An operation manual will be prepared that gives a high level of attention to protection of people from radiation exposure; operation of the equipment is to be based on the procedures and precautions in the manual. A Working Group for “Safe Operation of the X-ray Scanners” (provisional name) will be established for swift preparation of the manual. Implementation is to be as directed by the SCC.

The specific activity is preparation of a manual for use in the SCC organization based on the manual from the equipment maker.

- On-site tests using the manual
- Operation with a fail-safe function

This will be by means of direct support by consultants to the Implementing Agency.

The duration for this will be four weeks (one week each for study, analysis, design and

implementation).

### 3) Improvement of Image Analysis Technique

Training in image analysis, given by experts, will contribute to the improvement of ability to analyze X-ray images and detect illegal materials. Officials to be assigned to do the X-ray scanning at each of the project sites will be trained at a single location. A Working Group for “Image Database” (provisional name) will be established for joint operation with the consultant in preparation and operation of the database

The specific subjects of the training (lectures, practice, tests) is to be as follows.

- International trade and the WCO
- Relation of X-ray scanning equipment and detection of smuggling
- Principles behind scanning; imaging
- Converting image data to spatial images
- Methods of detecting illegal materials
- Smugglers’ measures to prevent detection
- Forming a database using image data
- Use of the database

This is to be done by direct support by experts, provided to the Implementing Agency.

The duration for this will be eight weeks. Six persons will be trained for four weeks, followed by another set of six for four weeks. The objective is to provide each project site with three experienced scanner operators.

#### 2-2-4-9 Implementation Schedule

In the event that this project is implemented with support in the form of Japanese Grant Aid, the procedures will be as follows, assuming that construction work and other matters that are the responsibilities of the Japanese and Uzbekistan side are carried out without delay or complications.

- 1) Confirmation of the design, by the Consultant; holding of the tender
- 2) Procurement of the equipment by the Supplier, with supervision by the Consultant

In case the project is implemented in two separate years, the implementation would be as shown in Tables 2-9 and 2-10. Assuming there is no delays, the first phase (first year) would last about 14.3 months and the second phase (second year) would last about 18.2 months.

Table 2-9 Implementation Schedule, Phase 1

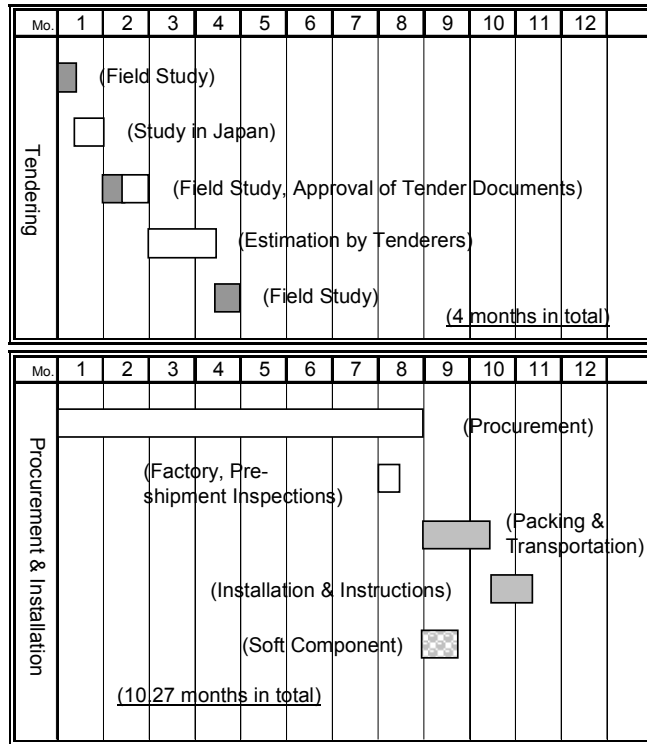
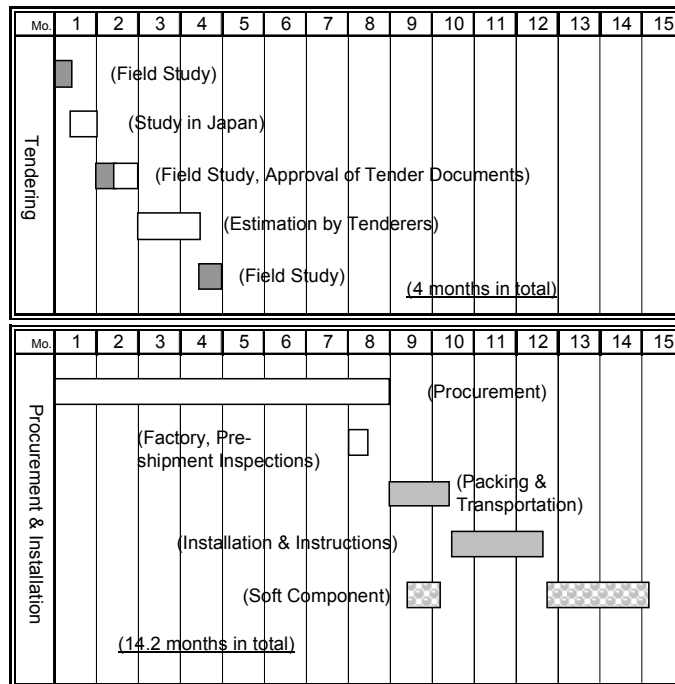


Table 2-10 Implementation Schedule, Phase 2





The soft component would be implemented at a suitable time in both the first and second phase and within the period provided for by the E/N.

### 2-3 Obligations of the Recipient Country

In the event that the project is implemented as a Grant Aid undertaking by the Government of Japan, the following would be the obligations that the recipient country would have to bear.

- 1) Provision of documents and information as needed for implementation of this project.
- 2) Prior to the start of installation of the equipment, satisfactory completion of related preparatory work in preparation for said equipment.
- 3) Preparation for the supply of necessary utilities such as electric power, water supply and drainage, etc.
- 4) Completion of budgetary arrangements and personnel assignments for effective operation and management of the equipment.
- 5) Payment of bank commission to the Japanese bank under the Banking Arrangement.
- 6) Waiving taxes and Customs duties on the equipment; assurance of unencumbered, swift clearing of Customs and inland transport of the equipment to the project sites.
- 7) Exemption from Uzbekistan taxes and levies for Japanese companies and individuals working under the verified contract in connection with the provision of goods and services as per the project.
- 8) Facilitation of entry to and stay in Uzbekistan for Japanese nationals working under the verified contract in connection with the provision of goods and services as per the project.
- 9) Securing of the necessary license, authorization, etc. for implementation of the project.
- 10) Assumption of responsibility for the proper and effective operation and care of the equipment and materials provided by the project.
- 11) All expenses for the project which are not included in the Japanese Grant Aid.

### 2-4 Project Operation Plan

After the equipment is installed, the SCC as the Implementing Agency will be required to adopt the following operation and management practices or take the following measures.

- 1) Compilation of manuals for the effective and safe use of the X-ray equipment.

- 2) Compilation of a manual for prevention of exposure to X-rays, and thorough-going education of personnel on the importance and methods of protection.
- 3) Periodic measurement of radiation exposure of X-ray personnel.
- 4) Periodic measurement of radiation in the peripheral area of the equipment.
- 5) Preparation of a manual for analysis of images, and making of efforts for improvement of image analysis techniques.
- 6) Budgetary provisions for the cost of maintenance of the equipment.

Prior to installation of the equipment at the project sites, the SCC must assign personnel to the corresponding Customs check points. The personnel requirement will be as follows, with two teams to rotate in one-hour shifts.

Table 2-11 Staffing at Customs Check Points

| Job title                       | Number of persons |        |       |       | Source   |
|---------------------------------|-------------------|--------|-------|-------|--|
|                                 | Ayritom           | Galaba | Oybek | Total |  |
| Scanner operators<br>(2 shifts) | 2                 | 2      | 2     | 6     | Retraining and reassigning of existing personnel |
| Image analyzer<br>(2 shifts)    | 2                 | 2      | 2     | 6     | Retraining and reassigning of existing personnel |
| Total                           | 4                 | 4      | 4     | 12    |  |

At each of the Customs check points where the equipment is to be installed there are now 40 to 50 employees. It is planned that the user of the X-ray scanning equipment will be by all of the certified officials, working on rotation, and there is no need to hire additional personnel. However, it will be necessary to raise the level of skills of existing employees, without interfering with normal Customs business, for which reason it is necessary that the engineers dispatched by the equipment makers provide Customs personnel with adequate guidance for start-up and ordinary operation.

In addition to the scanner operators and image analysis personnel, assignment of the following staff will be required:

- Vehicle maintenance person for the vehicle of the mobile type large-sized X-ray scanning equipment (one person).
- Person in charge of replacement parts for the mobile type large-sized X-ray scanning equipment (one person; concurrently an operator).
- Person in charge of replacement parts for the large-sized X-ray scanning equipment for rail

cargo (one person; concurrently an operator).

All of the above are assumed to be present employees at the Customs check points and no new hiring is required.

## 2-5 Project Cost Estimation

### 2-5-1 Initial Cost Estimation

#### (1) Project Cost to be covered by the Uzbekistan Government

In the event that the project equipment is supplied on a Grant Aid basis, the following are the estimated expense to be borne by the Uzbekistan side.

#### Expense of the Uzbekistan Side

| Item   | Amount<br>(million JPY) |
|--|-------------------------|
| Foundation work (for X-ray scanning equipment and X-ray shielding walls) | 0.55                    |
| Earth filling work   | 7.30                    |
| Vehicle registration fee (for mobile type X-ray scanning equipment)      | 0.23                    |
| Others (bank commission)   | 1.66                    |
| Total  | 9.74                    |

The revenue from Customs duty collection is of major importance for public finance in Uzbekistan. Moreover the ensuring of safe and efficient flow of goods can be said to be of vital importance for intra-regional cooperation in Central Asia.

Total truck traffic passing through the border check points that would be improved by the present project, in fiscal 2008, was about 102,000 vehicles. Declared value per truck varies according to the freight carried but is estimated at USD20,000-50,000. For convenience, assuming the average value of USD30,000, annual revenue collected at these check points is USD6,120,000. Of this 25% or USD1,530,000 (about JPY145 million) would be at the discretion of SCC, and this amount is thought to be adequate to cover the required expenses as estimated above.

## (2) Conditions for Cost Estimation

- 1) Time of Estimation : July 2009
- 2) Foreign currency exchange rate: US\$ 1 = J¥94.88
- 3) Implementation period: Required time for detailed design, tendering, equipment procurement and their delivery periods including soft component services is as shown in the Project Implementation Schedule in Tables 2-9 and 2-10.
- 4) Others: The project shall be implemented in accordance with relevant rules and the guideline of Japan's Grant Aid.

### 2-5-2 Operation and Maintenance Costs

The annual increment to be provided for in the Uzbekistan side in the event that the equipment is procured as stated in this study report, the cost being for operation and maintenance of the equipment, is estimated at about JPY 47.09 million as shown below. This is equivalent to 32% of the annual customs inspection charges collected at the border check points for truck traffic volume equal to that of fiscal 2008. This is the estimated cost for annual replacement parts from the third year onward after the equipment is placed in use. It is thought that, as long as there is anticipation of increase in traffic volume on the border with Afghanistan due to International Security Assistance Force (ISAF) cargo treaty at the relevant check points at the time the equipment is provided, the SCC can easily provide for this expense.

Table 2-12. Estimated Cost of Operation and Management

| Cost item                        | Amount<br>(million JPY) |
|----------------------------------|-------------------------|
| Electric power (4,300 kWh)       | 0.02                    |
| Fuel (diesel fuel, 3,100 liters) | 0.17                    |
| Replacement parts; supplies*     | 46.90                   |
| Total                            | 47.09                   |

\*WCO recommendation of 7% is adopted.

From the above, it is judged that the SCC has full capability to bear the sustained expense of operation and maintenance of the equipment.

## 2-6 Other Relevant Issue

All the works related to receiving and installing the procured equipment must be completed by the Uzbekistan side well before the new equipment arrives at the Customs check points. The Uzbekistan side shall make a plan to secure a budget for that particular purpose immediately after the relevant Exchange of Notes shall have been made between Uzbekistan and Japan. Otherwise the installation works of the equipment supplier will be delayed. In this regard, the Uzbekistan side shall be required to assure that it will carry out all the works under its responsibility as outlined earlier pursuant to the stipulations of the Japanese Grant Aid Scheme.

SCC as the Implementing Agency shall be required to secure a budget sufficient enough to bear the expenses which may be generated during the operation and maintenance of the equipment as outlined earlier.

Further, it is indispensable for the SCC to appoint sufficient number of its staff as outlined in Table 2-11 to attend the training by the engineers of supplier or manufacturer for proper operation and maintenance of the equipment. In this connection, the SCC will be required to deploy the personnel well before the equipment supplier starts operational guidance after delivery and installation of the equipment. It is also required of the SCC to appoint the members of the Working Groups for soft component services to be undertaken by the consultant well in advance so that the Working Groups may receive effective training.



## **CHAPTER 3 Project Evaluation and Recommendations**





### Chapter 3 Project Evaluation and Recommendations

#### 3-1 Effects of the Project

It is expected that implementation of this project would have the effects as summarized below, by the project’s supply of equipment for use at border check points in Uzbekistan, with the intention of satisfying development requirements related to X-ray scanning equipment for export and import shipments, for improvement of Customs operations as described in the “Business Strategy of the Republic of Uzbekistan for 2007-2010”, and “The Concept of Information Technology Policy of the State Customs Committee of the Republic of Uzbekistan (August 27, 2006; “Information Technology Policy”).

Table 1 Expected Effects of the Project

|                                       |   |
|---------------------------------------|---|
| Present Status and Problems           | <ul style="list-style-type: none"> <li>• Drugs, weapons and other illegal items are passing through Uzbekistan and the region along the borders with Afghanistan and Tajikistan, whereby they are being transported to various countries.</li> <li>• Inspection at Uzbekistan Customs check points is being performed by manual, visual means, requiring much time and hampering the efficient, smooth flow of goods.</li> </ul>  |
| Cooperative Measures                  | <p>One large-sized X-ray scanning unit (vehicle-mounted type) is to be provided for use at each of Ayritom and Oybek check points where road freight is examined, and one large-sized X-ray scanning unit for railway wagons is to be provided for use at the Galaba railway check point.</p>   |
| Direct Effects; Extent of Improvement | <ul style="list-style-type: none"> <li>• The present manual/visual inspection for detailed examination of a truck cargo that requires 3-5 hours can be accomplished in 20-30 minutes. Assuming 10,000 trucks are to be examined in one year’s time, it is estimated that the time requirement, now 30,000-50,000 hours, would be slashed by about 90% to 3,300-5,000 hours.</li> <li>• Transit freight that can be inspected using the X-ray equipment would be increased greatly (from zero to more than 100 vehicles a day).</li> <li>• A substantial increase in discovery and seizure of illegal items can be expected.</li> <li>• By introducing X-ray scanning for inspection of all the cargos, the Customs database will be improved measurably, and more effective risk management will become possible.</li> <li>• The soft component, by facilitating the widespread use of large-sized X-ray</li> </ul> |

|   |   |
|---|---|
|   | scanning equipment that would be tied in to the Customs information system, will contribute to more efficient work by about 100 Customs officers and to more effective inspections.   |
| Indirect Effects;<br>Extent of<br>Improvement | <ul style="list-style-type: none"> <li>• Increased preventive effect is expected over the inflow and outflow of illegal goods at the relevant Customs check points.</li> <li>• Entry of socially undesirable items will be curtailed, contributing to improved welfare of the citizens and stabilization of society.</li> <li>• Economic effects would be obtained through the decrease in time required for Customs inspections, decrease in transport costs, and increase in the international balance of payments resulting from the increased flow of goods resulting from gains in international competitiveness.</li> </ul> |

The time required to clear Customs, and the percentage of large-scale freight shipments subjected to X-ray scanning, can be used as indicators of the direct effects stated above. It will be a simple matter to make and monitor such indicators using the statistics collected at each Customs station.

## 3-2 Recommendations

### 3-2-1 Recommendations to the Uzbekistan Side

#### (1) Budgetary Provisions and Monitoring of Budget Allocation Use

It is planned to put the equipment that would be supplied by this project to immediate use after installation at the Customs check points. It is anticipated that considerable period of time will be required in the event that replacement parts or servicing of the equipment is subsequently required, because the equipment will be installed in remote locations. In order therefore to keep the inspection work functioning, it will be desirable for the SCC to sign a maintenance contract with the equipment suppliers. The WCO encourages provision of 7-10% of the equipment acquisition cost as annual expense for this purpose, and it would be necessary for the SCC to arrange for a budget to this effect. In order to ensure that the equipment is well maintained and hence effectively operational over a long period of time, it is indispensable that there be confirmation of such financial allowance at each check point, and to ensure that the equipment is being utilized to satisfy the original purpose. There should be periodic reports to the Japanese Government on such budgeting measures.

(2) Establishing Arrangements for Operation and Management of the Equipment

The IT Department of the SCC is to be responsible for managing the equipment that would be procured by this project, and Customs employees at each check point where the equipment is used would be in charge of day to day operation, routine checking, maintenance and care of the equipment. The SCC intends to appoint the employees at each check point who are to be so responsible, and provide training in advance of actual operation of the equipment. But because Customs officials are rotated to new assignments every two years, it will be necessary for Uzbekistan to have an ongoing arrangement for development and upgrading of the technical skills needed for operation and care of the equipment.

For this reason, it is necessary that Customs officials at each check point be on hand when the start-up operation tasks and initial training are provided by the equipment makers after the completion of installation, so that those officials can acquire the knowledge and techniques needed for the effective and efficient operation of the equipment. In order to further ensure maximization of the effects expected of the project, it is necessary for each check point to have a manual describing the routine and other matters related to the operation, maintenance and care of the equipment. It is further necessary, to provide for maintenance and care of the equipment, that at each check point a Customs official responsible for the use and care of the equipment be appointed, that arrangements be made for periodic inspection and checkup of the equipment, that records of equipment use and care as well as related expenses be maintained, and that budget allocations for maintenance and care of the equipment be provided.

(3) Need for Thoroughness in Assuring Protection from Radiation

Uzbekistan has adopted radiation safety standards, and the SCC is obliged to comply with the provisions for safety set forth in this law. The law further requires that measures related to X-ray equipment be taken in accordance with recommendations of the ICRP. As of the time of the present study Uzbekistan does not have regulations that specifically apply to the use of large-sized X-ray scanning equipment, nor does it have a licensing or certifying arrangement for technicians who operate such equipment. But the SCC plans to establish a radiation committee in its IT Department, and adopt the necessary regulations and licensing arrangements. The equipment to be provided has been planned to conform to specifications that comply with ICRP standards. It is hoped that proper arrangements be promptly made through consultations with the Ministry of Health and other ministries from the viewpoint of the importance of the safety of SCC officials on the job.

### 3-2-2 Technical Cooperation, and Coordination with Other Donors

#### (1) Coordination with Other Donors

The United Nations Office on Drugs and Crime (UNODC) as part of its technical cooperation activities provided training for upgrading the abilities of officials at the Ayritom Customs Complex, Surkhandarya, and at the Termez port Customs office, including support for Customs inspection equipment. A medium-sized X-ray equipment is already installed at the Ayritom complex, and work related to medium-sized equipment at the Termez port office is under progress. Medium-sized X-ray equipment can inspect the contents of a container, but large-sized equipment also inspects the container frame and chassis of the vehicle. By the combined use of medium- and large-sized equipment, detection of illegal items or material will be made much more effective.

Further, the United Nations Development Programme (UNDP) has constructed a training facility for the SCC, which is in use for improvement of inspection capabilities of Customs officers. It would be desirable for the SCC to seek further cooperation of the UNDP so that this facility can be used for training officers in analyzing X-ray images, to further assure the effective use of equipment provided by the present project. In this way, a multiplier effect of this project can be expected through cooperation with multilateral agencies.

#### (2) Technical Cooperation

The SCC plans to use its unified Customs information system to construct a Customs database. By integrating the Customs inspection information such as obtained by conventional means and the X-ray images to comprise part of the unified system, it will be possible to improve Customs' technical ability to detect illegal items or material, and officials' ability to analyze X-ray images. This arrangement should be considered in the context of future regional cooperation of Central Asian nations for establishment of a one-stop border post, traceability and other similar scheme. It is expected that SCC endeavors to enhance the Customs works including inspection technology from the viewpoints mentioned above.

In order to deal with this situation, it is thought that it would be meaningful for assistance to be provided in the future to the SCC via the technical cooperation scheme of the Japanese Government. It would be particularly effective to provide training for Uzbekistan Customs officers in Japan, or by dispatching experts from Japan. Study of such possibilities would be worthwhile.

## **Appendices**



## APPENDIX-1 MEMBER LIST OF THE STUDY TEAM

### 1-1 Preparatory Study

| Task  | Name              | Organization   |
|---|-------------------|--|
| Leader  | Yukihiko EJIRI    | Resident Representative,<br>JICA Uzbekistan Office   |
| Project Coordination                                | Noriharu MASUGI   | Assist. Director, Fiscal and Financial<br>Sector Management Div., Public Policy<br>Dept., JICA |
| Chief Consultant/<br>Equipment Planning (1)         | Wataru SHIGA      | UNICO International Corporation  |
| Equipment Planning (2)                              | Satoru HAMAMOTO   | UNICO International Corporation  |
| Procurement plan/<br>cost estimation                | Katsuhiko HIGUCHI | UNICO International Corporation  |
| Interpreter<br>(Japanese-Russian)                   | Vladimir BOGDANOV | UNICO International Corporation  |
| Interpreter<br>(English/Japanese-<br>Russian/Uzbek) | Marat KHANIPOV    | UNICO International Corporation  |

### 1-2 Explanation of Draft Report

| Task  | Name              | Organization   |
|---|-------------------|--|
| Leader                                      | Kazuto TSUJI      | Executive Technical Advisor to the<br>Director General, Public Policy Dept.,<br>JICA                             |
| Customs Administration                      | Masaki OKAMOTO    | Deputy Director for International<br>Cooperation, Customs & Tariff Bureau,<br>Ministry of Finance                |
| Cooperation Policy                          | Kyoko KOTARI      | Second Country Assistance Planning<br>Division, International Cooperation<br>Bureau, Ministry of Foreign Affairs |
| Project Coordination                        | Noriharu MASUGI   | Assist. Director, Fiscal and Financial<br>Sector Management Div., Public Policy<br>Dept., JICA                   |
| Chief Consultant/<br>Equipment Planning (1) | Wataru SHIGA      | UNICO International Corporation  |
| Equipment Planning (2)                      | Satoru HAMAMOTO   | UNICO International Corporation  |
| Procurement plan/<br>cost estimation        | Katsuhiko HIGUCHI | UNICO International Corporation  |
| Interpreter<br>(Japanese-Russian)           | Vladimir BOGDANOV | UNICO International Corporation  |





## APPENDIX-2 STUDY SCHEDULE

### 1. Preparatory Study

| Sr. No. | Date      | Day | JICA               |  | Consultant   |                        |                                      |
|---------|-----------|-----|--------------------|--|--|------------------------|--------------------------------------|
|         |           |     | Leader (or Deputy) | Project Coordinator                                | Chief Consultant (Equipment Planning 1), with Interpreter  | Equipment Planning 2   | Procurement Planning/Cost Estimation |
| 1       | 2009/7/6  | Mon |                    |  | <i>Lv. Narita &gt;&gt; Ar. Tashkent (via Seoul)</i>  |                        |                                      |
| 2       | 2009/7/7  | Tue |                    |  | Courtesy calls/discussions at JICA, EOJ, State Customs Committee                                   |                        |                                      |
| 3       | 2009/7/8  | Wed |                    |  | Discussions at MFERIT, NCDC  |                        |                                      |
| 4       | 2009/7/9  | Thu |                    |  | Discussions at Uzavtoyul, SCC  |                        |                                      |
| 5       | 2009/7/10 | Fri | Same as Consultant | Same as Consultant<br><i>Lv. Tashkent &gt;&gt;</i> | Discussions at UNODC, UNDP-BOMCA/CADAP, Embassy of USA, Embassy of China                           |                        |                                      |
| 6       | 2009/7/11 | Sat | Same as Consultant | <i>&gt;&gt; Ar. Narita</i>                         | Site survey at Oybek Checkpoint  |                        |                                      |
| 7       | 2009/7/12 | Sun |                    |  | Internal meeting: Data analysis  |                        |                                      |
| 8       | 2009/7/13 | Mon | Same as Consultant |  | <i>Lv. Tashkent &gt;&gt; Ar. Bukhara</i> , Discussion at SCC Bukhara, Site survey at Alat CP       |                        |                                      |
| 9       | 2009/7/14 | Tue | Same as Consultant |  | Site survey at Khodjadavlat and Karakul CP, Bukhara-2 and Bukhara-1 Station CP                     |                        |                                      |
| 10      | 2009/7/15 | Wed |                    |  | Discussion at SCC Bukhara  |                        |                                      |
| 11      | 2009/7/16 | Thu | Same as Consultant |  | <i>Lv. Bukhara &gt;&gt; Ar. Tashkent</i> , Discussion at SCC                                       |                        |                                      |
| 12      | 2009/7/17 | Fri | Same as Consultant |  | Site visit to Yallama CP (Kazakh Border)   |                        |                                      |
| 13      | 2009/7/18 | Sat |                    |  | Discussion at UIFA   |                        |                                      |
| 14      | 2009/7/19 | Sun |                    |  | Internal meeting: Data analysis  |                        |                                      |
| 15      | 2009/7/20 | Mon |                    |  | <i>Lv. Tashkent &gt;&gt; Ar. Termez</i> , Discussion at SCC Surkhandarya, Site survey at Galaba CP |                        |                                      |
| 16      | 2009/7/21 | Tue |                    |  | Site survey at Ayritom and River Port CP   |                        |                                      |
| 17      | 2009/7/22 | Wed | Same as Consultant |  | Site survey at Galaba, Ayritom, and River Port Checkpoints   |                        |                                      |
| 18      | 2009/7/23 | Thu | Same as Consultant |  | Discussion at SCC Surkhandarya, <i>Lv. Termez &gt;&gt; Ar. Tashkent</i>                            |                        |                                      |
| 19      | 2009/7/24 | Fri |                    |  | Discussion at SCC  |                        |                                      |
| 20      | 2009/7/25 | Sat |                    |  | Internal meeting: Data analysis  |                        |                                      |
| 21      | 2009/7/26 | Sun |                    |  | Internal meeting: Data analysis  |                        |                                      |
| 22      | 2009/7/27 | Mon |                    |  | Discussions at Uzbekistan National Railways, SCC   |                        |                                      |
| 23      | 2009/7/28 | Tue |                    |  | Discussion at SCC  |                        |                                      |
| 24      | 2009/7/29 | Wed | Discussion on MOD  |  | Discussion on MOD  | Survey of Local Agents |                                      |
| 25      | 2009/7/30 | Thu | Same as Consultant |  | Discussion on MOD  |                        |                                      |
| 26      | 2009/7/31 | Fri | Same as Consultant |  | Signing of MOD, Report to EOJ <i>Lv. Tashkent &gt;&gt;</i>   |                        |                                      |
| 27      | 2009/8/1  | Sat |                    |  | <i>&gt;&gt; Ar. Narita (via Seoul)</i>   |                        |                                      |

EOJ : Embassy of Japan in Uzbekistan

MFERIT : Ministry of Foreign Economic Relations, Investment and Trade

NCDC : National Information and Analysis Centre for Drug Control under the Cabinet of Ministers

SCC : State Customs Committee

UIFA : Uzbekistan International Forwarders Association

## 2. Explanation of Draft Report

| Sr. No. | Date       | Day | JICA   | Consultant  |                      |                                       |
|---------|------------|-----|--|---|----------------------|---------------------------------------|
|         |            |     | (Leader, Customs Administration, Cooperation Policy, Project Coordination) | Chief Consultant (Equipment Planning 1), with Interpreter       | Equipment Planning 2 | Procurement Planning/ Cost Estimation |
| 1       | 2009/10/26 | Mon | <i>Lv. Narita &gt;&gt; Ar. Tashkent (via Seoul)</i>                        | <i>Lv. Narita &gt;&gt; Ar. Tashkent (via Seoul)</i>             |                      |                                       |
| 2       | 2009/10/27 | Tue | Same with Consultant   | Courtesy calls/discussions at JICA, EOJ, MFERIT, SCC            |                      |                                       |
| 3       | 2009/10/28 | Wed | Same with Consultant   | Discussion on Draft Report & MOD at SCC                         |                      |                                       |
| 4       | 2009/10/29 | Thu | Discussion and signing of MOD  | Discussion on MOD, Specifications at SCC                        |                      |                                       |
| 5       | 2009/10/30 | Fri | Report to JICA, EOJ, <i>Lv. Tashkent &gt;&gt;</i>                          | Discussion at SCC   |                      |                                       |
| 6       | 2009/10/31 | Sat | <i>&gt;&gt; Ar. Narita (via Seoul)</i>                                     | Discussions at SCC  |                      |                                       |
| 7       | 2009/11/1  | Sun |  | Internal meeting: Data analysis                                 |                      |                                       |
| 8       | 2009/11/2  | Mon |  | Discussion at UZ National Railways                              |                      |                                       |
| 9       | 2009/11/3  | Tue |  | Discussions at SCC, Report to JICA <i>Lv. Tashkent &gt;&gt;</i> |                      |                                       |
| 10      | 2009/11/4  | Wed |  | <i>&gt;&gt; Ar. Narita (via Seoul)</i>                          |                      |                                       |

## APPENDIX-3 LIST OF PARTIES CONCERNED IN THE RECIPIENT COUNTRY

### <Uzbek Organizations>

#### State Customs Committee (SCC)

|                     |  |
|---------------------|--|
| Sadyrkhon Nasirov   | Chairman                                   |
| Rustam Mansurov     | Deputy Chairman                            |
| Bakhtiyor Raimov    | Deputy Chairman                            |
| Bakhodir Yunusov    | Head of Customs Cooperation Division       |
| Abdusobir Saidov    | Head of IT Division                        |
| Adham Inaminov      | Head of Customs Control Div.               |
| Djamshid Rahmedov   | Head, Finance Division                     |
| Musaev Djamoliddin  | Head of Smuggling Control Division         |
| Rahmatov Dilshod    | Head of Capital Construction Division      |
| Ulugbek Muhammadiev | Head, Basic Construction/Maintenance Div.  |
| Ravshan Akramov     | Deputy Head of Customs Control Division    |
| Shoiddir Rahimov    | Deputy Head, Tariff Division               |
| Abdulla Rakhmanov   | Chief Inspector, Law Division              |
| Ilhom Imamov        | Chief Inspector, Personnel Division        |
| Gaipov Fazliddin    | Inspector, Customs Cooperation Division    |
| Jakhongir Ismailov  | Senior Inspector, IT Division              |
| Kayumova Sayora     | Senior Inspector, Customs Control Division |
| Gulfiya Habieva     | Customs Cooperation Division               |

#### Ministry of Foreign Economic Relations, Investment and Trade (MFERIT)

|                    |  |
|--------------------|--|
| Nadjimov Nasriddin | First Deputy Minister                          |
| Suleymanov Shohruh | Head of Unit, Central Analytical Department    |
| Mursaliev Alisher  | Head of Registration and Monitoring Department |
| Aliev Tohir        | Deputy Head of Transport Department            |

#### National Information and Analysis Centre for Drug Control under the Cabinet of Ministers (NCDC)

|                   |  |
|-------------------|--|
| Erkabaev Azizbek  | Head of International Relations Unit   |
| Rustam Muhammedov | Head of Operation Control Div.         |
| Hamidov Olijon    | Chief Engineer, Railway Operation Div. |
| Djumanova Saodat  | Leading Expert, Coordination Unit      |

State Joint Stock Company "UzAvtoYul"

|                   |                                      |
|-------------------|--------------------------------------|
| Shosaidov Nazar   | Deputy Chairman                      |
| Nazarov Shuhrat   | Head of Central Department           |
| Alimov Bakhtiyor  | Head of Roads Management Department  |
| Huzhanov Zarlilla | Head of Road Construction Department |

State Customs Committee, Tashkent region

|                   |                                       |
|-------------------|---------------------------------------|
| Choriev Otabek    | Deputy Head                           |
| Turdiyev Murodjon | Deputy Head                           |
| Yuldashev Zohir   | Head of Unit                          |
| Kusharov Ravshan  | Deputy Head of Smuggling Control Unit |

Border Check Point "OYBEK"

|                 |      |
|-----------------|------|
| Ahiezov Hizirov | Head |
|-----------------|------|

Border Check Point "YALLAMA"

|                 |             |
|-----------------|-------------|
| Masoliev Nigmat | Acting Head |
|-----------------|-------------|

State Customs Committee, Bukhara region

|                    |                   |
|--------------------|-------------------|
| Karimov Hudoyberdi | Head              |
| Djavharov Ulugbek  | First Deputy Head |
| Khodjaev Ashraf    | Acting Head       |

Customs Complex "ALAT"

|                  |             |
|------------------|-------------|
| Haitov Bahshillo | Deputy Head |
|------------------|-------------|

Railway Check Point "HOJADAVLAT"

|              |                  |
|--------------|------------------|
| Ruziev Zafar | Shift Supervisor |
|--------------|------------------|

Customs Check Point "KARAKUL"

|                |             |
|----------------|-------------|
| Sharipov Jobir | Acting Head |
|----------------|-------------|

Customs Check Point "BUKHARA-2"

|                  |      |
|------------------|------|
| Mustafaev Khusen | Head |
|------------------|------|

Customs Check Point "KAGAN"

|                      |                 |
|----------------------|-----------------|
| Eshonkulov Zavkiddin | Chief Inspector |
|----------------------|-----------------|

State Customs Committee, Surkhandarya region

|                      |           |
|----------------------|-----------|
| Mukhammadiev Shavkat | Head      |
| Beknazarova Feruza   | Inspector |

Customs Complex "AYRITOM"

|                       |                  |
|-----------------------|------------------|
| Abdukhaliqov Boimurod | Shift Supervisor |
|-----------------------|------------------|

Railway Check Point "GALABA"

|                     |      |
|---------------------|------|
| Karakulov Ziyodullo | Head |
|---------------------|------|

Customs Check Point "River Port"

|                 |                  |
|-----------------|------------------|
| Mardaev Nortoji | Shift Supervisor |
|-----------------|------------------|

Uzbek Temir Yullari

|                     |   |
|---------------------|---|
| Sadykov Ulug'bek    | Head of Foreign Economic Relations Department     |
| Mukhamedov Nuriddin | Specialist, Foreign Economic Relations Department |
| Vakhidov Marat      | Engineer, Commercial Relations                    |
| Kohodjaev Alisher   | Vice-head of Wagon Department                     |

Uzbek International Forwarders Association (UIFA)

|                    |                  |
|--------------------|------------------|
| Matchanov Khokim   | Chairman         |
| Khamraev Davronbek | General Director |

**<International Organizations>**

United Nations Office on Drugs and Crime (UNODC)

|                     |  |
|---------------------|--|
| Zhulduz Akisheva    | Program Management Officer, Regional Office for CA |
| Dilmurad Mirkamilov | National Project Officer                           |

Border Management and Drug Action Programmes in Central Asia (BOMCA/CADAP)

|                |                               |
|----------------|-------------------------------|
| Alfiya Musina  | Program Manager in Uzbekistan |
| Kamal Dusmetov | Senior National Expert        |

Embassy of the United States of America

|                     |   |
|---------------------|---|
| Marella Mary Tobolt | Chief, Office of Military Cooperation                       |
| Steven N. Prohoska  | Second Secretary  |
| Barry A. Johnson    | Regional Export Control and Related Border Security Advisor |

Embassy of the People's Republic of China

Li Dong Zhu                      First Secretary, Economic and Commercial Section

**<Japanese Organizations>**

Embassy of Japan in Uzbekistan

Tsutomu Hiraoka                  Ambassador of Japan

Kazuhiko Uchida                Counsellor

Tatsuo Sunahara                First Secretary

Japan International Cooperation Agency (JICA) Uzbekistan Office

Yukihiko Ejiri                    Chief Representative

Shinji Totsuka                  Senior Representative

Naoki Nihei                      Representative

Sharifzoda Sharipov            Program Officer

APPENDIX-4 MINUTES OF DISCUSSION  
(PREPARATORY STUDY)

**Minutes of Discussions  
on the Preparatory Study  
on the Project for the Installation of X-ray Scanning Equipment  
at the Check Points of  
Uzbekistan Borders with the Neighboring Countries**

Based on the results of the Preparatory Survey, the Government of Japan decided to conduct a Preparatory Study on the Project for the "Installation of X-ray Scanning Equipment at the Check Points of Uzbekistan Borders with the Neighboring Countries" (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to the Republic of Uzbekistan (hereinafter referred to as "Uzbekistan") the Preparatory Study Team (hereinafter referred to as "the Team"), which is headed by Mr. Yukihiro Ejiri, Chief Representative, JICA Uzbekistan Office, and stayed in the country from July 6<sup>th</sup> to July 31<sup>st</sup> 2009.

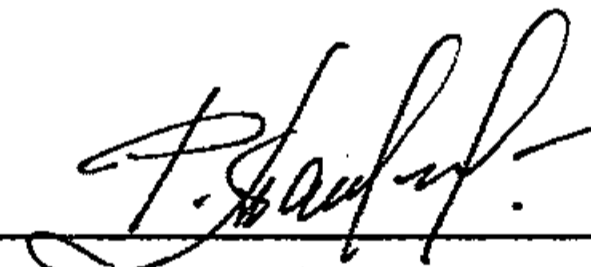
The Team held discussions with the officials concerned of the Government of Uzbekistan and conducted field surveys at the Project sites where X-ray Scanning Equipment are requested to be installed.

In the course of the discussions, both sides confirmed the main items described in the attachment. The Team will proceed to further works in Japan and prepare the Preparatory Study Report.

Tashkent, July 31, 2009



Mr. Yukihiro Ejiri  
Leader of the Study Team  
Chief Representative  
Uzbekistan Office  
Japan International Cooperation Agency



Mr. Rustam Mansurov  
Deputy Chairman  
The State Customs Committee,  
Republic of Uzbekistan



Mr. Nasriddin Najimov  
First Deputy Minister  
Ministry for Foreign Economic Relations,  
Investments and Trade,  
Republic of Uzbekistan

## ATTACHMENT

### 1. Objective of the Project

The objective of the Project is to enhance functions of customs enforcement at the check points of Uzbekistan Borders with the Neighboring Countries by installing X-ray scanning equipment in order to strengthen terrorism prevention measures, including the prevention of illegal goods such as drugs, weapons and explosives, as well as to improve the efficiency of cross-border trade and transport.

### 2. Project sites

The Project sites will be the customs check points selected by the State Customs Committee as shown in Annex 1. However, the final selection of the Project sites will be made by the Japanese side after further studies in Japan.

### 3. Items requested by the Uzbekistan side

After discussions with the Team, the items of equipment described in Annex 2 were finally requested by the Uzbekistan side. JICA will assess the appropriateness of the request based on the assessment of the needs and activity of each customs check point. The Team took note of the order of the priority that should be sufficiently proved with relevant information and data to be provided by the Uzbekistan side. After this study JICA will recommend to the Government of Japan for approval. The Uzbekistan side agreed that the final components of the Project will be decided by the Japanese side after further studies in Japan. However, both sides understand that all check points conform to the urgent needs of the Uzbekistan side.

### 4. Responsible and Implementing Agency

The responsible and implementing agency is the State Customs Committee of the Republic of Uzbekistan (hereinafter referred to as "SCC").

The organization chart of SCC is attached as Annex 3.

### 5. Japan's Grant Aid Scheme

5-1. The Uzbekistan side understands the Japan's Grant Aid Scheme and the necessary measures to be taken by the Government of Uzbekistan as explained by the Team and described in Annex 2 and Annex 3 of the Minutes of Discussions signed by both parties on January 23, 2009.

5-2. Uzbekistan side will take the necessary measures, as described in Annex 4, in addition to 5-1, for successful implementation of the Project, as a condition for the Japanese Grant Aid to be implemented.

### 6. Schedule of the Study

6-1. JICA will prepare the draft report in English (and in Russian for reference) and dispatch a mission in order to explain its contents in the end of October 2009.

6-2. If the contents of the report is accepted in principle by the Government of Uzbekistan, JICA will complete the final report and send it to the Government of Uzbekistan by March 2010.

### 7. Other Relevant Issues



- 7-1. The Uzbekistan side ensures that they will make available to the Team necessary information, data and references such as maps, layout charts of facilities, etc. as requested by the Team during their stay in Uzbekistan. The Uzbekistan side will also provide such information as requested by the Team even after their return to Japan. The Uzbekistan side ensures that they will also render assistance for issuance of permissions to enter border areas and check points at the borders and, wherever necessary, photos being taken by the Team.
- 7-2. The Uzbekistan side agreed to secure allocation of sufficient budget and qualified staff and establish a system to properly and effectively operate and maintain the equipment. The necessary staff and budget will be proposed by the Team after analyzing work based on the discussions and SCC's plans.
- 7-3. The Uzbekistan side shall take the following measures as according to Annex 5:
- 7-3-1. Exemption of customs payments of the goods imported within the framework of the Project;
- 7-3-2. Exemption of the tax on value added cost for the services rendered by the Japanese nationals in the territory of the Republic of Uzbekistan; and
- 7-3-3. Exemption of taxes or other kinds of obligatory payments for the goods and services procured in the Republic of Uzbekistan with a view to the realization of the Project.
- 7-4. The Uzbekistan side shall stick national flag of Japan and/or ODA symbol mark sticker on all the equipment procured by the Japanese Grant Aid.
- 7-5. The Uzbekistan side shall submit answers of the questionnaire given by the Team.
8. The English version of the present Minutes of Discussion stands as an official document. The Russian version is considered a working paper and would be used for reference.

Annex 1. List of customs check points to be considered for supply with X-ray scanning equipment

Annex 2. List of equipment requested by the Uzbekistan side

Annex 3. The organization chart of SCC.

Annex 4. Major Undertakings to be taken by Each Government (Facilities)

Annex 5. Detailed Measures for Exemption of Customs Duties, Internal Taxes and Other Fiscal Levies

Annex 1. List of customs check points to be considered for supply with X-ray scanning equipment

| Region       | Custom check points            | Bordering with             | To control                    |
|--------------|--------------------------------|----------------------------|-------------------------------|
| Bukhara      | Alat Customs Complex (Road)    | Turkmenistan               | Contraband/Narcotics and arms |
| Bukhara      | Khojadavlat (Rail)             | Turkmenistan               | Contraband/Narcotics and arms |
| Surkhandarya | Galaba (Rail)                  | Afghanistan,<br>Tajikistan | Narcotics and arms/Contraband |
| Surkhandarya | Ayritom Customs Complex (Road) | Afghanistan                | Narcotics and arms/Contraband |
| Tashkent     | Oybek (Road)                   | Tajikistan                 | Narcotics and arms/Contraband |

Annex 2. List of equipment requested by the Uzbekistan side

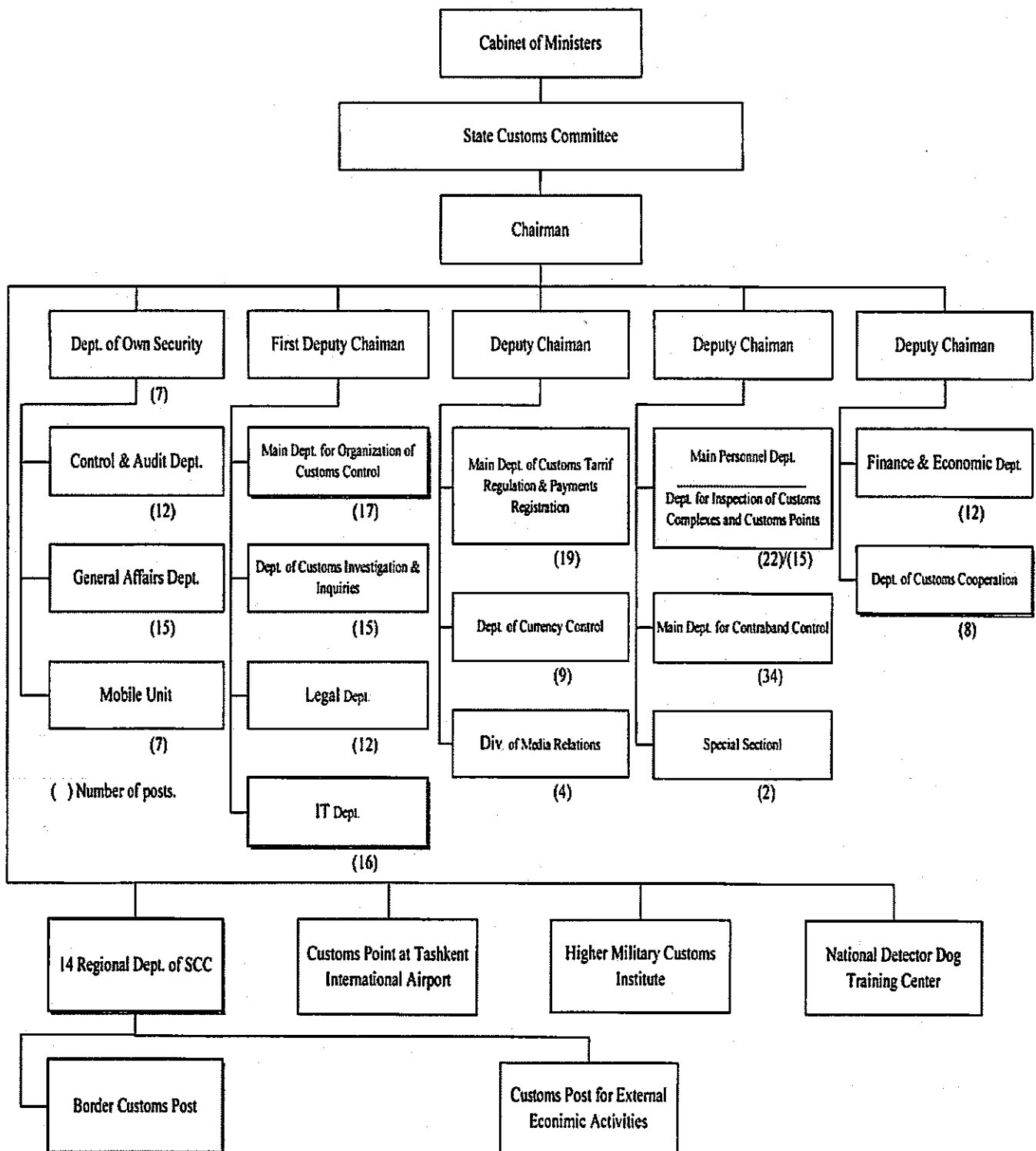
| Customs check points    | To scan                                   | Description of Equipment                     | Capacity                         | Qty | Priority |
|-------------------------|---|--|----------------------------------|-----|----------|
| Alat Customs Complex    | Road transport vehicle, container & cargo | Large-sized X-ray Scanning Unit, mobile type | X-ray Penetration: 240mm or more | 1   | B        |
| Khojadavlat             | Railway wagon, van, container & cargo     | Large-sized X-ray Scanning Unit*             | X-ray Penetration: 300mm or more | 1   | C        |
| Galaba                  | Railway wagon, van, container & cargo     | Large-sized X-ray Scanning Unit*             | X-ray Penetration: 300mm or more | 1   | A        |
| Ayritom Customs Complex | Road transport vehicle, container & cargo | Large-sized X-ray Scanning Unit, mobile type | X-ray Penetration: 240mm or more | 1   | A        |
| Oybek                   | Road transport vehicle, container & cargo | Large-sized X-ray Scanning Unit, mobile type | X-ray Penetration: 240mm or more | 1   | B        |

\*to be supplied with a stand-by generator (60 - 80kW)

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Annex 3. The organization chart of SCC.



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Annex 4

Major Undertakings to be taken by Each Government (Facilities)

| NO  | Items   | To be covered by Grant Aid | To be covered by Recipient side |
|-----|---|----------------------------|---------------------------------|
| 1   | To secure land  |                            | •                               |
| 2   | To clear, level and reclaim the site when needed  |                            | •                               |
| 3   | To construct gates and fences in and around the site  |                            | •                               |
| 4   | To construct the parking lot  |                            | •                               |
| 5   | To construct roads  |                            |                                 |
|     | 1) Within the site  |                            | •                               |
|     | 2) Outside the site   |                            | •                               |
| 6-1 | To construct the building (except safeguard facilities)   |                            | •                               |
| 6-2 | Safeguard facilities associated with operation of X-ray scanning equipment  | •                          |                                 |
| 6-3 | Foundation work for X-ray scanning equipment and safeguard facilities   |                            | •                               |
| 7   | To provide facilities for the distribution of electricity, water supply, drainage and other incidental facilities |                            | •                               |
|     | 1)Electricity   |                            |                                 |
|     | a.The distributing line to the site   |                            | •                               |
|     | b.The drop wiring and internal wiring within the site   |                            | •                               |
|     | c.The main circuit breaker and transformer  |                            | •                               |
|     | 2)Water Supply  |                            |                                 |
|     | a.The city water distribution main to the site  |                            | •                               |
|     | b.The supply system within the site ( receiving and/or elevated tanks )   |                            | •                               |
|     | 3)Drainage  |                            |                                 |
|     | a.The city drainage main ( for storm, sewer and others ) to the site  |                            | •                               |
|     | b.The drainage system ( for toilet sewer, ordinary waste, storm drainage and others ) within the site             |                            | •                               |
|     | 4)Gas Supply  |                            |                                 |
|     | a.The city gas main to the site   |                            | •                               |
|     | b.The gas supply system within the site   |                            | •                               |
|     | 5)Telephone System  |                            |                                 |
|     | a.The telephone trunk line to the main distribution frame / panel (MDF) of the building                           |                            | •                               |
|     | b.The MDF and the extension after the frame / panel   |                            | •                               |
|     | 6)Furniture and Equipment   |                            |                                 |
|     | a.General furniture, electric appliances  |                            | •                               |
|     | b.Project equipment (X-ray Scanning Equipment and its accessories)  | •                          |                                 |

Annex 5. Detailed Measures for Exemption of Customs Duties, Internal Taxes and Other Fiscal Levies

The Uzbekistan side will take necessary measures to exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the Republic of Uzbekistan with respect to the supply of the products and services under the contracts to be verified by the Government of Japan in relation with the Project, based on the relevant stipulations of laws and regulations of the Republic of Uzbekistan including the following:

Article 33 of the *Law on Custom Duties* released from the customs duties taxation of the goods delivered on inter-governmental and credit agreements, concluded on behalf of the Government of the Republic Uzbekistan or under its guarantees.

Article 211 (5) of the *Tax Code* released from the taxation of added cost of the goods imported by legal entities at the expense of loans (credits), provided by the international and foreign governmental financial organizations under the international treaties of the Republic of Uzbekistan, and also goods imported at the expense of grant aid.

The application of above quoted juridical clauses will be materialized through a governmental notice in form of Resolution to the relevant authorities of Uzbekistan after the governments of Uzbekistan and Japan execute an agreement for execution of the Project.

26

P. Abdul.



**Minutes of Discussions  
on the Preparatory Study  
on the Project for the Installation of X-ray Scanning Equipment  
at the Check Points of  
Uzbekistan Borders with the Neighboring Countries  
(Explanation on the Draft Report)**

In July 2009, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Preparatory Study Team on the Project for the Installation of X-ray Scanning Equipment at the Check Points of Uzbekistan Borders with the Neighboring Countries (hereinafter referred to as "the Project") to the Republic of Uzbekistan and through discussions, field surveys, and technical examination of the results in Japan, JICA prepared a draft report of the Study.

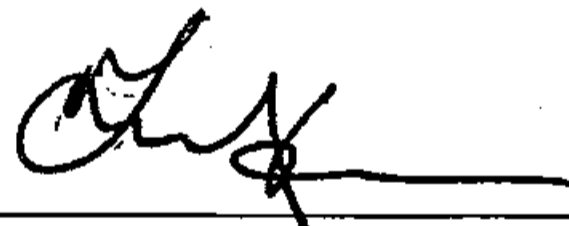
In order to explain and share the components of the draft report with the Government of Uzbekistan, JICA sent the Preparatory Study Team (hereinafter referred to as "the Team"), which is headed by Mr. Kazuto Tsuji, Executive Technical Advisor to the Director General, Public Policy Department, JICA and the Team stayed in the country from 26<sup>th</sup> to 30<sup>th</sup> of October, 2009.

As a result of discussions, both sides confirmed the items described in the attachment.

Tashkent, October 29, 2009



Mr. Kazuto Tsuji  
Leader  
Preparatory Study Team  
Japan International Cooperation Agency



Mr. Sadirkhon Nasirov  
Chairman  
The State Customs Committee,  
Republic of Uzbekistan



Mr. Nasriddin Najimov  
First Deputy Minister  
Ministry for Foreign Economic Relations,  
Investments and Trade,  
Republic of Uzbekistan

## ATTACHMENT

### 1. Components of the Draft Report

The State Customs Committee (hereinafter referred to as "the Uzbekistan side") agreed and accepted the components of the Draft Report that was explained by the Team. The list of components is shown in Annex 1. However, the final selection of the components will be decided by the Government of Japan.

### 2. Schedule of the Study

JICA will complete the Final Report in accordance with the confirmed items and send it to the Uzbekistan side around January 2010.

### 3. Other Relevant Issues

#### 3-1. Confidentiality of the Project Cost Estimate

Both sides agreed on the cost estimate of the Project as described in Annex 2. Both sides agreed that the Project Cost Estimate should never be duplicated or released to any outside parties before signing all necessary contract(s) for the Project. Uzbekistan side understood that the attached Project Cost Estimate is not final and is subject to change.

#### 3-2. Confidentiality of the Specification of the Equipment

The Team handed a copy of the draft specifications of the equipment to the Uzbekistan side. Both sides agreed that this draft specification is confidential and should not be duplicated or released to any outside parties.

#### 3-3. Implementation of the Project

The Uzbekistan side understood that the procurement and installation of equipment would be made in two separate phases, as shown in Annex 3, due to budgetary system constraints on the Japanese side. The mobile scanners for road will be procured and installed first and stationary scanner for rail will follow.

#### 3-4. Undertakings by the Uzbekistan side

Both sides re-confirmed that the Uzbekistan side would allocate necessary budget for undertakings to be conducted in a timely manner. The list of undertakings is shown in Annex 4.

3-4-1. It is advised that the Uzbekistan side starts to arrange necessary documents and approvals for the foundation work at Galaba before tendering starts at August 2010. The Uzbekistan side assured that they would secure land and complete clearing the existent railroad as well as complete land-reclamation and leveling the site for stationary scanner by the end of May 2011. Japanese side requested the Uzbekistan side to submit the report of completion with



the substantial data of earth fill and land leveling of the site to the Japanese consulting firm and to JICA Uzbekistan Office.

END

**Annex 1 List of Components for the Project**

**Annex 2 Project Cost Estimate**

**Annex 3 Tentative Implementation Schedule**

**Annex 4 Major Undertakings to be taken by Each Government**

**Annex 5 Revised Draft Report**

### List of Components of the Project

The Project comprises of the following components to be covered by the Japan's Grant Aid.

#### 1. Procurement of the Equipment

##### (1) List of Equipment

| Site                                   | Description of Equipment                        | Q'ty | Capacity                         | Justification   |
|--|---|------|----------------------------------|---|
| Ayritom Customs Complex (Road)         | Large-sized X-ray Scanning Unit, mobile type    | 1    | X-ray Penetration: 240mm or more | On the border with Afghanistan, it is mutually acknowledged that the Customs here is the frontline of counterterrorism measures. Needs and relevance are identified from the information provided.  |
| Galaba Railway Check Point (Rail)      | Large-sized X-ray Scanning Unit, for rail cargo | 1    | X-ray Penetration: 300mm or more | The site being the intersection of the two rails from Afghanistan and Tajikistan, it is mutually acknowledged that the Check Point here is also the frontline of counterterrorism measures. Needs and relevance are identified from the information provided.   |
| Oybek Customs Check Point (Road)       | Large-sized X-ray Scanning Unit, mobile type    | 1    | X-ray Penetration: 240mm or more | On the border with Tajikistan, it is mutually acknowledged that the Customs here is another frontline of counterterrorism measures. Needs and relevance are identified from the information provided.   |
| Alat Customs Complex (Road)            | Large-sized X-ray Scanning Unit, mobile type    | 1    | X-ray Penetration: 240mm or more | Although the site is on the border with Turkmenistan and is located on the high-volume North-South corridor, the Team could not identify the urgent risk of terrorism due to lack of empirical information. Nevertheless, Alat was tentatively included in the Draft Report by the Ministry of Foreign Affairs of the Government of Japan for diplomatic reasons. |
| Khojadavlat Railway Check Point (Rail) | Large-sized X-ray Scanning Unit, for rail cargo | 0    | —                                | Need to improve Customs inspections is acknowledged, but arrangements for inspections being inadequate, few seizures have been made; the suitability of large-scale inspection equipment is low.  |

In addition to the above-mentioned, the Uzbekistan side requests to take a note, that the Uzbekistan side plans to install similar X-ray scanning equipment at all the customs points without an exception in order to comprehensively accomplish the main tasks of SCC. These efforts aim to prevent illegal smuggling of prohibited items, to assure the stability and security of the Republic of Uzbekistan and also the Central Asia region as a whole and to promote the development of trade and cooperation.

##### (2) Delivery, Installation, and Training

The above items of equipment will be procured and delivered to the Project sites, and installed at the designated location of each site by (a) Japanese supplier(s).

After the installation, the supplier or the manufacturer will conduct 1) guidance on initial operations, and 2) trainings on practical operations.

## **2. Consulting Service**

**The following services shall be rendered by a Japanese consulting firm.**

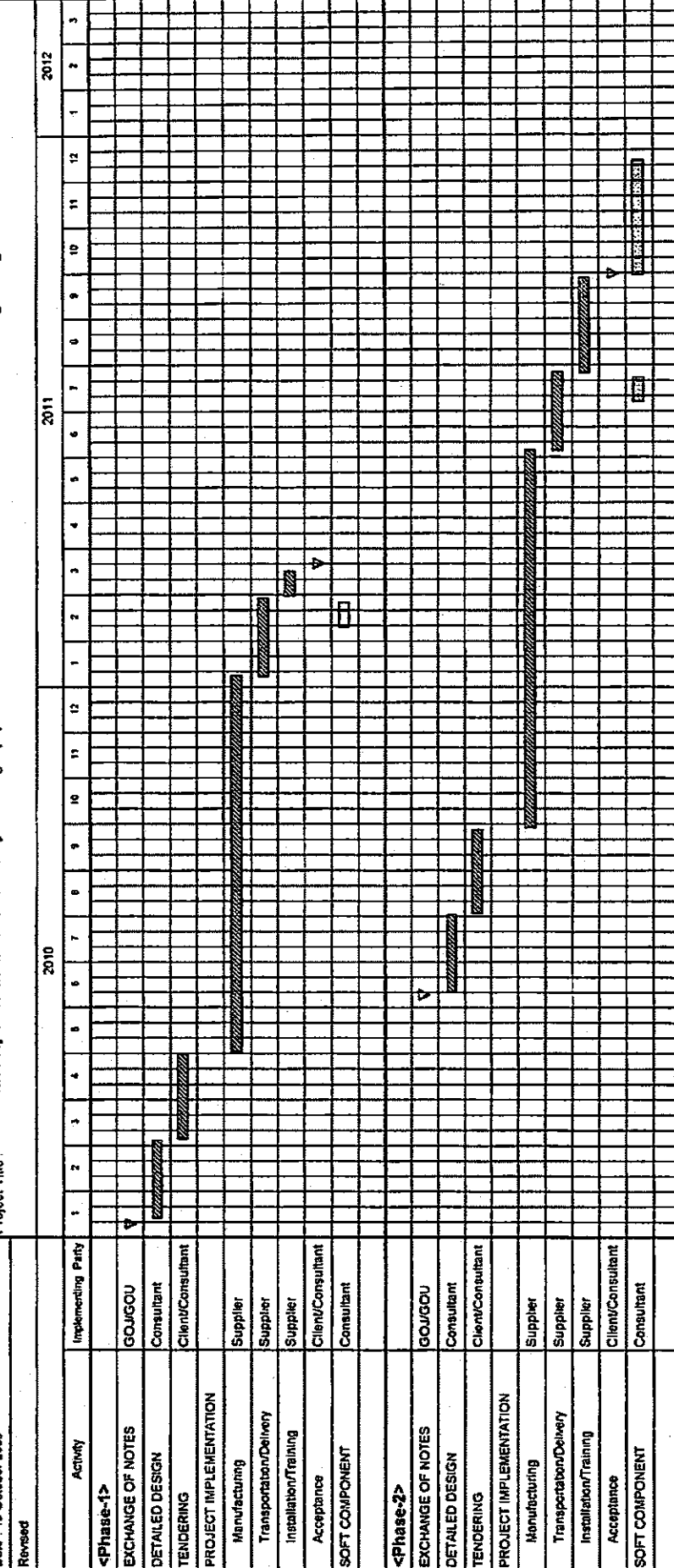
- Detailed design**
- Project supervision**
- Soft Component**

**Tentative Implementation Schedule (for reference only)**

Annex 3

Date : 19 October 2009  
 Revised

Project Title : The Project for the Installation of X-ray Scanning Equipment at the Check Points of Uzbekistan Borders with the Neighboring Countries



NOTE:

Above time schedule is for reference only, and the actual schedule is subject to approval of the GOJ.

LEGEND: GOJ: Government of the Republic of Uzbekistan

GOJ: Government of Japan

Client: State Customs Committee (SCC)

JICA: Japan International Cooperation Agency

Consultant: Japanese consulting company

Supplier: Japanese trading company

## Major Undertakings to be taken by Each Government (Facilities)

| NO  | Items   | To be covered by Grant Aid | To be covered by Recipient side |
|-----|---|----------------------------|---------------------------------|
| 1   | To secure land  |                            | •                               |
| 2   | To clear, level and reclaim the site when needed  |                            | •                               |
| 3   | To construct gates and fences in and around the site  |                            | •                               |
| 4   | To construct the parking lot  |                            | •                               |
| 5   | To construct roads  |                            |                                 |
|     | 1) Within the site  |                            | •                               |
|     | 2) Outside the site   |                            | •                               |
| 6-1 | To construct the building (except safeguard facilities)   |                            | •                               |
| 6-2 | Safeguard facilities associated with operation of X-ray scanning equipment  | •                          |                                 |
| 6-3 | Foundation work for X-ray scanning equipment and safeguard facilities   |                            | •                               |
| 7   | To provide facilities for the distribution of electricity, water supply, drainage and other incidental facilities |                            | •                               |
|     | 1)Electricity   |                            |                                 |
|     | a.The distributing line to the site   |                            | •                               |
|     | b.The drop wiring and internal wiring within the site   |                            | •                               |
|     | c.The main circuit breaker and transformer  |                            | •                               |
|     | 2)Water Supply  |                            |                                 |
|     | a.The city water distribution main to the site  |                            | •                               |
|     | b.The supply system within the site ( receiving and/or elevated tanks )   |                            | •                               |
|     | 3)Drainage  |                            |                                 |
|     | a.The city drainage main ( for storm, sewer and others ) to the site  |                            | •                               |
|     | b.The drainage system ( for toilet sewer, ordinary waste, storm drainage and others ) within the site             |                            | •                               |
|     | 4)Gas Supply  |                            |                                 |
|     | a.The city gas main to the site   |                            | •                               |
|     | b.The gas supply system within the site   |                            | •                               |
|     | 5)Telephone System  |                            |                                 |
|     | a.The telephone trunk line to the main distribution frame / panel (MDF) of the building                           |                            | •                               |
|     | b.The MDF and the extension after the frame / panel   |                            | •                               |
|     | 6)Furniture and Equipment   |                            |                                 |
|     | a.General furniture, electric appliances  |                            | •                               |
|     | b.Project equipment (X-ray Scanning Equipment and its accessories)  | •                          |                                 |



## APPENDIX-6 SOFT COMPONENT PLAN

### 1 Background of the Soft Component Plan

In connection with the large-sized X-ray scanning equipment to be procured through the grant aid scheme of the Government of Japan for the Project for the Installation of X-Ray Scanning Equipment at the Check Points of Uzbekistan Borders with the Neighboring Countries in the Republic of Uzbekistan, Customs officials at the sites where the equipment is to be installed will be basically capable of operating and managing the equipment, because technicians dispatched by the equipment makers will have provided guidance for the start of operation and initial training in the use of the equipment. Nevertheless, although the X-ray equipment is to be organically integrated with the existing unified information system in order to further gain benefits from use of the equipment, there being no large-sized X-ray scanning equipment in Uzbekistan at this time, the country lacks adequate technology for creating the working environment for such a linkage and integrating the X-ray equipment with the existing system. Therefore, in order to provide assistance to assure a smooth start-up when Uzbekistan begins utilizing the equipment, and to ensure sustained benefits from the project, the following technical support is necessary.

- Improvement of customs works (incorporation into the existing unified information system)
- Operation of large-sized X-ray scanning equipment (operation, maintenance and care)
- Improvement of image analysis techniques (skills in detecting illegal items and materials)

#### (1) Improvement of Customs Works

At the Customs offices where the large-sized X-ray scanning equipment is to be installed, images (image data) obtained by scanning will be examined. If the results of this examination are made part of a database that can be shared and used by Customs officials throughout the country, the accuracy of inspection and detection of suspicious or illegal items and materials can be improved. As the unified information system of the SCC has the purpose of unification of Customs work, if data originating in the use of the X-ray scanning equipment would be incorporated in it as a subsystem, it will be possible to improve the efficiency and effectiveness of Customs work on a national scale. However, since this would be the first time that large-sized X-ray scanning equipment is used in Uzbekistan, it would be difficult for the SCC to develop this subsystem on its own. Therefore, technical support will be needed so that the results of inspection using the large-sized scanning equipment can be incorporated in the unified information system. If the system is to be thus improved, technical assistance will be needed so that arrangements can be made so that inspection can be made to determine if there has been a change of the vehicle chassis

as well as frame of a container, or the form (shape) of the freight carried between times of entering and exiting the country, that will mean a much stronger arrangement for inspection of transit freight.

## (2) Operation of Large-sized X-ray Scanning Equipment

Concerning the management of large-sized X-ray equipment after installation, although the installation period is not long, at that time the manufacturer's technical representative will provide guidance for start-up operation and basic equipment management requirements. Beyond this, however, to assure the sustainability of Customs work performed using the equipment, it will be necessary to have an "inspection manual" available at each place where the equipment has been installed, because of the SCC practice of rotating personnel at intervals of two years. It will therefore necessary to provide the SCC with advice so that the manual can be prepared. Of particular importance in this regard is that Uzbekistan is committed to observing the ICRP60 standards but as specific operation procedures in Uzbekistan have not yet been established, it will be necessary to write the manual while paying attention to relevant institutional or administrative arrangements.

## (3) Improvement of Image Analysis Techniques

The technology of analyzing images can be classified as either "basics" or "applications." The basics can be learned through instruction provided by specialists provided by the equipment manufacturer, at the time that the equipment is acquired. What this means is training in the use of software (to obtain the outline of forms, adjust density ranges, reverse black and white, zoom, etc.) for processing the raw images (images that show by change of color the change in intensity of X-rays resulting from differences in penetrability). Applications, on the other hand, refers to identifying materials by inspection of the processed images, determining if there is any discrepancy relative to the accompanying documentation, or discovering any change that has been made in the frame of a vehicle or container. That is, "applications" means applying the basics, and because hands-on skills are required, training in applying the basics must be done by a veteran technician.

## 2. Objectives of the Soft Component

The objectives of the soft component are as follows.



Table 1 Soft Component Objectives

| Item  | Objective  |
|---|--|
| Improvement of Customs works                      | Contributing to efficient, effective Customs work on a national basis  |
| Operation of large-sized X-ray scanning equipment | <ul style="list-style-type: none"> <li>• Utilizing the features of large-sized scanning</li> <li>• Establishing arrangements and methods of operation that assure safety from radiation</li> </ul> |
| Improvement of image analysis techniques          | Improvement of techniques for detection of contraband  |

### 3. Effects of the Soft Component

The effects of the soft component that can be anticipated are as follows.

Table 2 Soft Component Effects

| Item  | Effect  |
|---|---|
| Improvement of Customs works                      | Standardization of Customs data including that for discovery of contraband; facilitating planning of Customs work   |
| Operation of large-sized X-ray scanning equipment | <ul style="list-style-type: none"> <li>• Enabling efficient use of the equipment</li> <li>• Thorough-going assurance of the safety from radiation of Customs examiners, related employees, and workers in the general area</li> </ul> |
| Improvement of image analysis techniques          | Improved accuracy of Customs inspections (detection of contraband, and of smuggled goods)   |

### 4. Method of Confirming the Degree of Effects Achieved

Indicators that can be used to gauge the degree that the expected effects are achieved are as follows.

Table 3 Gauging Extent of Effects

| Item  | Effect   | Indicator   |
|---|--|---|
| Improvement of Customs works                      | Standardization of Customs data including that for discovery of contraband; facilitating planning of Customs work                                    | Records transferred from each Customs station to the SCC head office for archiving (monitoring the increase)          |
| Operation of large-sized X-ray scanning equipment | Enabling efficient use of the equipment, assurance of safety from radiation of Customs examiners, related employees, and workers in the general area | Comparison of inspection records before and after adoption of manuals (measuring the gains in efficiency of time use) |
| Improvement of image analysis techniques          | Improved accuracy of Customs inspections (detection of contraband, and of smuggled goods)  | Number of images captured; number of illegal goods or material seized (monitor the expected increase)                 |

## 5. Soft Component Activities

Soft component activities would be composed of the following three.

### (1) Improvement of Customs Works

The soft component would contribute to the improvement of Customs work by providing guidance on how to incorporate operation of large-sized X-ray scanning equipment with the existing unified information system, and on how to combine preliminary information of goods with information obtained by scanning. Specifically, the SCC would create what might be called a working group on sharing of X-ray scanning information with the unified information system, and the soft component activities would include guidance and advice provided to this working group on inspections, analysis and design. These activities would be implemented by the IT Department at the SCC head office. Considering that the large-sized X-ray equipment will not be installed at all Customs stations, and that there is a limitation in that data transmission would be at 128kbps, soft component support would go up to the design stage.

### 1) Study

Nature of activities: A study would be made of Customs tasks that would be required by the functional characteristics of the equipment, and the outlook for effective use of the unified information system. The study would comprise the following.

- By examination of manuals for use of the equipment, determination of the data that are necessary prior to scanning and the data to be provided after scanning
- Assuming that the equipment has been installed, identification of problems that may be encountered in Customs work (e.g., related to equipment operation, data flows, task assignments, etc.)
- Study of the data that are to be incorporated in the unified information system
- Study of future plans for acquisition of large-sized X-ray equipment

Implementation resource: system engineer

Period, 1 week (one person)

Effects: By clarifying the work entailed by acquisition of the equipment and through examination of existing work tasks and performance, the soft component will ascertain the nature or types of information necessary for and to be gained by scanning operations.

### 2) Analysis

Nature of activities: Presence at the time of actual operation, to demonstrate by performance and to oversee the analysis tasks. The tasks are to be as follows.

- Analysis of the matching of before-and-after X-ray scan information with Customs work
- Analysis of work performed by Customs officers
- Analysis of information to be incorporated in the unified information system (with consideration given to future planning regarding acquisition of large-sized X-ray scanning equipment)

Implementation resource: system engineer

Period, 1 week (one person)

Effects: By ascertaining the Customs tasks involving use of the scanning equipment, and determining the flow of information, it will be made possible to develop a plan for staffing and anticipate future planning.

### 3) Design

Nature of activities: Compilation of operation manual(s) so as to ensure effective operation after use of the equipment begins. Consideration is to be given to the possibility of future acquisition of X-ray scanning equipment for use at other Customs check points, in that a manual for management of before-and-after information will be prepared. The manuals are to be as follows.

- Manual of Customs tasks

- Manual for X-ray scan information and the unified information system (For present and possible future use)

Implementation resource: system engineer

Period, 2 weeks (one person)

Effects: A foundation for effective work flow will be established by the use of the manuals as a matter of official Customs policy.

## (2) Operation of Large-sized X-ray Scanning Equipment

The manuals will be prepared with an emphasis given to assuring safe protection from radiation, and equipment operation will be required to comply with the manual. Specifically, a working group at the IT Department, which may be called the “large-sized X-ray equipment operation safety working group” or something similar will be appointed, and the soft component personnel will work with its members on studies, analysis, design and validation. Validation would be provided through supervision by the SCC. Separate manuals will be prepared for inspection of vehicle-transported freight and rail-transported freight.

### 1) Studies

Nature of activities: Studies will be made regarding operation of the equipment according to the requirements set forth in the manuals, and the safety of and protection from radiation. Uzbekistan’s legal requirements regarding protection from X-rays, and the ICRP standard, will be studied. The studies are to be on the following subjects.

- Actual operation of X-ray scanning equipment according to manual requirements
- The relationship between X-rays and operations
- ICRP60 and Uzbekistan laws and regulations

Implementation resource: X-ray freight scanning specialist

Period, 1 week (one person)

Effects: The most important aspects of operation of the large-sized scanning equipment will be ascertained, and basic aspects concerning safety assurance will become known.

### 2) Analysis

Nature of activities: Presence at the time of actual operation, to analyze and assist in performance of X-ray scanning. The tasks are to be as follows.

- Analysis of safety management in connection with X-ray scanning
- Analysis of work by X-ray equipment operators, and relevant aspects of safety management
- Analysis from the viewpoint of domestic laws and regulations, and the ICRP

Implementation resource: X-ray freight scanning specialist

Period, 1 week (one person)

Effects: Determination of specifics of management and operation of the X-ray scanning equipment. Confirmation of safety-related aspects of large-sized X-ray scanning equipment operation, and determination of personnel requirements and manual design policy.

### 3) Design

Nature of activities: Completion of the management and operation manuals for the large-sized X-ray scanning equipment, to ensure effective use of said equipment. One manual is to be provided for road vehicle use, and one manual is to be provided for railcar use.

Implementation resource: X-ray freight scanning specialist

Period: 1 week (one person)

Effects: A basis for safe and effective performance of work using the equipment, and management of said equipment, will be ensured by use of the manuals as a guide.

### 4) Validation

Nature of activities: Undertaking of actual operation of the large-sized X-ray scanning equipment in accordance with the appropriate manuals. Customs officials assigned to operation of the equipment will use the equipment in the presence of the Consultant and persons from the IT Department. The results of the operation will be evaluated and the effectiveness and safety of the operation will be confirmed. This will be done for both vehicle-transported freight and rail-transported freight.

## (3) Improvement of Image Analysis Techniques

Training in analysis of X-ray images will be done by an expert in that field, with the purpose of improving ability to analyze images in order to contribute to improved detection of contraband. Work will also involve building a database system for the maintenance of scanned images. Training will be done by assembling at a single location all Customs officials assigned to this work. A working group, which might have such a name as “the working group for the image database,” is to be appointed at the IT Department and on an as-required basis a joint effort at work as well as guidance would be provided in connection with establishing the image database.

### 1) Training

Nature of activities: Training through lectures and supervised hands-on trial operation as well as paper examinations, relate to techniques of analyzing X-ray scanned images. The training subjects are to be as follows.

- International trade and the WCO
- X-ray scanning equipment and the detection of smuggled goods and materials

- The principles of X-ray scanning equipment, and imagery
- Spatial images from scan data
- Methods of detecting contraband
- Methods of concealing contraband
- Smugglers' measures to counter X-ray inspection

Implementation resource: X-ray image analysis specialist

Period, 3 weeks (one person), two times

Effects: Improvement of ability to analyze images, and detect contraband.

## 2) Forming an Image Database

Nature of activities: Guidance in the archiving of image data obtained from X-ray scanning, and methodology for building a database. Subjects are to include the following.

- Methods for deciding on selection of data for preservation
- Categories of archived data, database contents list, data tags

Implementation resource: system engineer

Period, 1 week (one person)

Effects: Establishment of the database will provide the basic data required for improving technical skills in analyzing images.

## 3) Utilization of the Image Database

Nature of activities: Guidance on the use of the image database. Subjects covered are to be as follows.

- Instruction in methods of using the database for training
- Creation of statistical data from the image database, and its use

Implementation resource: system engineer

Period, 1 week (one person)

Effects: Training in the use of the image database will result in improvement of the ability to analyze image data. The combined use of image data and information about past seizures will contribute to improvement of techniques for detection of contraband even at Customs offices having no x-ray equipment.

## 6. Means of Obtaining the Implementation Resources for the Soft Component

The equipment that is proposed to be supplied under Japan's grant aid scheme is large-sized X-ray scanning equipment; as this equipment has a very specialized use, so that adequate study not only of the equipment proper at the time of basic design but also of its application (compatibility with Customs work; assurance of safety, etc.) is necessary for

determination of the equipment specifications. Therefore, the soft component must be provided so as to exploit available existing know-how and experience. For the actual supply of the soft component, therefore, the required services to be provided under the supervision of the Consultant will be that of one systems engineer for work in connection with modification of Customs work and work on the database in connection with improvement of image analysis technology, one expert in operation of large-sized X-ray scanning equipment for operation of the equipment, and one expert in X-ray scan images for training on behalf of improvement of image analysis technology. Interpretation services will be required as it is not practical to provide training in English.

### 7. Schedule for Implementation of the Soft Component

The schedule for implementation of the soft component is to be as follows.

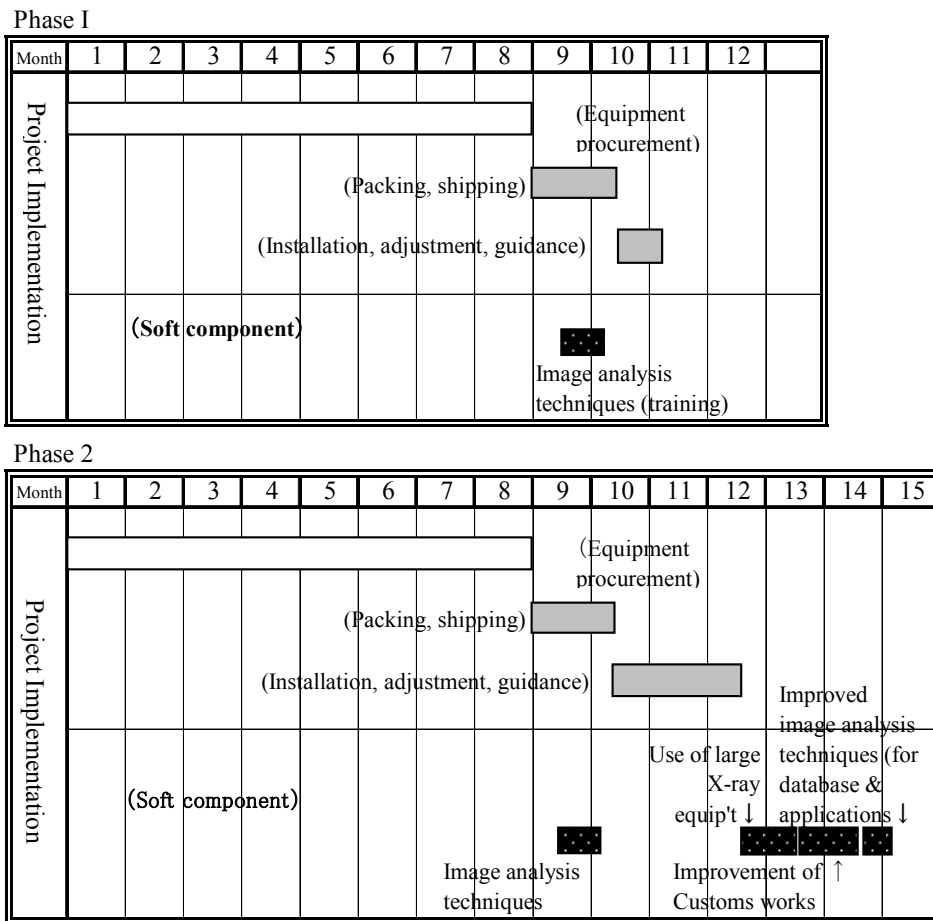


Fig. 1 Soft Component Schedule

## 8. Results of the Soft Component

The results expected from the soft component are as follows.

Table 4 Soft Component Results

| Item  | Results  |
|---|--|
| Improvement of Customs works                      | <ul style="list-style-type: none"><li>• Operation manuals for Customs</li><li>• Design specifications for the combined X-ray scan data and the unified information system (present and future phases)</li><li>• Minutes of meetings</li></ul>  |
| Operation of large-sized X-ray scanning equipment | <ul style="list-style-type: none"><li>• Manual for operation of large-sized X-ray scanning equipment (vehicle-transported freight inspection)</li><li>• Manual for operation of large-sized X-ray scanning equipment (rail-transported freight inspection)</li><li>• Minutes of meetings</li></ul> |
| Improvement of image analysis techniques          | <ul style="list-style-type: none"><li>• Training schedule (contents); roster of trainees</li><li>• Manual for database use</li><li>• Minutes of meetings</li></ul>   |

Upon completion of work the Consultant will draft and submit a Report on Completion of the Soft Component.

## 9. Responsibilities of the Counterpart Implementing Agency

It will be necessary for the SCC to establish three working groups in the IT Department, in connection with the soft component. These working groups would be the following (tentative names)

- Sharing of X-ray scanning information with the unified information system
- Large-sized X-ray equipment operation safety working group
- Image database

Someone from the IT Department is to be appointed as in charge of each working group; selection of the group members is to be by the IT Department as it sees fit. Working group members may work together with the Consultant when so required by the content of the soft component activities.



It is necessary for the SCC, through the working groups, to make thorough-going efforts at assuring safety at times when the large-sized X-ray equipment is in operation. Further, in connection with the image database, the SCC must endeavor to accumulate accurate image data after the start of operation of the equipment, to utilize the opportunities presented by training, and promote wide understanding of what it is undertaking.



## APPENDIX-7 REFERENCES

|    | Title  | Q'ty | Issuing Agent  | Contents  |
|----|--|------|--|---|
| 1  | Answers to the Questionnaire   | 1    | State Customs Committee  | A set of answers to the questions raised by the Preparatory Study Team of JICA (2009)       |
| 2  | Business Strategy of the State Customs Committee of the Republic of Uzbekistan for 2007-2010   | 1    | State Customs Committee  | Plan of activities to be taken by the State Customs Committee (2007)                        |
| 3  | The Concept of Information Technology Policy of the State Customs Committee  | 1    | State Customs Committee  | Strategic plan for introducing IT system in the customs works (2006)                        |
| 4  | Law of the Republic of Uzbekistan on the State Customs Committee   | 1    | Republic of Uzbekistan   | Statutory document for establishing the State Customs Committee (1997)                      |
| 5  | Resolution of the Cabinet of Ministers No.274 "On Further Perfection for Control Over Entrance, Departure and Transit of the Foreign Motor Transportation Means"     | 1    | Republic of Uzbekistan   | Plan to adopt mechanized inspection system at the checkpoints of Oybek and Andarkhan (2008) |
| 6  | Presidential Decree PP-1103 "On measures to reconstruct and develop the Uzbekistan National Highways in 2009-2014"   | 1    | Republic of Uzbekistan   | Plan to reconstruct and develop the Uzbekistan National Highways in 2009-2014 (2009)        |
| 7  | Integrated Customs Information System  | 1    | State Customs Committee  | Description of the IT system to be adopted for customs inspections (2009)                   |
| 8  | The Basic Tendencies of Development of a Narcosituation in the Republic of Uzbekistan in 2008 – Measures undertaken by Uzbekistan in Struggle against Narcoexpansion | 1    | National Information and Analysis Centre for Drug Control (NCDC) | Current situation of transportation and abuse of narcotics (2008)                           |
| 9  | Assistance to Uzbekistan for the Resumption of Activities at the Hayraton Checkpoint on the Uzbek-Afghan Border  | 1    | United Nations Office on Drugs and Crime (UNODC)                 | Project summary of UNODC (2009)   |
| 10 | Uzbekistan State Customs Committee – Non Intrusive Inspection Systems Programme Definition   | 1    | World Customs Organization                                       | Recommendation for use of non-intrusive inspection technique at customs checkpoints (2008)  |

(Note) Only major documents are listed. Those already collected through the Preparatory Survey (Jan. 2009) are not included in the list.

