

Country Name	Project for the Installation of X-ray Scanning Equipment at the Check Points of Uzbekistan Borders with the Neighboring Countries (Phase I) (Phase II)
Republic of Uzbekistan	

I. Project Outline

Background	<p>As Uzbekistan is a landlocked county in Central Asia, the county was subject to inflow of various illegal goods and materials that enter from or via neighboring countries. The government of Uzbekistan designated a number of border customs check points as high-risk points, and adopted policy measures to control traffic in drugs and arms.</p> <p>On the other hand, in keeping with the increasing flows of goods accelerated by improvement of the transport network within the Central Asia Region, the importance of rapid customs clearance at border crossings had risen. Differences in custom clearance system and insufficient border infrastructure in the neighboring countries caused congestion of trucks carrying freight accumulation of rail freights at customs check points. With regard to the customs in Uzbekistan, the issues with highest priority were unification of the relevant laws and regulations, greater transparency of customs procedures, reduction of the time needed for customs clearance of freights, detection of illegal and smuggling goods, and improvement of the rate of duty collection.</p> <p>In March 2008, the World Customs Organization (WCO) recommended to the State Custom Committee (SCC) of Uzbekistan that in order to improve the nonintrusive inspection arrangements by installation of X-ray scanning equipment at the border check points with high risk to inflow illegal goods. Under those situations, SCC planned to install lager scale X-ray scanning equipment at 16 major border check points in the country in order to conduct efficient and effective custom inspections as well as to strengthen detection of illegal goods and materials, such as drugs and arms flowing from the neighboring regions.,</p>				
Objectives of the Project	To speed up customs procedures and improve the X-ray inspection rate by installation of large-sized X-ray equipment for inspection of freight and vehicles at high-risk border check points near the neighboring countries and provision of technical training for customs officers, thereby contribute to establishment of efficient transport networks.				
Contents of the Project	<div>1. Project Site: Ayritom Customs Complex (Road) (Surkhandarya Region), Galaba Railway Check Point (Railway) (Surkhandarya Region), Oybek Customs Check Point (Road) (Tashkent Region)</div> <div>2. Japanese side</div> <div><div>(1) Procurement and installation of equipment</div><div>➤ Large-sized X-ray Scanning Unit (mobile type) x 2 units</div><div>➤ Large-sized X-ray Scanning Unit (for rail cargo) x 1 unit</div></div> <div>(2) Technical Assistance (soft component of Grant Aid)</div> <div>➤ Technical training for customs officers on operation of X-ray scanning equipment</div> <div>3. Uzbekistan side:</div> <div>(1) Groundwork for installation of large size X-ray scanning equipment for rail freights</div> <div>(2) Embankment and land preparation at the project sites</div> <div>(3) Registration of vehicle for mobile large size X-ray</div>				
Ex-Ante Evaluation	2010	E/N Date	(Phase I) March 1, 2010 (Phase II) September 16, 2010	Completion Date	October 22, 2012
		G/A Date	(Phase I) N.A. (Phase II) September 16, 2010		
Project Cost	(Phase I) E/N Grant Limit / G/A Grand Limit: 467 million yen, Actual Grant Amount: 329 million yen (Phase II) E/N Grant Limit / G/A Grand Limit: 360 million yen, Actual Grant Amount: 293 million yen				
Executing Agency	The State Custom Committee (SCC)				
Contracted Agencies	Consultant: UNICO International Corporation Contractor: Marubeni Corporation, Sojitz Aerospace Corporation				

II. Result of the Evaluation

<Constraints on Evaluation>

- In order to verify effects of the X-ray scanning equipment installed by the project, the ex-post evaluation attempted to collect supplementary quantitative data such as the number of cases that illegal goods detected including smuggled machines and narcotics and the number of containers/truck cargos for customs clearance procedures could be reasonable. However, confidentiality of those data, SCC did not provided such quantitative data. Therefore, the project effect on improvement in detection of illegal goods was mainly verified based on the qualitative information through interviews with the SCC officers.

<Special perspectives considered in the ex-post evaluation>

- In the ex-ante evaluation, the two project impacts such as (i) contribution to social stability and (ii) establishment of efficient transport networks were mentioned. However, as a notion of “social stability” is vague, difficult to measure “social stability”, and there are many social and economic factors related to “social stability”, this ex-post evaluation exclude the impact of (i) contribution to social stability.

1 Relevance

<Consistency with the Development Policy of Uzbekistan at the time of ex-ante and ex-post evaluation>

This project was consistent with Uzbekistan’s development policy of “to modernize customs system in Uzbekistan” as set forth in the policy documents including “Business Strategy of the State Customs Committee of the Republic of Uzbekistan (2007-2010)” and “the Investment Programs of Uzbekistan Government (2010-2016)”.

<Consistency with the Development Needs of Uzbekistan at the time of ex-ante and ex-post evaluation>

This project met the development needs of Uzbekistan to improve the nonintrusive inspection arrangements at border check points by

introduction of X-ray scanning equipment since it was recommended by WCO at the time of both ex-ante and ex-post evaluation.

<Consistency with Japan's ODA Policy at the time of ex-ante evaluation>

This project was consistent with Japan's Country Assistance Program for Uzbekistan (established in September 2006) to prioritize (i) support for human resource development and institutional building to facilitate a market economy and develop economy and industry, and (ii) promotion of intra-regional cooperation.

<Evaluation Result>

In light of the above, the relevance of the project is high.

2 Effectiveness/Impact

<Effectiveness>

The project has partially achieved its objectives at the time of ex-post evaluation. The radiographic (X-ray) inspection rate of truck cargo including transit freights at the Ayritom Customs Complex reached to 76.4% in 2015 and 100% in 2016, and the rate of railway containers at the Galaba Railway Check Point reached 100% in 2015 and 72.3% in 2016. These two customs check points either fully met the target value (100%) in 2015 or 2016. However, the X-ray scanning equipment installed at the Ayritom Customs Complex has not been operated since October 2016 due to breakdown of accelerator. It was repaired by own funds of SCC and started operating by February 7, 2017. On the other hand, the radiographic inspection rate at the Oybek Customs Check Point was low as it was 36% in 2015 and 0% in 2016 because the equipment has been in non-operable condition since July 16, 2015 due to a problem of accelerator which may have been caused by normal wearing off (see Table 1). According to the interview with SCC, the inspection time per truck cargo (or container) was 7-10 minutes at all three target customs check points to truck cargo and freight train. According to the interviews with the customs officers of the Oybek Customs Check Point, the illegal (non-declared) goods for the amount of Uzbek Soum 146 million¹ were revealed in 2015 by using the X-ray scanners installed by the project. Other 2 check points also confirmed that illegal goods were frequently detected by using X-ray scanners. Although no quantitative data was available due to their confidentiality, it can be reasonably assumed that the project has brought about a positive effect on increase in the number of cases of illegal goods detected at the target customs check points.

Table 1: Operational Status of X-ray Equipment

Equipment	Location	Status of Operation
Large-sized X-ray Scanning Unit (mobile type)	Ayritom Customs Complex (Surkhandarya Region)	<ul style="list-style-type: none"> Start of operation: August 1, 2011. 2014: Partially operational 2015: Mostly operational 2016: Fully operational until October 3, 2016 (microcircuit powering accelerator was burnt out). 2017: Resumed full operation on February 7.
Large-sized X-ray Scanning Unit (mobile type)	Oybek Customs Check Point (Tashkent Region)	<ul style="list-style-type: none"> Start of operation: April 1, 2011. 2014: Partially operational 2015: Partially operational (The equipment has been in non-operable condition since July 16, 2015 due to a problem of accelerator). 2016: Non-operational
Large-sized X-ray Scanning Unit (for rail cargo)	Galaba Railway Check Point (Surkhandarya Region)	<ul style="list-style-type: none"> Start of operation: November 13, 2012. 2014: Partially operational 2015: Fully operational 2016: Fully operational.

Source: The State Custom Committee (SCC).

In addition to provision of X-ray equipment, the project conducted a technical training for customs officers on operation of X-ray equipment and supported to establish a database on X-ray inspection images as a soft component of the project. It was expected that the database would have been shared by other customs offices. However, at the time of ex-post evaluation, the database on X-ray inspection images currently were stored separately at each customs check point and they are not shared by other customs office since no unified database system has been created yet. Currently, SCC has been working on establishment of unified database system.

<Impact>

The project has a positive impact on increase in flow of goods. For example, 100-150 containers (2-3 freight trains) used to pass through the Galaba railway station in a day before the project, but currently 200-250 containers (4-5 freight trains) pass through the station in a day due to reduction in the time required for customs inspection after installation of X-ray scanners by the project.

No negative impact on the natural environment was observed and no land acquisition and resettlement of people were taken place.

<Evaluation Result>

In light of the above, a certain effect of the project has been observed. Therefore, the effectiveness/impact of the project is fair.

Quantitative Effects

Indicator	Baseline 2009 Baseline year	Target 2015 3 years after completion	Actual 2012 Completion year	Actual 2013 1 year after completion	Actual 2014* 2 years after completion	Actual 2015 3 years after completion	Actual 2016** Ex-post evaluation
Indicator 1: Radiographic inspection rate of large scale container/truck cargo including transit freight (%)							
a) Ayritom Customs Complex	0	100	N.A.	N.A.	43.9	76.4	100
b) Oybek Customs Check Point	0	100	N.A.	N.A.	13.2	36.0	0
c) Galaba Railway Check Point	0	100	N.A.	N.A.	44.8	100	72.3
Indicator 2: Time for custom clearance per track cargo (minutes)							
a) Ayritom Customs Complex	180-300****	20-30	N.A.	N.A.	N.A.	N.A.	7-10*****
b) Oybek Customs Check Point	180-300****	20-30	N.A.	N.A.	N.A.	N.A.	7-10*****
(Reference)							
c) Galaba Railway Check Point***	-	-	N.A.	N.A.	N.A.	N.A.	7-10*****

Source: SCC

Note 1: *The actual date for 2014 was for four months from September to December 2014.

Note 2: **The actual data for 2016 was for six months from January to June 2016.

Note 3: *** Before the project, since there was insufficiency of personnel, inspections for containers from Afghanistan and Tajikistan were conducted on a random basis.

¹ JPY 6.57 million converted by JICA's foreign currency translation rate in December 2015 (UZS1=¥0.045).

Note 4: **** The time for custom clearance, including time for manual opening door inspection.

Note 5: ***** The inspection time per cargo truck or railway container by using X-ray scanner.

3 Efficiency

The outputs were produced as planned and both the project cost and project period were within the plan (ratio against plan were 75% and 89% respectively). Therefore, the efficiency of the project is high.

4 Sustainability

<Institutional Aspect>

SCC of Uzbekistan is responsible for operation and maintenance (O&M) of the equipment installed by the project. While, the customs offices at each check point are in charge of operation and daily maintenance of the X-ray scanners and management of the image database, the IT Department of SCC conducts periodic maintenance of the X-ray scanners together with the authorized personnel of the manufacturer. Each of the three target customs check points has deployed four customs officers for the O&M of the X-ray scanners and the number of staff has been sufficient for the required assignment. Among three units of large-sized X-ray scanners procured by the project, two units of mobile type were manufactured by the German company and the one unit for railway was manufactured by the UK company. SCC has a maintenance contract on another X-ray scanner installed near Galaba Railway Check Point funded by the US government for the years of 2016 and 2017. If necessary, SCC is supposed to ask for technical assistance under this contract to X-ray scanner installed by the project. On the other hand, SCC has no maintenance contract with any German manufacturer, and calls their assistance in case where SCC is not able to fix breakdowns and problems. These two manufacturers also supplied number of small and medium-sized X-ray scanners in Uzbekistan. Therefore, their branch office in Uzbekistan has been providing the maintenance services for their products.

<Technical Aspect>

The customs officers who operate the X-ray scanners have sufficient skills for daily operation and maintenance with using the manuals, however they lack skills for diagnostics and repair of the equipment. In such case, they ask for technical assistance of the branch office of manufacturers. However, they have not been able to repair non-operational two units of X-ray scanners at Ayritom Customs Complex and Oybek Customs Check Point (manufactured by German company) for a while because no qualified technical experts specialized in diagnostics and repair of large-sized X-ray scanning units are allocated in their branch office in Uzbekistan as the number of the existing large X-ray scanners of their products in Uzbekistan is limited. This posed an impediment for prompt recovery of non-operational two X-ray scanners. One of them (namely in Ayritom) was repaired only after 5 months after it was broken, while another in Oybek is still in the process of repairing. The SCC has been negotiating with the manufacturer on this issue. SCC has some training on radiation security and also general basic trainings on operation of X-ray scanners provided by other donors.

<Financial Aspect>

The detailed financial information was not provided by SCC including annual O&M budget for X-ray scanners installed by the project due to the high confidentiality of SCC operation. However, during the interview, SCC recognized that the sufficient amount of budget has been allocated to daily proper operation and maintenance of the inspection equipment including the equipment installed by the project. Own funds of SCC were used to repair of the X-ray Scanner in Ayritom and currently SCC is in process of repairing the second X-Ray Scanner in Oybek.

<Current Status of Operation and Maintenance>

As mentioned above, out of three large-sized X-ray scanning units equipment one was repaired and one is in process of repair. SCC and the staff in charge at the target customs check points confirmed that spare parts and consumables were procured on timely basis. However, SCC could not purchase genuine parts made by the manufacturer which is not easily available in the country.

<Evaluation Result>

In light of the above, some problems have been observed in terms of the technical and current status of operation and maintenance aspects of the executing agency. Therefore, the sustainability of the project effect is fair.

5 Summary of the Evaluation

The project has partially achieved its objectives. The target value for the radiographic inspection rate was met by two customs check points. Also the inspection time per truck cargo was considerably shortened. On the other hand, no unified database system for X-ray inspection images has been established so far, hence the database was only utilized separately at each customs check points.

As for sustainability, some problems have been observed in terms of the technical and current status of operation and maintenance aspects due to limited maintenance service by the manufacturer. At the time of ex-post evaluation, one out of three X-ray equipment was not operational. On the other hand, the sufficient number of customs officers were assigned for O&M of each X-ray equipment and they have been conducted their expected O&M activities under the limited circumstances.

Considering all of the above points, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations to executing agency:

- In order to continue the project effects as well as to improve their sustainability, SCC should consider a possibility of making a maintenance contract of large-sized X-ray equipment with the manufacturer to avoid delays in repairing of broken equipment. For this purpose, SCC also needs to discuss the additional budget with the Ministry of Finance for the above mentioned maintenance contract. Or SCC shall be advised to preserve an emergency repair fund to cover such kind of repair and maintenance expenses.
- In order avoiding the problems with the diagnostics and repair of equipment, SCC shall consider unification of specification for the hi-tech equipment throughout the country, which provides sufficient economic interest for the original equipment manufacturer (OEM) to deploy necessary staff in Uzbekistan for rendering diagnostics and repair services.

Lessons learned for JICA:

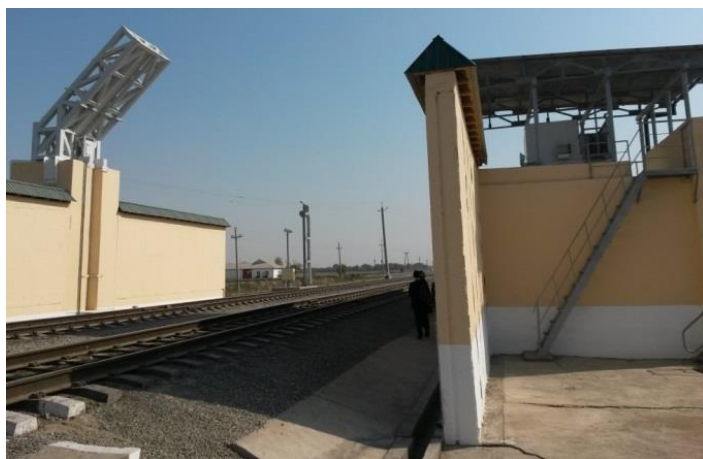
- Some statistics related with the SCC's operations are categorized as confidential/internal use only. In the case where it is assumed that such data with high confidentiality will be necessary to verify project effects at ex-post evaluation, it is required to discuss with relevant agencies about possibility to provide data with high confidentiality and to agree upon provision of the data in the Record of Discussions (R/D) at the time of project preparation. Or, in the case where agreement of the data provision cannot be concluded with the relevant

agencies, it is necessary to consider alternative data/ information at the time of project preparation.

- Before supply of the highly sophisticated technological equipment, the commitments shall be received from manufacturer on accessibility of the diagnostics and repair in case of troubles.



Large truck-mounted X ray Scanner at Oybek, at Uzbek-Tajik border
(Out of operation)



X-Ray scanner at the Galaba Station, near Uzbek-Afghan border.
(Fully operational)



Large truck-mounted X-ray Scanner at Ayritom, at Uzbek-Afghan border.
(was out of operation from October 3, 2016 to February 7, 2017.
Currently fully in operation.)

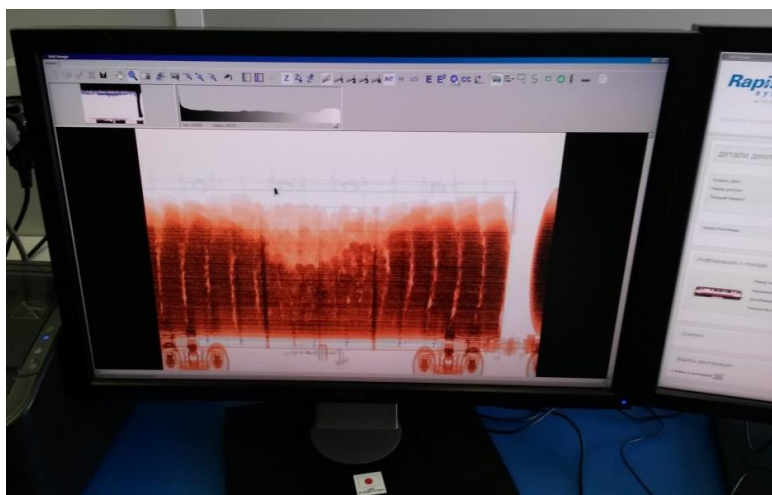


Image of agricultural products in the rail car scanned by the X-ray scanner at the Galaba Station