

Republic of Myanmar

FY 2019 External Ex-Post Evaluation of Japanese Grant Aid Project
“The Project for National Single Window and Customs Modernization
by Introducing Automated Cargo Clearance System”

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0. Summary

The Project for National Single Window and Customs Modernization by Introducing Automated Cargo Clearance System (hereinafter referred to as “the Project”) was implemented to establish the Myanmar Automated Cargo Clearance System (hereinafter referred to as “MACCS”) and the Myanmar Customs Intelligence Database System (hereinafter referred to as “MCIS”) to improve the efficiency of the customs clearance procedures,¹ thereby contributing to strengthening of the financial base through the facilitation of trade and customs revenue. The establishment of an electronic (computerized) cargo clearance system which enables the simplification, improved transparency and improved efficiency of the customs clearance procedures has been an important challenge faced by Myanmar at the time of both project appraisal and ex-post evaluation and the Project is highly consistent with the development policy and needs of Myanmar. The Project was also consistent with one of the pillars of Japan’s country assistance policy for Myanmar, namely “assistance for the capacity development of human resources and development of a system to support Myanmar’s economy and society” at the time of project planning. Therefore, the relevance of the Project is high. The outputs of the Project are generally as planned, the project cost was as planned, while the project period was shorter than planned. Therefore, the efficiency of the Project is high. In Yangon and Thilawa, the wide use of the e-declaration process through MACCS has somewhat shortened the customs clearance time but the actual time has not reached the level assumed at the time of project appraisal. On the other hand, the Project has achieved improved efficiency and transparency of the customs clearance procedures, improved accuracy and consistency of customs inspection, and intensified crackdown through inspection. All of these are synergy effects of the Project and the Technical Cooperation Project which have been implemented side by side. Based on the above, the Project is considered to have contributed to trade facilitation and strengthening of the financial base by customs revenue. Therefore, the effectiveness and impacts of the Project are fair. No major problems have been observed in the institutional/organizational, technical and financial aspects and the current status of the operation and maintenance of the Project. Therefore, the sustainability of the project effects is high.

In the light of the above, the Project is evaluated to be highly satisfactory.

¹ See 3.2.1 Project Outputs for more explanations on MACCS and MCIS.

1. Project Description



Project Location



Customs Clearance Procedures at the Yangon International Airport

1.1 Background

Since the inauguration of the new administration in March, 2011, the Republic of the Union of Myanmar (hereinafter referred to as “Myanmar”) has conducted various reforms in October 2011, including the relaxation of import restrictions on vehicles and lifting of the ban on foreign currency trading, in order to shift the conventional centrally controlled economy to a market economy. While conscious efforts have been made to develop the private sector, characterized by labour-intensive and export-oriented industries, through the encouragement of inward investment, the complicated administrative procedure has posed a barrier to such development. The customs clearance procedures were based on paper documents and the development of a modern customs clearance system, especially an electronic cargo clearance system, in Myanmar lagged well behind that of other ASEAN countries. Meanwhile, the strengthening of the revenue base and trade facilitation, including improvement of the efficiency of the customs clearance procedures, were essential to cope with the rapid increase of both the import and export volumes reflecting Myanmar’s economic development. Moreover, in the face of the forthcoming regional integration of ASEAN in 2015, Myanmar faced an urgent need to develop a comprehensive customs system with the establishment of a National Single Window (NSW) in sight.²

Against this background, JICA dispatched individual experts from Japan Customs of the Ministry of Finance to the Myanmar Customs Department (MCD) of the Ministry of Finance in the period from 2012 to 2014 on the issue of customs clearance and the customs service. With the cooperation of Japan Customs, MCD examined a likely scheme for a desirable electronic customs clearance system for Myanmar which would utilize technologies associated with the Nippon Automated Cargo and Port Consolidated System (NACCS) and Customs Intelligence Database System (CIS) used in Japan. The Government of Myanmar then requested the Government of Japan to provide grant aid cooperation to realize the said system as well as technical cooperation for the development of

² “Single window” means the electronization of the customs clearance procedure. Application/notification can be conducted by single input/transmission to make the procedure simpler and smoother. In ASEAN, the establishment of an ASEAN single window was agreed in 2005 to mutually link national NSWs after the establishment of a NSW for the trading procedure in each member country for the purpose of exchanging and sharing information between exporting and importing countries.

institutional set-up and capacity building of the manpower necessary for the appropriate operation and maintenance of the system. In response, JICA started the Project of Capacity Development for National Single Window and Customs Modernization by Introducing an Automated Cargo Clearance System in Myanmar (hereinafter referred to as “the Technical Cooperation Project”) in February 2014,³ and later signed the Exchange of Notes (E/N) for the grant aid project (present project) in April of the same year.

1.2 Project Outline

The purpose of the Project was to establish the Myanmar Automated Cargo Clearance System (MACCS) and Myanmar Customs Intelligence Database System (MCIS) in order to improve the efficiency of the customs clearance procedures, thereby contributing to strengthening of the financial base through the trade facilitation and customs revenue.⁴

G/A Grant Limit / Disbursed Amount		3,990 million JPY / 3,990 million JPY
Exchange of Notes Date / Grant Agreement Date		April 2014 / April 2014
Executing Agency		Myanmar Customs Department (MCD), Ministry of Planning and Finance
Project Completion		November 2016
Project Area		Yangon, Thilawa (Thanlyin Township)
Project proponents	Main component	NTT DADA Corporation (software development; equipment procurement/installation)
	Consultant	Nippon Automated Cargo and Port Consolidated System, Inc.
Preparatory Study		October 2013 - March 2014
Related Projects		Dispatch of experts (Customs Clearance and Customs Service) (FY 2012 - FY 2014); Project of Capacity Development for National Single Window and Customs Modernization by Introducing Automated Cargo Clearance System in Myanmar (February 2014 - June 2020)

³ The stated purpose of the Technical Cooperation Project was “Necessary environment for properly operating and maintaining MACCS/MCIS is enhanced with smooth introduction of the system based on the technology of NACCS/CIS towards Customs reform and modernization” while the stated overall goal was “Trade facilitation in Myanmar is further promoted with securing appropriate collection of Customs and Tariff”. Using MCD as the counterpart with a cooperation period from February 2014 to June 2020, this project is assisting the establishment of capacity development to properly operate and maintain MACCS/MCIS, training of users in the private sector and expansion of the target area to include inland border regions among other things (the technical cooperation project is still in progress at the time of this ex-post evaluation).

⁴ On the project appraisal sheet, the purpose of the Project is: “To improve the efficiency of the customs clearance procedure, including the introduction of NSW, by establishing MACCS/MCIS, thereby contributing to the reform and modernization of the customs administration”. However, for the ex-post evaluation, those parts relating to the project impacts were modified in consideration of the background for the implementation of the Project stated on the project appraisal sheets, etc.

2. Outline of the Evaluation Study

2.1 External Evaluator

Hajime Sonoda, Global Group 21 Japan, Inc.

2.2 Duration of the Evaluation Study

The ex-post evaluation study for the Project was conducted over the following period.

Duration of the Study: July 2019 - July 2020

Duration of the Field Survey: 16th September - 9th October, 12th - 19th December 2019

3. Results of Evaluation (Overall Rating: A⁵)

3.1 Relevance (Rating: ③⁶)

3.1.1 Consistency with the Development Policies of Myanmar

At the time of planning (2014), the Government of Myanmar adopted “the promotion of trade and investment as the growth engine” as one of its principal policies. Meanwhile, in the face of the forthcoming regional integration of ASEAN in 2015, there was an urgent need for the development of a comprehensive customs system with the establishment of the NSW in sight. The Myanmar Sustainable Development Plan 2018 - 2030 prepared by the Ministry of Planning and Finance in 2018 adopted “growth through the creation of employment and led by the private sector” as one of its targets. As a strategy to achieve this target, promotion of the reform of the trade sector as a member of ASEAN was called for along with a plan to proceed with the simplification, improved transparency and improved efficiency of the customs clearance procedures. With the assistance of donors, the Government of Myanmar is proceeding with preparations to establish the NSW while coordinating stakeholder government organizations (see the section on “Impacts”). Therefore, the Project is consistent with the development policy and plan of Myanmar at the time of both planning and ex-post evaluation.

3.1.2 Consistency with the Development Needs of Myanmar

As already described in “1.1 Background”, the development of the strengthened revenue base together with smoother trade through the improved efficiency and prioritization of the customs clearance procedures was an important challenge for Myanmar at the time of project planning. The Customs Reform and Modernization Strategy 2017 - 2021 which is in place at the time of ex-post evaluation lists (i) modernization of the customs clearance procedures, (ii) development of the IT environment, (iii) organizational reform and human resources development and (iv) cooperation with the private sector as well as other government organizations as four target issues.

As MCD has been assisted by the Project as well as the Technical Cooperation Project, the customs clearance procedures at Yangon, Thilawa and some border crossing points have been computerized to improve the efficiency to some extent although computerization in other geographical

⁵ A: Highly satisfactory; B: Satisfactory; C: Partially satisfactory; D: Unsatisfactory

⁶ ①: Low; ② Fair; ③: High

areas is required in the coming years. The LPI-Customs score indicating the customs performance for Myanmar is 2.17 points out of a full 5 points (ranked 131st among 160 countries in 2018).⁷ Although there is an improvement from the 1.97 points (150th) in 2014, it is still one of the lowest in the world. Because of this, the necessity for the Project is still maintained at the time of ex-post evaluation.

3.1.3 Consistency with Japan’s ODA Policies

At the time of planning, the Project was considered to fall under “assistance for the capacity development of human resources and development of a system to support Myanmar’s economy and society” which was one of the three pillars of the Japan’s country assistance policy for Myanmar (April 2012). As such, the Project is consistent with Japan’s ODA policy. For the purpose of facilitating trade and foreign investment in Myanmar, the Government of Japan held the first meeting of the Japan-Myanmar Joint Initiative in March 2013, commencing the exchange of opinions on how to deal with various issues, including the speeding up as well as efficiency improvement of the customs clearance procedures.

Based on the above, the Project is highly relevant to Myanmar’s development policies as well as Myanmar’s development needs and Japan’s ODA policies. Therefore, its relevance is high.

3.2 Efficiency (Rating: ③)

3.2.1 Project Outputs

The work conducted under the Project included the development of a software to introduce MACCS/MCIS, procurement and installation of equipment, support for the introduction of a system and consulting services for the detailed design and procurement management.⁸ Although some changes were made to the software specifications and the specifications, quantities and installation sites of equipment, the overall outputs were generally as planned (Table 1).

MACCS/MCIS is a system enabling the computerization of the customs clearance procedures and has functions to control cargo and to liaise with the relevant government organizations. It is used by the customs and other customs clearance-related government organizations (hereinafter referred to as “OGAs”), importing and exporting companies, airlines and companies relating to trade procedures and/or customs clearance (shipping companies, land transportation companies, customs brokers and logistics companies) among others. The principal functions of MACCS are those listed below (at the time of completion of the Project).

⁷ The LPI (Logistics Performance Index) measures the efficiency of international supply chains and is published by the World Bank every year. It converts multi-faceted evaluation results obtained from a questionnaire survey with more than 1,000 logistics operators throughout the world into a score and ranks 160 countries. The index evaluates the customs service, infrastructure, cost, quality, traceability and punctuality of each country.

⁸ As the Technical Cooperation Project was implemented in parallel with the Project, technical assistance (soft component) was not provided within the scope of the Project.

Table 1 Planned and Actual Outputs

	Planned	Actual
Software	Software: one set	Generally as planned with the partial modification of the scope of work
Equipment, etc.	Hardware: one set	Generally as planned with the partial modification of the specifications, quantities and installation sites
Assistance for introduction of the system	Assistance for explanatory meetings, user application, system configuration, preparation of manuals, training of customs officers, private sector users and system managers and others	As planned (jointly implemented with the Technical Cooperation Project)
Consulting services	Detailed design and procurement supervision	As planned

- Cargo control function: This function registers information on the manifests of ships and airway bills of airplanes. It controls cargo movement to and from the customs control area and allows the real-time tracing of cargo movement.
- Import/export declaration and tax payment function: Declaration of import/export is made with such documents as invoice and bill of lading attached to cargo, using PDF format, etc. This function automatically judges inspection categories (simplified examination, document examination and actual inspection) corresponding to the risk, etc. of smuggling and illegal customs clearance of cargo. Once customs duty is paid by means of deduction from the deposit or direct payment after the completion of examination/inspection (in the case of import), a cargo release order is issued.
- Liaising function with OGAs: This function enables application, receipt or enquiry regarding an import/export licence through the system operated by the Ministry of Commerce, application for the inspection of imported animals/plants as well as imported foods/pharmaceutical products by a relevant government organizations (with the attachment of an application form in the Burmese language in PDF format) and registration of and enquiries about the inspection results.

Meanwhile, MCIS is a system to accumulate information on import/export permits, examination/inspection records, etc. which have been processed by MACCS and is only accessible by customs officers at the time of examination/inspection, at the time of customs clearance or for the purpose of supporting the customs service, including post clearance audit (hereinafter referred to as “PCA”).

As far as the software for MACCS/MCIS is concerned, its schematic design was made through the Preparatory Study, with reference to a similar system in Japan (NACCS/CIS) owned and operated by NACCS as a model system, based on the basic design (2013) which was prepared through consultations involving Nippon Automated Cargo and Port Consolidated System, Inc. (NACCS), a developer of NACCS/CIS software, Japanese experts and MCD. This was followed by examination of

the necessity for and priority of various works to be included in MACCS/MCIS from the viewpoint of the speeding up of the customs clearance procedures and improvement of the control efficiency, etc. after a detailed study of the customs clearance procedures and other trade related administrative procedures in Myanmar by the working group set up by the Technical Cooperation Project. Based on the results of this examination, the consultant of the Project prepared the detailed design where the scope of work assumed in the schematic design were partially modified.

MACCS/MCIS connects the network host (group of servers) to the terminal units of private sector users as well as the terminal units of customs officers (350 units of which 200 units are paid for by MCD). This network host is installed at a data centre of the private sector and is connected to private sector users through the Internet, and to terminals of customs officers via base servers using dedicated lines of Myanmar Posts and Telecommunications (MPT). Originally, 11 sites were planned for the base server locations but the Myanmar Customs Training Institute was added in the light of the importance of the training of customs officers on MACCS/MCIS along with two other sites, i.e. the newly established Thilawa Special Economic Zone (SEZ) Customs Office and Ahlone International Port Terminal of Yangon Port, resulting in a total of 14 sites. In addition, a router for communication conversion was additionally installed to deal with the global IP address shortage to ensure connection between the network host and the Internet.

All of the modifications on software and hardware described above were necessary for the proper functioning of MACCS/MCIS and efficient implementation of the administrative procedures for international trade, including the customs clearance procedures, and are, therefore, judged to be reasonable.

The main contractor (NTT Data Corporation) and the consultant (NACCS) for the Project conducted the preparatory work for the introduction of MACCS/MCIS jointly with MCD and the Japanese experts under the Technical Cooperation Project.⁹ The work conducted by MCD included a usage contract with a data centre, procurement of dedicated lines between the data centre and individual base servers, establishment of LAN at each base server site, procurement/development of a network for private sector users and selection/procurement of vendors for the maintenance of operation software and hardware. In August 2015 during the implementation of the Project, IT sections of MCD were integrated to the newly established MACCS Division which is responsible for the further development of MACCS/MCIS, operation and maintenance of MACCS/MCIS after its launch, and operation of the Help Desk. Trainers were prepared from among staff members of this division and explanatory meetings and the practical training for customs officers in the target areas of the system (approximately 400 persons) were conducted. Moreover, a brief explanatory meeting was repeatedly held for officials of the OGAs and private sector users in addition to the practical training of staff members of customs brokers (some 800 participants) on the software to operate MACCS terminals. From August to October 2016, the

⁹ As this preparatory work was conducted under the Project and the Technical Cooperation Project in an integral manner, it is practically impossible to clearly determine the area of responsibility of the Project.

general operation test was conducted and MACCS/MCIS system was officially launched on 12th November, 2016.

According to MACCS Division, the target operating ratio adopted at the time of planning (99.9% or higher for MACCS and 99.4% for MCIS) were achieved during the period from the initial commissioning of the system in November 2016 to the ex-post evaluation (September 2019). Also achieved was the traffic processing time (an average of one second).¹⁰ Consequently, MCD has highly evaluated the performance (quality) of MACCS/MCIS, i.e. the output of the Project.

3.2.2 Project Inputs

3.2.2.1 Project Cost

The planned total project cost was 4.04 billion JPY (Japanese portion of 3.99 billion JPY and Myanmar portion of 50 million JPY). As the scope of the Project was re-arranged to make the project cost within the planned cost despite changes of the planned software and hardware, the actual project cost was 4.04 billion JPY (Japanese portion of 3.99 billion JPY and Myanmar portion of 50 million JPY) as planned.

3.2.2.2 Project Period

The Project was planned to be completed in 30 months from the signing of the consultant agreement to the acceptance inspection and handing-over. In reality, the project period was 28 months, which was shorter than the planned period, from the signing of the consultant agreement in August 2014 to the handing-over in November 2016. Although the work was delayed by such undertakings of the Myanmar side as the securing of a data centre and establishment of the network (dedicated lines) connecting the data centre and base servers, the overall project period was shortened, primarily because of the regularly held project progress meetings involving the consultant and main contractor for the Project, MCD and technical cooperation experts and also because of appropriate schedule control by the consultant.

Based on the above, while the project cost was as planned, the project period was within the plan. Therefore, the efficiency of the project is high.

3.3 Effectiveness and Impacts¹¹ (Rating: ②)

3.3.1 Effectiveness

The Project aimed at improving the efficiency of the customs clearance procedures by establishing MACCS/MCIS in Myanmar. The achievement of the indicators set at the time of planning

¹⁰ Operating ratio = (operating time – down time) ÷ operating time. The down time excludes the system suspension time due to power failure, network failure, etc. while the operating time excludes the maintenance time and planned down time.

¹¹ The effectiveness is rated in consideration of not only the effects but also the impacts.

(quantitative effects) and other effects relating to the project purpose (qualitative effects) are analysed next featuring Yangon and Thilawa after clarifying the utilization situation of MACCS/MCIS up to the time of ex-post evaluation.

3.3.1.1 Situation of Utilization of MACCS¹²

In parallel with the design work for MACCS and examination of the e-declaration procedure, MCD has commenced reviewing the existing customs clearance procedures to improve and simplify them in line with the international rules set by the World Trade Organization (WTO), World Customs Organization (WCO), etc. The principal matters considered included the introduction of a tax payment system by self-assessment, post clearance audit, advance ruling system and bonded system and abolition of the advance payment of customs duty.¹³ Other matters intrinsic to e-declaration using MACCS include the declaration of bonded transportation, preliminary declaration and introduction of an import/export processing system not requiring either examination or inspection by a customs officer (simplified examination).¹⁴ Of these matters, the consultant and main contractor for the Project and the Japanese experts of the Technical Cooperation Project joined in the examination of those related to e-declaration by MCD.

At the start of the MACCS operation, there was some confusion originating from the insufficient preparation on the side of private sector users (mainly customs brokers).¹⁵ As the Help Desk of MACCS Division could not deal with the situation on its own, a support centre was established under the Technical Cooperation Project to assist the Help Desk to handle enquiries from customs brokers and other relevant matters. This confusion calmed down some three months after the start of MACCS operation and the number of registered users of MACCS has increased from some 1,800 in 2016 to some 2,600 in October 2019. Half of these users are companies involved in import and export, and customs brokers and transporters account for approximately 20% each. Other users include OGAs, warehouse operators, airlines and shipping companies. In 2019, MCD prepared the Standard Operating Procedure (SOP), in addition to the existing manual, for the customs clearance procedures and cargo control for customs officers and private sector users as a user friendly handbook for the use of MACCS. Its first edition is expected to be widely distributed in 2020 after a trial period of three months for some users.

The target areas of the Project were originally Yangon City and Thilawa SEZ. However, MCD expanded the target operating areas of MACCS to include Myawaddy on the Thai border in June 2018

¹² As MACCS and MCIS are operated in an integral manner, they are simply referred to as MACCS in 3.3.1.1 and subsequent sections of this ex-post evaluation report.

¹³ The previous method was to make a declaration after the payment of the assumed customs duty and any shortfall as a result of examination by MCD was paid later if necessary.

¹⁴ With this system, MACCS automatically selects the suitable inspection category (simplified examination, document examination or actual inspection) corresponding to the risk of the cargo to simplify the examination of low risk cargo so that examination/inspection focuses on high risk cargo.

¹⁵ In an interview with the then President of the Myanmar Customs Brokers Association, it was revealed that half of customs brokers did not have a PC when MACCS was launched. Moreover, many private sector users did not participate in the general operation test which was conducted for a period of three months prior to the start of full-scale MACCS operation.

with the assistance of the Technical Cooperation Project. This was followed by secured funding for further expansion to a Chinese border site (Muse border trade zone).

After commissioning of the system, MCD, OGAs, the Japanese experts of the Technical Cooperation Project and the vendors examined the needs for improvement which became apparent through the actual operation of MACCS as well as the requests made by users, and implemented improvement measures in order of their urgency or importance. MCD secured the necessary budget to realize some of these measures, such as program modification, etc., which required additional cost.¹⁶ MACCS contains some extra functions for their future use but these are not yet in operation as the conditions for their use have not yet been met.¹⁷

With MACCS, a bank paying-in record is used to register the amount of deposit to the system. When this amount is higher than the amount of customs duty, etc. to be collected, actual payment is made electronically after the completion of examination. Alternatively, direct payment to customs is possible by submitting a bank paying-in record for the amount of customs duty, etc. to be collected by the customs. Because of a request by many private sector users for direct on-line payment to MACCS from the bank account of a person requesting examination, the establishment of a link between MACCS and the settlement system of the Central Bank of Myanmar is being considered at the time of ex-post evaluation, as this link would make such direct on-line payment possible. The development of a system to enable this link is scheduled to take place in the second half of 2020 or later.

3.3.1.2 Quantitative Effects (Operation and Effect Indicators)

At the time of planning, “e-declaration rate” and “shortening of the customs clearance time (for import)” were listed as quantitative indicators to measure the degree of achievement for “the improved efficiency of the customs clearance procedures through e-declaration”.

(1) E-declaration Rate¹⁸

In areas where MACCS was introduced, it was decided that only e-declaration would be accepted except for the declaration of cargo exceeding 200 different items at the same time which cannot be handled by MACCS. Because of this, the e-declaration rate is currently high. To be more precise, the rate has reached 96% in the target areas of the Project (Yangon and Thilawa SEZ), exceeding the target 90% at the time of planning (Table 2). In short, the degree of achievement regarding the e-declaration rate is high.

¹⁶ In general, any computer system is often required to adjust and modify its program as defects and requests for improvement surface after the commencement of its actual operation.

¹⁷ Some of these functions are a link to the EDI (electronic data interchange system) of the Ports Department, handling of transits and electronic invoicing.

¹⁸ The indicator at the time of planning as “the ratio of the number of e-declarations/value to the total number of declarations”. As no data on the declared value is available at the time of ex-post evaluation, the e-declaration rate is simply analyzed based on the number of declarations.

Table 2 E-Declaration Rates for Import and Export in Yangon and Thilawa SEZ

	Export			Import			Combined
	Total Number of Declarations	Number of E-declarations	E-declaration Rate	Total Number of Declarations	Number of E-declarations	E-declaration Rate	E-declaration Rate
2016.11 - 2017.3 (5-month Period)	40,333	39,010	96.7%	109,079	105,246	96.5%	96.5%
2017.4 - 2018.3 (12-month Period)	111,891	109,163	97.6%	263,743	250,706	95.1%	95.8%
2018.4 - 2019.7 (16-month Period)	170,603	167,673	98.3%	310,109	292,664	94.4%	95.8%
Whole Period	322,827	315,846	97.8%	682,931	648,616	95.0%	95.9%

Source: Compiled by the evaluator using reference materials provided by MCD.

(2) Shortening of the Customs Clearance Time

Prior to the implementation of the Project, import and export declarations were entirely made by paper documents. Many declarers had to undergo document examination by many customs appraisers of MCD as well as cargo inspection by inspectors. Because of this, the customs clearance time for importation (time from initial declaration to receipt of a cargo release order) was 1 - 3 days for document examination alone or longer when inspection was involved. E-declaration under MACCS takes only several seconds to automatically determine which of three examination categories (simplified examination, document examination and inspection) the cargo in question must undergo depending on the risk level of the cargo. In the case of simplified examination, a cargo release order is issued immediately after the payment of customs duty. In other words, when the account balance on MACCS is above the payable amount of customs duty, a cargo release order is issued simultaneously with the categorization of cargo for simplified examination. Meanwhile, document examination can be conducted on-line by a customs appraisal officer using the document attachment function (PDF format, etc.) of MACCS but examination using the original document is still prevalent even after the introduction of MACCS as described later. When a declaration is judged to require inspection, an inspector checks the correspondence between the cargo described in the submitted document and the actual cargo.

At the time of planning, it was assumed that the implementation of the Project would shorten the customs clearance time in the case of simplified examination to three seconds and the time in the case of document examination to 2 - 4 hours. The target time for simplified examination assumed that sufficient account balance is registered with MACCS. The target time for document examination assumed that the attached document would be verified and screened in the form of an electronic file only.¹⁹ There was no target time for customs clearance time in the case of inspection. In reality, as described below, the target times appear to have been achieved in the case of simplified examination when the account balance is above the payable amount of customs duty and in the case of declarations

¹⁹ According to the Japanese experts of the Technical Cooperation Project, paperless declaration was intended at the time of the planning of the Project and the widespread use of original paper documents for verification was not anticipated.

at Thilawa SEZ which account for some 2% of the total number of customs declarations in the target areas of the Project. The planned target times appear to have not been achieved in other instances.

Yangon

According to the survey on the customs clearance time conducted by MCD in 2014 and 2019 at the Asia World Port Terminal (AWPT), the largest terminal of Yangon Port which handles 70% of trading cargo and 90% of container cargo in Yangon, the average customs clearance time (from declaration to the issue of a cargo release order) in 2014 was 72 hours. In 2019, the time was reduced to 59 hours, a reduction of some 20% from the 2014 level. By type of customs examination, simplified examination took 14 hours, document examination took 42 hours and inspection took 91 hours. As shown in Table 3, the degree of target achievement for shortening of the customs clearance time at the AWPT was 81% for simplified examination and 43 - 44% for document examination. As the overall target achievement rate (weighted average based on the number of samples for simplified examination and document examination) was approximately 61%,²⁰ the degree of target achievement is judged to be fair. Meanwhile, the customs clearance time for inspection slightly increased between these five years and this is believed to be attributable to the more thorough inspection of high risk cargo.²¹

Table 3 Changes on Customs Clearance Time at Yangon Port (AWPT)

Category of Examination	Reference Time in 2014	Actual Time in 2019	Time Shortened (Shortening Ratio)	Shortening Target	Degree of Target Achievement
	A	B	C = A - B	D	E = C / D
Simplified Examination	72 hours (no distinction of examination category)	14 hours	58 hours (1%)	72 hours	81%
Document Examination		42 hours	30 hours (42%)	68 - 70 hours	43 - 44%
Inspection		91 hours	(Increased)	None	Not applicable
Overall		59 hours	13 hours (18%)	None	Not applicable

Source: Compiled by the evaluator using the materials provided by MCD.

Note: The reference customs clearance time (A) was 24 - 72 hours at the time of planning (figures for simplified examination was not applicable because it did not exist at the time). In the ex-post evaluation, the result of the survey on the customs clearance time conducted at AWPT in 2014 (72 hours) is used. The shortening target (D) was set to be the time reduced for customs clearance (simplified examination: 72 hours → 3 seconds; document examination: 72 hours → 2 - 4 hours; inspection: none) in the case where the target time (simplified examination: 3 seconds; document examination: 2 - 4 hours; inspection: none) is achieved at AWPT.

²⁰ The time release study (TRS) at the AWPT checked 179 declarations (43 cases of simplified examination, 50 cases of document examination and 86 cases of inspection).

²¹ See “Intensified crackdown through inspection” in 3.3.1.3 Qualitative Effects (Other Effects).

The results of interviews with MCD and private sector users generally suggest several factors for the partial failure to achieve a shorter customs clearance time at Yangon as described below.²²

- Verification of original documents at the Head Office of MCD (relevant only to document examination or inspection)

Only some 20% of declarations are classified in the category of simplified examination under MACCS. As inspection is based on document examination results, the remaining some 80% of declarations undergo document examination. In Myanmar, most document examination is conducted by submitting original documents which are attached to the declaration to the head office of MCD (customs office at an airport in the case of air cargo) except at Thilawa SEZ (described later). Although document verification itself takes less than 30 minutes to complete, there is additional time for a customs broker who must travel to the head office of MCD and queue for examination at the said office. When the submission of documents is not completed by around 15:00, the broker must wait until the next day.²³

Some 80% of the declarations for document examination and possible inspection are applications for tax exemption under a free trade agreement.²⁴ To prevent tax exemption fraud, MCD believes that it is important to verify the certificate of origin using the “original document”. In the case of Japanese customs, verification of the certificate of origin is almost always conducted electronically and, if necessary, submission of the original document is requested after the completion of declaration examination. Japan has a well-structured PCA system (tax investigation by the customs after the customs clearance of imported cargo). In Myanmar, however, MCD adopts the verification of original documents as a matter of principle, as it emphasizes the shoreline control of illegal activities and safeguarding of customs revenue in the light of the prevalence of false documentation, large tax exemption amount (maximum of 40% of the customs duty; average of 9 - 10%) and infant state of the PCA system.²⁵

²² As part of the ex-post evaluation, an interview was conducted with the Myanmar Customs Brokers Association, Myanmar International Freight Forwarders’ Association, JETRO, two Japanese logistics companies, two Myanmar logistics companies and two Myanmar import and export companies.

²³ According to the time release study (TRS) at the AWPT, original document examination adds an average of 28 hours to the overall customs clearance time.

²⁴ Following the launch of the ASEAN Economic Community (AEC) in December 2015, the tariffs on most goods of which the origin is within the ASEAN were eliminated for intra-regional trading. While Myanmar officially joined the AEC on 1st January, 2019, tariffs had been eliminated earlier in accordance with the AEC rules in 2018.

²⁵ According to MCD, against the background of long economic sanctions from 1997 to 2016, various fraudulent import and export practices were rampant in the difficult situation. Fraud using false documentation and other illegal activities by the private sector were widespread to evade stringent trade control and crackdown by the government, resulting in a decline of the trust between the government and private sector. Meanwhile, some customs officers pointed out that widening of the scope of tax-exempt products in the AEC reduced the necessity to indulge in such fraudulent activities as under-declaring of the quantity to reduce the tax amount, reducing the number of such fraudulent activities. In ASEAN countries, the direct receipt of a certificate of origin by MACCS through connection with the ASEAN single window makes verification relying on original documents almost unnecessary. However, because of the cost of changing the program to enable this

In the interview with the Myanmar Customs Brokers Association, the opinions were expressed that “In view of the fact that each customs broker deposits some US\$ 3,000, the standard practice should preferably be customs clearance first which is followed by verification of the original documentation and that any problem should be settled by the deposit in the case of a monetary problem or by the ex-post investigation system”.

➤ Payment procedure for customs duties

When the balance of an account held in MACCS is found to be insufficient after the completion of examination, or the importer prefers direct payment of customs duties, some time is required to deposit into a bank and submit the bank payment record to the head office of MCD.²⁶ Customs clearance may be the next day depending on the timing of declaration. The situation is similar for simplified examination. With MACCS, the examination category is determined in several seconds after declaration but a cargo release order is immediately issued only when the account balance held by MACCS is above the payable customs duty. As such a case indicates, even though MACCS has a function to shorten the necessary time to complete payment, insufficient use by some users based on their own preference is affecting the customs clearance time.²⁷

➤ Inspection by the OGAs

Food and pharmaceutical products require inspection by the Food and Drug Administration, Ministry of Health and Sports. This inspection involves the sampling of the cargo and analysis of samples at the Ministry’s laboratory which takes several weeks to complete while the cargo is sealed and allowed to pass the customs clearance procedures. In the case of agricultural and fisheries products, inspection (quarantine inspection) is conducted by the Ministry of Agriculture, Livestock and Irrigation. This inspection is conducted in an area controlled by MCD primarily based on documentation. Such inspection by the OGAs is conducted prior to declaration, during examination or after the issue of a cargo release order depending on the type of cargo. Extra time, including waiting time, may be necessary as it requires witnessing by the customs broker concerned, making it impossible to be conducted in parallel with document examination, actual cargo inspection, etc. Moreover, there is a case where cargo which was declared not to require an import licence from the Ministry of

connection and other matters, it is currently uncertain when MACCS will be connected to the ASEAN single window.

²⁶ According to the time release study (TRS) at the AWPT, the customs clearance time is an average of five hours longer in the case of an insufficient account balance or an average of 16 hours in the case of direct bank bill payment compared to the case of a sufficient account balance. However, the ratio of an insufficient account deposit and direct bank bill payment is relatively low at 15% of all declarations.

²⁷ According to the Japanese experts working for the Technical Cooperation Project, many private sector users did not trust the deposit system at first and were reluctant to place a deposit.

Commerce is found during the examination process to require such a licence, forcing the importer to spend extra time obtaining and submitting such licence.

Thilawa SEZ

According to the results of the interviews with the customs office at Thilawa SEZ and logistics companies operating in Thilawa SEZ, the document examination time for imported cargo to this SEZ was reduced to 1 - 3 hours after the introduction of MACCS based on the examination of an attached electronic file in principle from some four days before the introduction of MACCS. Accordingly, it is inferred that the customs clearance time in the case of document examination plus inspection at Thilawa SEZ customs office is shorter than at other customs in Yangon. According to MCD, companies operating in Thilawa SEZ are believed to strictly adhere to the legal requirements because of the stringent examination of tenants by the operating body of the SEZ and, unlike other customs, the verification of original documents is not, in principle, considered necessary.

In the said interviews (with the Myanmar Customs Brokers Association, logistics companies, etc.) on the issue of the shortened customs clearance time by MACCS, many expressed the opinion that “although the overall examination at Thilawa SEZ and the declaration procedure for simplified examination (green channel) is completed faster than before, there is no real sense that the customs clearance time has generally been substantially shortened”. In the light of the above, the degree of achievement by the Project of the target to shorten the customs clearance time is judged to be fair. At the time of planning, the target for a shorter customs clearance time for document examination was set with reference to the Japanese method which does not involve the verification of original documents. However, this target appears to have been rather over-optimistic for Myanmar where the verification of original documents is required due to the much greater risk of falsified documents than in Japan. On the other hand, from the viewpoint of trade facilitation and risk management, there is room for further consideration of whether or not verification of the certificate of origin using the original document without exception is the best way in Yangon.

3.3.1.3 Qualitative Effects (Other Effects)

According to the results of interviews with customs officers and private sector users of MACCS, the Project is considered to have achieved the following effects concerning the customs clearance procedures in addition to the e-declaration and shortening of the customs clearance time.

➤ Improved efficiency of the customs clearance procedures

The opinion of customs officers is that automated judgement of the examination category and automated calculation of the tax amount have reduced the responsibility of officers, lowering the sense of burden. Even in Thilawa SEZ where the number of declarations has been substantially

increased, the shorter clearance time has increased the number of declarations handled by each customs officer, resulting in restraint of the number of officers required. At some terminals of Yangon Port, the decreased number of required customs officers to examine import declarations during the day has enabled expansion of the night-time examination of import declarations, making this service available 24 hours a day.

At MCD, it has become easier to control and search a large number of documents. As the declaration records of individual import/export companies are stored in the system, an examiner can now quickly check past records if needed to judge the necessity for document examination/inspection and the scope of inspection.

Some private sector users point out that declaration can be efficiently prepared using information on past declarations. However, some say that the electronization (scanning) of documents to be attached, attachment of the scanned documents, printing of the declaration documents required for document examination or receipt of released cargo and other processes are all time-consuming and that the submission of original documents to the head office of MCD after e-declaration is repetitive.

➤ Improved transparency of the customs clearance procedures

Because the revision history of declared contents is entirely recorded, it has become difficult to fraudulently alter document contents which was a fairly common practice in the past. Some private sector users have expressed the opinion that the introduction of MACCS has clarified the flow of the customs clearance procedures and that it has become easier to predict the customs clearance time depending on the type of cargo. Moreover, the fewer face to face meetings between customs brokers and customs officers have reduced the habit of giving officers a small gratuity.²⁸

➤ Improved accuracy of examination and declaration

At MCD, tax calculation which used to be manually conducted has now been automated, reducing the number of calculation errors. In addition, automated confirmation of items requiring the approval of the OGAs based on individual item codes has reduced the number of oversights. On the side of private sector users, the number of mistakes in the entries of e-declaration is reduced as an incorrect entry prompts an error message.

➤ Improved consistency of examination

The automatic selection of a declaration category by MACCS has reduced judgement variations by customs officers, improving the consistency of examination. Even though there are instances where document examination is changed to inspection or simplified examination is changed to document examination/inspection because of the judgement of an examiner after automated selection, the consistency of the overall examination process is believed to have been improved.

²⁸ According to customs brokers, the signatures of many customs officers were required to complete the customs clearance procedures in the past and that it was a common practice to give each officer a small gratuity.

➤ Intensified crackdown through inspection

The target cargo for inspection was previously selected by lottery and there was no firm basis for the selection of the inspection method for each cargo.²⁹ Since the introduction of MACCS, the examination category is judged based on risk evaluation of the cargo using import/export permit data as well as examination and inspection records accumulated by MCIS, making it possible to conduct inspection which prioritizes higher risk cargo. The lower number of cargo subject to inspection means the allocation of more time to inspection and the adoption of an appropriate inspection method which corresponds to the type of cargo as instructed by MCIS. According to MCD, the introduction of MACCS has led to the intensified crackdown through inspection as described above.

3.3.1.4 Summary of Effectiveness

MACCS has been operating adequately and is widely used in Yangon and Thilawa. Even though shortening of the customs clearance time has generally been achieved, the actual shortening has not reached the assumed level at the time of planning except in the case where the account balance exceeds the tax amount for simplified examination and in Thilawa SEZ, due to partial retaining of such procedures as the verification of original documents. Meanwhile, some positive achievements are believed to have been made in terms of the efficiency and transparency of the customs clearance procedures, accuracy and consistency of examination and intensified crackdown through inspection. In the light of the above, the degree of achievement of the project purpose of “improved efficiency of the customs clearance procedures through e-declaration” is judged to be fair.³⁰ As the Project and the Technical Cooperation Project have been planned and implemented in an integral manner with close collaboration, all of the effects described above are the synergized effects of the two projects.

3.3.2 Impacts

3.3.2.1 Intended Impacts

The main impacts expected of the Project were “trade facilitation” and “strengthening of the financial base through customs revenue”.

(1) Trade Facilitation

Yangon

According to the time release study (TRS) at the AWPT, the customs clearance time in 2019 was an average of 59 hours. In addition to this, 149 hours were spent from port arrival to declaration and 12 hours were spent from the release order to physical release, resulting in a total time from port arrival to the release of cargo of 220 hours (9 days and 4 hours) which is 1.4 times of the total 157 hours (6 days and 13 hours) in 2014. Since the introduction of MACCS, the customs clearance

²⁹ There are many different inspection methods, including X-ray inspection and the partial/total inspection of actual cargo.

³⁰ For reference, the LPI-Customs Score of Myanmar was 2.17 in 2018 (ranked 131st of 160 countries), showing a slight improvement from 1.97 points in 2014 (ranked 150th) as already mentioned in “Relevance”.

time is shorter than that in 2014 but the time from port arrival to declaration and the time from the release order to physical release have increased by 64 hours and 11 hours respectively.

While it is necessary to further check the causes of the longer time from port arrival to declaration, the following reasons have surfaced through interviews with MCD and private sector users.

- While import declaration using MACCS compulsorily requires the registration of cargo information to MACCS, the time-consuming registration of cargo information by the Myanmar Port Authority with MACCS sometimes hinders swift declaration.
- Because port warehouses allow the storage of cargo for up to 7 days without additional charge, an importer may delay declaration because of its own reasons, such as the lack of availability of a means of transportation (trucks, etc.) or warehouse space to store the released cargo.

One of the reasons for the long time required from a release order to physical release is the need for a printed release order document to be signed by a customs officer. According to MCD, this signature is required by the Central Bank in order to realize bank transfer of import fees, and is not a required procedure by the customs. MCD is modifying the relevant program of MACCS to eliminate this procedure so that release orders can be directly browsed by the Central Bank and other related government organizations.

In the light of the above, the customs clearance time at the AWPT has been somewhat shortened by the Project but cargo distribution cannot be said to have been speeded up due to other reasons.

Thilawa SEZ

Before the introduction of MACCS, the customs clearance procedures at Thilawa SEZ which was opened in 2015 was handled by the Thilawa Customs Office located outside the SEZ. Through the Project, with the connection of MACCS to the customs office inside the SEZ, the customs clearance time has been considerably shortened as described earlier.³¹

Linkage with OGAs

MACCS has a linkage function with OGAs and is partially used for the applications, acceptances and enquiries relating to import/export licences through the system of the Ministry of Commerce, applications for the inspection of imported animals and plants as well as imported food and drugs by the relevant government organizations and registration and enquiries relating to inspection results, etc. However, because of the slow deregulation of such government

³¹ The Thilawa Container Terminal constructed with a Japanese ODA loan and which opened for business in May 2019 is expected to improve physical distribution related to Thilawa SEZ. The opening of a new customs office at this terminal is scheduled to take place by the end of 2019.

organizations and the slow progress of the collaboration among them, the linkage function of MACCS with other government organizations has not been sufficiently used.

In regard to a trade-related procedures linking more government organizations of Myanmar, the Blue Print which presents the overall concept of NSW and technical requirements has been announced with the assistance of the World Bank. In this Blue Print, the expectation that MACCS and MCD will play a central role in realizing NSW in Myanmar is repeatedly mentioned, as it is believed that the connection between the systems of the related government organizations will be built around MACCS which has a proven operational performance. The introduction of MACCS provided the opportunity for MCD to assume leadership in a series of discussions aimed at identifying the actual needs of the related government organizations as well as the private sector towards trade facilitation and coordination between stakeholders, generating the momentum to achieve NSW. Nonetheless, the reality in Myanmar is that spontaneous coordination among ministries cannot be expected and that there is no concrete prospect of the realization of NSW. Despite of this, there is no doubt that the introduction of MACCS by the Project and the Technical Cooperation Project has played an important role towards the realization of NSW.

Non-tariff barriers

In the 2018 JETRO Survey on the Business Conditions of Japanese Companies in Asia and Oceania, 53% of Japanese companies operating in Myanmar replied that there were non-tariff barriers hampering their business. This ratio is the second highest after Indonesia among the target countries of the survey. By type of barrier mentioned, the highest was import restrictions (obligation to register as an importer; import licence system; restrictions on quantity; import charges) at 31%.

As described above, the Project is believed to have contributed to trade facilitation in Myanmar through shortening of the customs clearance time. However, further trade facilitation requires the early realization of NSW and conscious efforts to tackle logistic issues and other issues such as the existence of non-tariff barriers, which cannot be dealt with by MCD.

(2) Strengthening of the Financial Base Through Customs Revenue

According to MCD, the overall trade value (in US\$) increased by approximately 33% in the last five years. The real tariff rate fell from approximately 15% to approximately 11% in the same period due to widening of the scope of tax exemption based on free trade agreements (FTA) with ASEAN countries and others. The customs revenue in US dollars dropped by approximately 4% in the last five years.³²

³² Because of fluctuations of the foreign exchange rate, the customs revenue in Kyats increased by approximately 38% during the same period. The customs revenue of 523.8 billion kyats in FY 2017 accounted for 23% of the total tax revenue of the Government of Myanmar (approximately 2,300 billion kyats) in this fiscal year.

Meanwhile, MCD has enforced the strict crackdown of tax evasion using forged documents, etc. As described earlier, the introduction of MACCS is believed to have helped the intensification of crackdown, suggesting the possibility of its contribution to the securing of customs revenue. However, it is difficult to quantitatively verify this possibility in this ex-post evaluation based on the information obtained.

3.3.2.2 Other Positive and Negative Impacts

There are no notable impacts of the Project in terms of the environmental and social aspects.

In summary, the Project has achieved its objectives to some extent. Therefore, the effectiveness and impacts of the Project are fair.

3.4 Sustainability (Rating: ③)

3.4.1 Institutional Aspects of Operation and Maintenance

Taking the opportunity of the introduction of MACCS, the Government of Myanmar began to modernize the customs clearance procedures in line with international rules and to improve the efficiency of declaration. Its efforts are continuing with the preparation of the Customs Reform and Modernization Strategy 2017 - 2021. MACCS was introduced in November 2016 for the target operation areas of Yangon and Thilawa. In June 2018, it was rolled out to Myawaddy on the Thai border and is currently expected to be further rolled out to Muse on the Chinese border as part of the plan to extend MACCS to cover the entire country. Based on such achievements, the policy and institutional environment for the continued utilization of MACCS is believed to be in place at the time of ex-post evaluation.

MCD has eight divisions under the Director General and two Deputy Director Generals, and has some 2,000 staff members (as of September 2019) nationwide. In June 2015, with the assistance of the Technical Cooperation Project, MCD established MACCS Division responsible for the operation and maintenance of MACCS, absorbing the ICT Section of the Administrative Division. At the time of ex-post evaluation, MACCS Division has 79 staff members (as of September 2019), including the division head and two deputy division heads, and conducts the operation and maintenance of MACCS/MCIS with the cooperation of entrusted system operation and maintenance companies (vendors) which are on contract. The Help Desk established in the Division handles enquiries from customs officers and private sector users. According to the Division, there are no problems regarding staff strength even though there are some unfilled positions. While coordinating the work within MCD and with related government organizations through a working group set up in the Division to conduct joint work with the Technical Cooperation Project, the Division is involved in various types of work, including the addition of hardware, program modification (software development), preparation of a standard operating procedures (SOP) for the work under MACCS, training of MCD staff of the Export and Import Control Division, Investigation Division and Finance and Inspection Division, all of which

use MACCS/MCIS, and opinion exchange with the private sector. Based on the above, there are no problems regarding the institutional aspect of the operation and maintenance of the Project.

3.4.2 Technical Aspects of Operation and Maintenance

Since the establishment of MACCS Division in June 2015, MCD has been continually training personnel of the said Division with the assistance of the Technical Cooperation Project while dealing with daily issues. By the time of ex-post evaluation, the Division had experienced several changes of the program, extension of the service area to Myawaddy on the Thai border and preparatory work for hardware upgrading scheduled to take place in 2021. Through a series of such work, MCD is believed to have acquired the basic capability to continually operate and maintain MACCS/MCIS in the coming years. As described here, the Technical Cooperation Project (scheduled to end in June 2020) which has been in progress since February 2014 to the time of ex-post evaluation has contributed to strengthening the operation and maintenance capability. At the time of ex-post evaluation, MACCS Division properly operates and maintains the system through the vendors and there does not appear to be any problems with the operation and maintenance of the Project (MACCS itself).

As far as the training of customs officers regarding MACCS is concerned, there is week-long training for those with no previous experience of MACCS. Week-long training targeting senior officers is also conducted several times a year. It has been pointed out by private sector users that frontline customs officers with no previous experience of MACCS appear to take some time to become accustomed to its operation. There is also the opinion that half of the frontline customs officers are not well familiar with MACCS. Those officers unfamiliar with MACCS conduct their work while learning how to operate MACCS from more experienced officers. There has been a case of a customs office with few officers familiar with MACCS because of frequent personnel changes. Such a situation at the frontline suggests a need to further intensify MACCS training for customs officers. Meanwhile, the capability of those working at the Help Desk answering telephone enquiries about the system is highly appraised by customs officers and private sector users of MACCS.

To ensure more active use of MACCS in the future, it is desirable to properly address such issues as expansion of the scope of services handled by MACCS, further improvement of the efficiency of the customs clearance procedures through a review of the existing MACCS-related work, solving of various practical problems to achieve the facilitation of trade and promotion of the NSW initiative through coordination with relevant government organizations. For the successful completion of these challenges, further strengthening of not only MACCS Division but also MCD as a whole is necessary even after the completion of the Technical Cooperation Project as planned. For this purpose, utilization of Japan's experience of its comparative system (NACCS/NCIS), which is the model for MACCS/MCIS, should prove useful.

Based on the above, although the necessity to consolidate the training of customs officers and to enhance the overall capability of MCD can be pointed out to ensure the more active use of MACCS, there appears to be no problem with the technical aspect of the operation and maintenance of the Project.

3.4.3 Financial Aspects of Operation and Maintenance

After the completion of the Project, the Ministry of Finance allocated the operation and maintenance budget for MACCS/MCIS, including commission for the external assignment of its maintenance (based on a contract with each vendor), in response to a budget request by MCD. On its part, MCD has secured the necessary budget for its work, such as modification of the program, expansion of the service area to include Myawaddy and Muse, and renewal of equipment at the network host in 2021, which is the 5th year of operation, from the National Treasury with parliamentary approval. As such, there are no problems regarding the financial aspects of the operation and maintenance of the Project. The budgeted expenditure of MACCS Division since FY 2016 is shown in Table 4.

Table 4 Budgeted Expenditure of MACCS Division of MCD

(Unit: million kyats)

	Expenditure
FY 2016 (April 2016 - March 2017)	4,353
FY 2017 (April 2017 - March 2018)	3,636
Fiscal Year Adjustment Period (April - September 2018)	2,322

Source: MCD

Note: 1 kyat = 0.071 JPY (September 2019)

MCD collects a handling fee of 30,000 kyats (approximately 2,100 JPY) per e-declaration to MACCS. This fee level is said to have been set to cover the estimated MACCS operation and maintenance cost in the first five-year period of operation (including the hardware renewal cost), taking the estimated increase of the number of declarations in the said period into consideration. In accordance with the regulation of Myanmar that all fees for government services are paid into the National Treasury, this customs operation revenue is paid into the National Treasury.

3.4.4 Current Status of Operation and Maintenance

Both the hardware and software of MACCS/MCIS have been properly operated and maintained. Although the system has stopped several times due to a fault with the exclusive lines provided by Myanmar Posts and Telecommunications, it has not stopped due to any fault of its own. The system has achieved high reliability of 99.9% and the target average traffic processing time of one second has been achieved.³³ Therefore, there are no problems regarding the operation and maintenance situation of the Project.

No major problems have been observed in the institutional/organizational, technical, financial aspects and the current status of the operation and maintenance system. Therefore, the sustainability of the project effects is high.

³³ See 3.2.1 Project Outputs for the summaries of MACCS and MCIS.

4 Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

The Project was implemented to establish MACCS and MCIS to improve the efficiency of the customs clearance procedures, thereby contributing to strengthening of the financial base through the facilitation of trade and customs revenue. The establishment of an electronic (computerized) cargo clearance system which enables the simplification, improved transparency and improved efficiency of the customs clearance procedures has been an important challenge faced by Myanmar at the time of both project appraisal and ex-post evaluation and the Project is highly consistent with the development policy and needs of Myanmar. The Project was also consistent with one of the pillars of Japan's country assistance policy for Myanmar, namely "assistance for the capacity development of human resources and development of a system to support Myanmar's economy and society" at the time of project planning. Therefore, the relevance of the Project is high. The outputs of the Project are generally as planned, the project cost was as planned, while the project period was shorter than planned. Therefore, the efficiency of the Project is high. In Yangon and Thilawa, the wide use of the e-declaration process through MACCS has somewhat shortened the customs clearance time but the actual time has not reached the level assumed at the time of project appraisal. On the other hand, the Project has achieved improved efficiency and transparency of the customs clearance procedures, improved accuracy and consistency of customs inspection, and intensified crackdown through inspection. All of these are synergy effects of the Project and the Technical Cooperation Project which have been implemented side by side. Based on the above, the Project is considered to have contributed to trade facilitation and strengthening of the financial base by customs revenue. Therefore, the effectiveness and impacts of the Project are fair. No major problems have been observed in the institutional/organizational, technical and financial aspects and the current status of the operation and maintenance of the Project. Therefore, the sustainability of the project effects is high.

In the light of the above, the Project is evaluated to be highly satisfactory.

4.2 Recommendations

4.2.1 Recommendations for the Implementing Agency (Myanmar Customs Department)

- (1) In response to the expectations of importers and exporters to further shorten the customs clearance time and to improve the convenience of the customs procedures, MCD should review the current customs procedures and operations related to import/export declarations and should address the following issues.
 - Enhancement of PCA
 - Further utilization of the attachment function of MACCS (confirmation of attached documents on screen)

- Examination/inspection taking into consideration import/export records and examination/inspection results in the past
 - Advanced selection processing based on the risk management method
 - Realization of the electronic payment (on-line payment) of customs duties
- (2) Based on the operating experience over the three years, MCD should tackle the following issues to develop a training scheme which allows on-site customs officers to always be equipped with the latest knowledge of MACCS/MCIS.
- Development of more practical and effective training methods and training materials for newly appointed customs officers and those who have no previous experience of working with MACCS/MCIS
 - Introduction of brush-up training for staff with experience of using MACCS/MCIS in the field in view of the regular updating of their knowledge
- (3) MCD has been exchanging opinions with private organizations as required. While, it is suggested that a mechanism for the regular exchange of opinions with private organizations should be created at MCD, since an improvement in public administrative services would require accurate understanding on the needs of the private sector and a relationship of trust with the private sector build over time. For this purpose, the case of NACCS in Japan for which Nippon Automated Cargo and Port Consolidated System, Inc. provides a platform for the exchange of information and opinions of trade-related companies should prove helpful.
- (4) MCD should continue its cooperation with trade-related governmental organizations in relation to the establishment of the NSW and use of the TIN number of the Revenue Department for customs declaration.

4.2.2 Recommendations for JICA

- (1) JICA should examine the continuation of the technical cooperation after the completion of the Technical Cooperation Project in June 2020 to support the implementation of the above recommendations for MCD.
- (2) JICA, together with JETRO and the Embassy of Japan, should continue its approach to the upper echelons of the Government of Myanmar through the Japan-Myanmar Joint Initiative in order to drive forward the clarification of the political will on the Myanmar side on inter-governmental cooperation towards the establishment of the NSW and other issues.

4.3 Lessons Learned

Continuation of technical cooperation after the introduction of the system

The Technical Cooperation Project which was implemented in line with the development and introduction of MACCS/MCIS by the Project assisted various preparations and capacity development for the introduction of the system. After the commissioning of MACCS/MCIS, the Technical Cooperation Project, by helping solve various operational problems such as setting up a support centre to deal with confusion at the time of launching the system, reviewing operational aspects, modification of programs, expansion of target area, hardware update and so on, has been continuing for approximately three and a half years, contributing to the strengthening of the capacity for the operation, maintenance and active utilization of MACCS/MICS by MCD and also to the enhancement and continued sustainability of the project effects.

The experience described above suggests a need to note that there are many issues which only surface through the actual operation of the system when the development and introduction of a new system is intended. It is also necessary to continue technical assistance for a certain period after the commissioning of the system so that issues which surface during operation can be properly dealt with.

Examination of the operating conditions of the system and setting of targets

For the Project, the target for the reduction of the customs clearance time was set, assuming paperless operation with the Japanese system in mind. In reality, however, some 80% of the declarations are dealt with using original documents in response to the operating principle adopted by the Myanmar side and, therefore, the target level for a reduced customs clearance time was not achieved.

Based on this experience, when a system which models a Japanese system is to be introduced for the purpose of improving an administrative service in the recipient country, it is essential to clarify the operating conditions of the system which enable the full achievement of the expected improvement effects while identifying differences regarding the administrative service in question and its operation between the two countries. It is also necessary to sufficiently confirm the willingness and commitment of the recipient country to achieve the improvement effects. Given the fact that the introduction of a new system is, by definition, a new experience for a recipient country, it is not easy to develop a concrete image of system operation until such time when the development of the software used by the system starts to allow visualization of operation screen, etc. For this reason, it is necessary to remember that the operating conditions may require reviewing as development of the system concerned progresses. Moreover, when operation differs from the comparative case in Japan, it is necessary to establish indicators and target values which correspond to the assumed actual operating conditions in the recipient country. There are several ways to deal with such a situation, including (i) changing of the target values at the stage when the actual operating conditions come into sight and (ii) setting of conditional target values which clarify the firstly assumed operating conditions.