

YEAR BOOK

December 2018

MEMBER PROGRESS REPORT

 **JAPAN**

 **CHINESE TAIPEI**



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AFACT Permanent Secretariat

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Country Progress Report

CHINESE TAIPEI

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JAPAN

Japan Association for Simplification of International Trade Procedures (JASTPRO)

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37th AFACT Plenary
2019-Thailand

CHINESE TAIPEI – Customs-Port-Trade (CPT) Single Window

1. Introduction

To promote trade facilitation and security, Chinese Taipei Customs used World Customs Organization (WCO) SAFE Framework of Standards and UN/CEFACT recommendations (e.g. No.33 and No.34) to establish a single-entry point for international trade, namely the Customs-Port-Trade Single Window (hereafter referred to as the “CPT”). CPT was officially launched on August 2013.

To harmonize international and domestic trade data, the Customs and participating agencies worked together to create the “Customs-Port-Trade Data Elements Set” referring to the WCO Data Model v3.0, and then developed domestic telecommunication standards for stakeholders to conduct electronic data interchange.

The trading community shall use above domestic standards to submit documentation for importation, exportation, or transit of goods through CPT to the Customs or participating agencies. For example, the trading community could electronically lodge customs declarations, or applications for the import/export license to fulfill regulatory requirements. The number of customs declarations has been increasing since CPT entered into operation and reached fifty million declarations in 2017 as shown in Figure 1. Nowadays almost 99.99% of customs declarations are electronically transmitted.

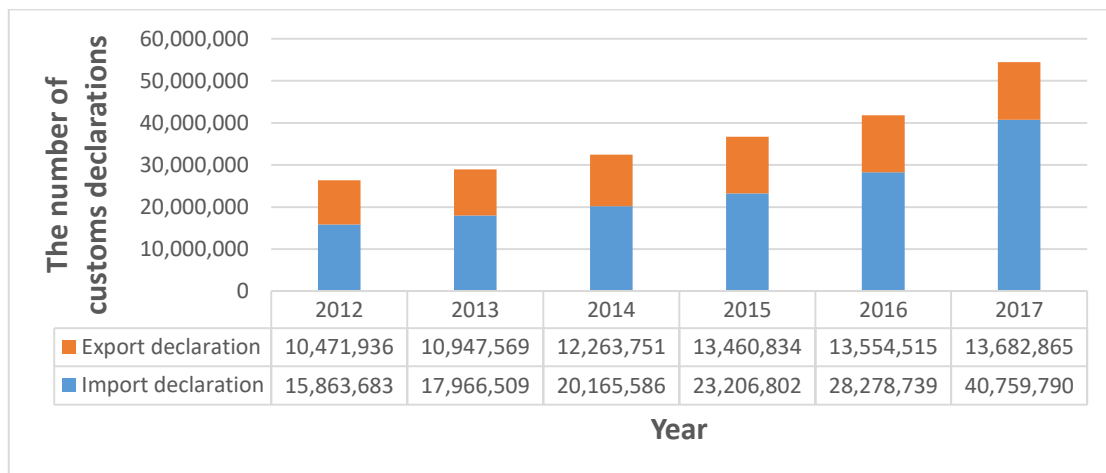


Figure 1. The number of customs declarations in 2012-2017

2. Service Framework

The service framework of CPT is illustrated as Figure 2. By the end of 2017, there are twenty-eight participating agencies, including the Customs, trade authorities, port authorities, and quarantine authorities, that have electronically interconnected with CPT through the network dedicated to domestic government agencies. The trading

CHINESE TAIPEI – Customs-Port-Trade (CPT) Single Window

community (importers, exporters, customs brokers, freight forwarders, carriers, etc.) are the main users of CPT. According to the statistic, there are about five thousand user accounts registered on the website of CPT. CPT offers two interfaces of application for the trading community filing documents:

- a. XML/EDI interface of application for those using the aforementioned standards to lodge documentation electronically through Custom Clearance Value-Added Networks (VANs) to CPT.
- b. Web-based interface of application for individuals who just log in the website of CPT to fill in relevant forms online.

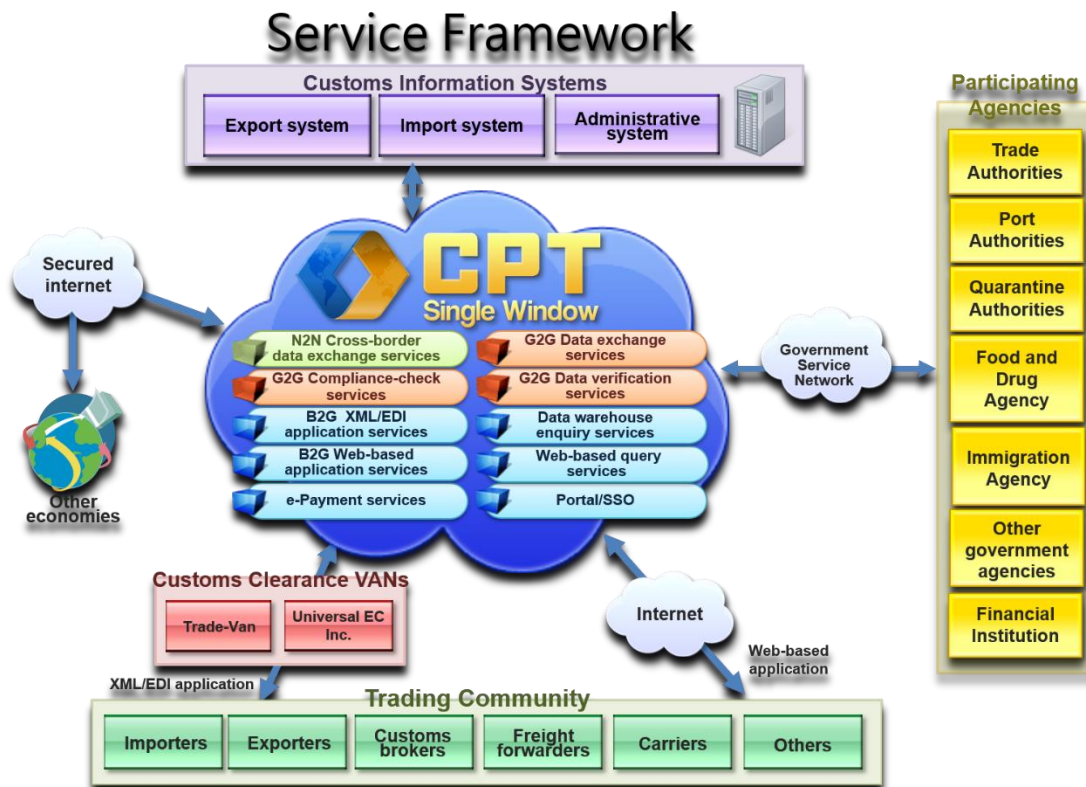


Figure 2. CPT Service framework

In addition, CPT successfully achieved international interoperability in 2014. In other words, CPT has interoperated with other economies' single window systems to conduct cross-border data exchange. Since April 2014 the Customs and China Customs have exchanged the electronic Certificate of Origin (eCO) via their single window systems to facilitate cargo clearance of two parties and also deepen bilateral customs cooperation.

CHINESE TAIPEI – Customs-Port-Trade (CPT) Single Window

For the users, all services that CPT offered could be categorized as follows:

a. Business to Government (B2G) application services

Except for the above submission of documentation related to trade, CPT also offers different kinds of convenient services to facilitate clearance procedures, like online e-Payment services enables taxes or fees could be electronically deducted from the bank account of traders.

Furthermore, an innovative practice called “Permit and Declaration Integration” was introduced in 2016. It consolidates the customs declaration and the application of import license into one single form to streamline the B2G application procedure for importation of goods. Now traders could lodge the consolidated form to CPT to fulfill regulatory requirements without submitting different forms to different agencies.

b. Government to Government (G2G) information sharing services

For Customs and participating agencies to perform effective border management, CPT is a rapid, secure, and timely platform for data exchange. Over three hundred different types of information are shared among government agencies through CPT.

c. Nation to Nation (N2N) data exchange services

CPT as a portal could be interoperable with foreign single window systems so as to offer N2N cross-border data exchange services for any domestic government agencies interested in exchanging trade documentation (e.g. eCO, Sanitary and Phytosanitary SPS Certificate) with other countries.

3. Way forward

To ensure the sustainability and interoperability for CPT, the Customs has made every effort to improve the quality of services that CPT offers. Firstly, the Customs will open the direct XML/EDI interface for trading community to lodge electronic documents in 2019. By taking advantage of it, the trading community will have an alternative option to submit the data to CPT directly without through VANs.

Secondly, the Customs endeavors to promote international interoperability with other foreign single window systems to enhance regional connectivity and trade facilitation. For example, Chinese Taipei quarantine authorities plans to use CPT to exchange electronic SPS certificate with other countries.

Thirdly, the Customs will maintain the open mindset to explore the latest technologies that might be helpful to enhance the effectiveness of border management. Lately the Customs is now on the pilot stage of using Big Data technology to extract valuable



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information from the data collected by CPT to enhance the existing risk management mechanism.

Finally, in line with the concept of Coordinated Border Management (CBM), the Customs and participating agencies will perform joint inspection at border by utilizing CPT so that it will lower trade cost and expedite the clearance procedure.

 **CHINESE TAIPEI – EPA Report**

1. The international work of Taiwan EPA

Sharing Taiwan’s environmental experiences and technologies
Working with the USEPA to promote the International Environmental Partnership (IEP) to assist in regional environmental capacity building
Over 40 countries have participated in environmental education, city clean air, atmospheric mercury monitoring, climate change a adaptation



More than 40 nations have participated in the IEP

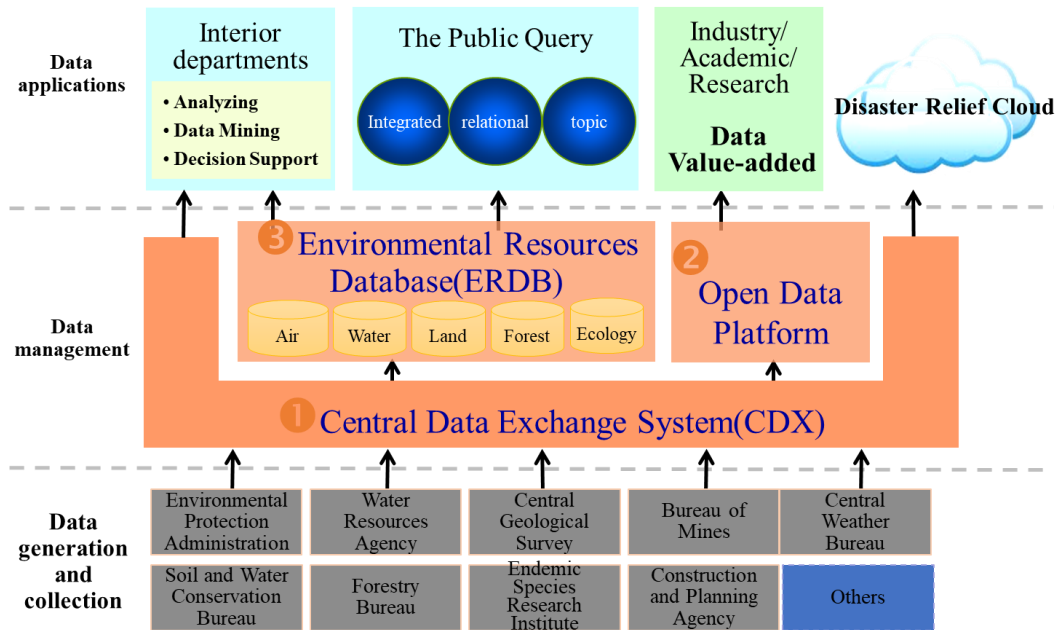
2. EnviroCloud missions

| Integrate National Environmental Data | Measure the Value of Data | Promote Data Applications |
|---|---|--|
| <ul style="list-style-type: none"> • Use emerging information technology • Implement quality assurance • Implement data exchange | <ul style="list-style-type: none"> • Build a sharing platform • Develop integrated data analytics | <ul style="list-style-type: none"> • Follow open government data policy • Promote applications of environmental data |

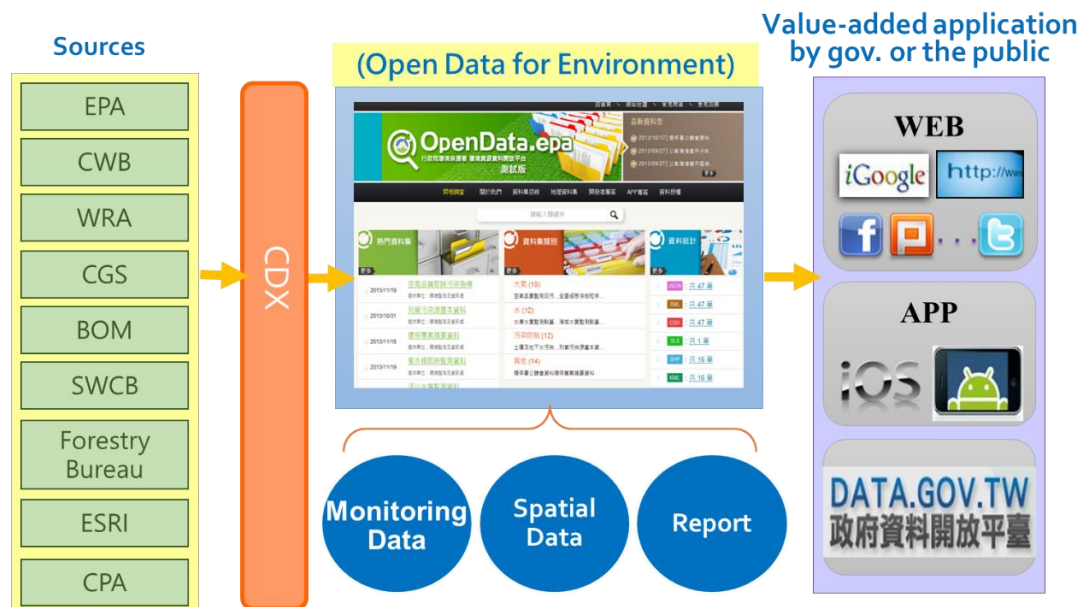


CHINESE TAIPEI – EPA Report

3. The Architecture of EnviroCloud



4. Open Data Platform

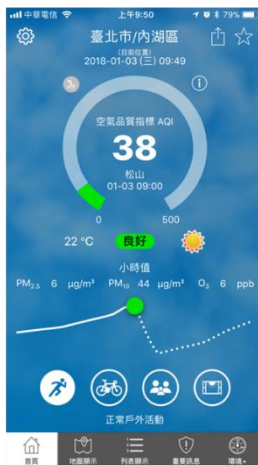


CHINESE TAIPEI – EPA Report

5. Enhancing Open data quality and more application

Environmental Open Data Cloud Services

| Rank | Top5 Visiting Rate of Open Data |
|------|---------------------------------|
| 1 | Air Quality Indicator |
| 2 | Real-time UV index data |
| 3 | 10-minute rainfall data |
| 4 | Air quality forecast data |
| 5 | Real-time weather data |



Application Case



6. Environment Info Push App

- Integrate indices to show real-time info, such as PM2.5, UVI, RPI, weather forecast and latest news or emergency alerts, like typhoon, mudslide, flood, earthquake, heavy rain, sent to users' devices.
- Geospatial World Excellence Awards 2016 by Geospatial World Forum

JAPAN – Section I (General Condition Updates)

1.1 Overview

The Ministry of Economy, Trade and Industry, Japan (METI) Releases Results of Financial Year (FY)2017 E-Commerce Market Survey

METI conducted the FY2017 Survey of Infrastructure Development Status for Data-driven Society in Japan (E-Commerce Market Survey) to analyze the current state of the Japanese E-Commerce (EC) market and the market trends in cross-border EC among three countries – Japan, the U.S., and China – and compiled the results into a report.

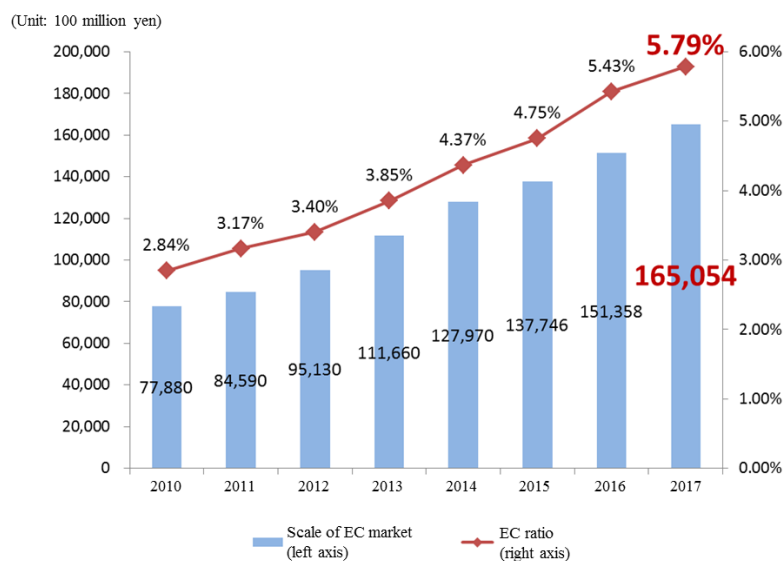
1.2 Summary of the survey results

1.2.1 Scale of the domestic EC market (business-to-consumer (B-to-C) and business-to-business (B-to-B)).

In 2017, the scale of the domestic B-to-C EC market expanded to 16.5 trillion yen (up by 9.1% from 15.1 trillion yen in the previous year). The scale of the domestic B-to-B EC market expanded in the same year to 317.2 trillion yen (up by 9.0% from 291.0 trillion yen in the previous year).

The EC ratio* was 5.79% (up by 0.36 percentage points from the previous year) for B-to-C EC, while it was 29.6% (up by 1.3 percentage points from the previous year) for B-to-B EC. The survey results show continuous progress in the computerization of commercial transactions.

Changes in scale of B-to-C EC market in Japan





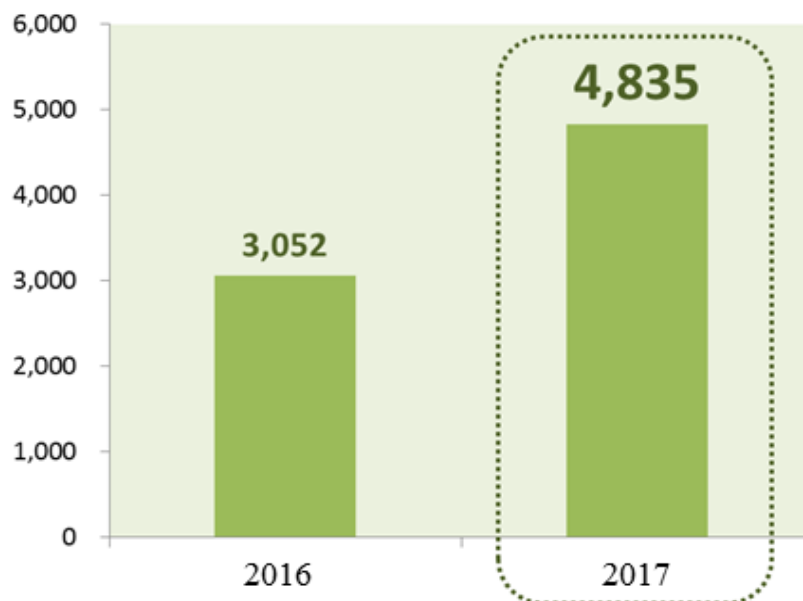
● JAPAN – Section I (General Condition Updates)

1.3. Scale of the domestic EC market (consumer to consumer (C-to-C))

In recent years, the C-to-C EC market has been dramatically expanding as an EC channel. In light of this trend, METI has been estimating the scale of the market in Japan since the 2016 survey. In the 2017 survey, the results revealed that the scale of the internet auction market in 2017 was estimated to be 1,120.0 billion yen (up by 3.2% from 1,084.9 billion yen in the previous year), the C-to-C scale of which was estimated to be 356.9 billion yen (up by 3.2% from 345.8 billion yen in the previous year).

The scale of the EC market via flea market applications was estimated to be 483.5 billion yen (up by 58.4% from 305.2 billion yen in the previous year), showing a sharp increase. This revealed that a giant market with a scale of lower-500.0 billion yen has emerged in Japan just five years since the entry of flea market applications into the market in 2012.

Estimated market scale of flea market applications (Unit: 100 million yen)



1.4 Market scale of cross-border EC among Japan, the U.S. and China

In 2017, the market scale of cross-border EC among Japan, the U.S. and China, increased in all countries. In particular, the amount purchased through cross-border EC by Chinese consumers from Japanese business operators was 1,297.8 billion yen (up by 25.2% from 1,036.6 billion yen in the previous year), and that from U.S. business operators was 1,457.8 billion yen (up by 28.2% from 1,137.1 billion yen in the previous year), showing an outstanding expansion of the amount purchased



● **JAPAN – Section I (General Condition Updates)**

through cross-border EC by Chinese consumers.

(Unit: Billion yen)

| Country (consumer) | Amount purchased from Japan | Amount purchased from U.S. | Amount purchased from China | Total |
|-------------------------|-----------------------------------|----------------------------------|-----------------------------------|-------------------|
| Japan (year-on-year) | / | 232.7 +7.2% | 24.3 +7.3% | 257.0 +7.3% |
| U.S. (year-on-year) | 712.8 +15.8% | / | 494.2 +16.0% | 1,207.0 +15.9% |
| China (year-on-year) | 1,297.8 +25.2% | 1,457.8 +28.2% | / | 2,755.6 +26.8% |
| Total (year-on-year) | 2,010.6 +21.7% | 1,690.5 +24.8% | 518.6 +15.6% | 4,219.6 +22.1% |

2. Expanding of e-commerce in Japan

2.1, Tokyo Olympic games

Olympic games and Paralympic games will be held in Tokyo on 2020 summer and the construction of the sport arenas, the athletes’ dormitories, the press center for news bureau and the hotels for huge amount of audience are undergoing now. Although credit card can be used at almost all shops/stores in Japan, it is worried in software field. Because EC settlement is not popular in the consumer business, because Japanese people traditionally do not like to have the debit. Almost 80% of personal shopping is by cash settlement, and this figure is extra ordinary high in the world; i.e. 11% in Korea, 40% in China and 55% in USA. Even small shops sitting at the lane must prepare the settlement of EC method for the huge amount of foreign guest, otherwise they will face with the trouble for small shopping.

2.2 E-Commerce ratio in future

METI had planned to increase EC trade ratio to 40% at 2025, from 18% at 2015. The reasons they want to increase are because of not only new business expansion but also saving the risk/cost of cash handling and avoiding the troublesome of the business matter.

Now days the big amount of cash is carried from the bank safety to the automated teller machines (ATM) located at all the corner in Japan (So called cash management costs). EC can solve this problem very easy in the shorter time with few mistakes.



● JAPAN – Section I (General Condition Updates)

3. Expanding of E-Commerce in Japan (Since 2015)

The Development Committee for 2020 and Beyond under the New Industrial Structure Committee (hereinafter referred to as the “committee”) Compiled a report for FY2015.

It was announced by METI compiled an interim report titled “FY2015 Report - The Japan Way -.”

3.1. Outline of the committee

In light of the upcoming 2020 Tokyo Olympic and Paralympic games, interest in consumption and investment by the public and by the private sector as well as overseas countries’ interest in Japan are expected to grow. Taking full advantage of this opportunity, Japan needs to overcome the challenges caused by the Great East Japan Earthquake in 2011 and revitalize its economy, including the reconstruction of Fukushima Prefecture and nationwide regional revitalization.

To achieve these goals, the committee discussed Japan’s path toward sustainable growth from 2020. It also discussed the reforms which are necessary for realizing these goals and the implementation of specific projects to be triggered by the 2020 Tokyo Olympic and Paralympic games, and compiled the results of the discussion into the report.

3.1.1. The committee considers the 2020 games the best opportunity for overcoming the societal challenges that Japan is facing and recognizes the importance of realizing a society in which all members of the public can exert their strengths and potential, while Japan maintains or improves the scale of economic activities and employment. From these standpoints, the committee discusses the past and the current business environment and future approaches to an ideal business environment that the public will cooperate in creating. In addition, it also proposes an ideal economy (industry and business management) and lifestyle (labor and education) as future goals for which Japan should aim.

3.1.2. To address the societal challenges that Japan is facing, e.g., the super-aging society, the committee covered current challenges, future efforts, and road maps to 2020 in the report, featuring nine projects: mobility; smart community; stress-free society; cybersecurity measures; fully-energetic, vintage society; innovation; investment; human-resource development and revitalization of regional economies; and sports and culture.

METI hereby announces that the Development Committee for 2020 and Beyond under the New Industrial Structure Committee compiled an interim report titled “FY2015 Report - The Japan Way -.”

**● JAPAN – Section I (General Condition Updates)****4. Cashless Vision and API (An application programming interface) Guidelines for Utilization of Credit Card Data**

As the concrete solution of the promoting e-commerce trade, METI established a Study Group for API-based Collaboration Involving Credit Card Utilization. Since then, the study group held meetings to discuss specific measures for promoting API-based collaboration among credit card companies. In addition, in November 2017, the study group expanded a range of target issues in light of the recent diversity of payment means and started discussions concerning challenges in efforts for promoting cashless settlements and future directions thereof.

METI hereby releases two documents titled: Cashless Vision and API Guidelines for Utilization of Credit Card Data as outcomes of the discussion by the study group.

*Note: An application programming interface (API) is a specification that facilitates one program to access a function of another program. For example, when a third party attempts to access a function on a system operated by a credit card company, an API of the system works as an entrance port for the third party.

4.1. Background

Promotion of cashless settlement among the public is expected to bring about a variety of advantages, such as consumer-friendliness in which consumers are not required to bring a large amount of cash while shopping, a smaller risk of people losing cash while carrying it, and improvement of productivity for businesses brought about by saving cash management costs.

In recent years, payment options have been diversifying, as seen by the appearance of new payment services different from the conventional ones offered by credit cards, and a wide variety of payment services is expected to emerge in the near future.

In light of this background, METI established a Study Group for API-based Collaboration Involving Credit Card Utilization in March 2017, and the study group started discussions concerning ideal approaches to advancing API-based collaboration between credit card companies and FinTech (Finance Technology) companies.

In light of trends and other situations in related fields both inside and outside of Japan, the study group expanded a range of target issues in November 2017. Comprehensive discussions on ideal approaches to means of payment that satisfy consumer friendliness and those to cashless environments that industrial players and credit-card affiliated stores are likely to accept were also held.



● JAPAN – Section I (General Condition Updates)

METI hereby releases two documents titled: Cashless Vision and API Guidelines for Utilization of Credit Card Data as outcomes of the discussions by the study group.

4.2. Key points of the Cashless Vision

The Cashless Vision presents recommendations on the directions of efforts contributing to solving challenges faced by both credit-card affiliated stores and consumers as well as measures in the realization of a cashless society.

- (1) Definitions of cashless settlement, etc.
- (2) Trends in cashless settlement worldwide
- (3) Current situations of cashless settlement in Japan
- (4) Directions of actions in light of current situations in Japan and specific measures therefor (proposal)
- (5) Future efforts •Anticipating the World Expo 2025 in Osaka, the study group set a new goal called “Declaration of Payment Reform” in which aim to achieve a higher ratio of consumers who utilize cashless settlement ahead of the scheduled 40% which was already set in the Future Strategy 2017. In addition, the study group will aim to raise this ratio to 80% in the future, the world’s highest level.

Under the leadership of a new commission tentatively called “Commission for Promotion of Cashless Settlement,” the industry, academia and government sectors will collaboratively advance efforts under the framework of All-Japan initiatives.

4.3. Key points of the API Guidelines for Utilization of Credit Card Data

The guidelines present model directions of measures for API specifications, security and protecting credit card users. Through this effort, Japan will aim to encourage businesses involved in API-based collaboration to enhance efficiency in providing credit card services and aim to create an environment in which users are able to enjoy shopping in a safe and secure manner.

- (1) Harmonization of API specifications
- (2) Measures for security and protection of users
- (3) Relationship with regulations under the related laws, other guidelines, etc.
- (4) Future efforts

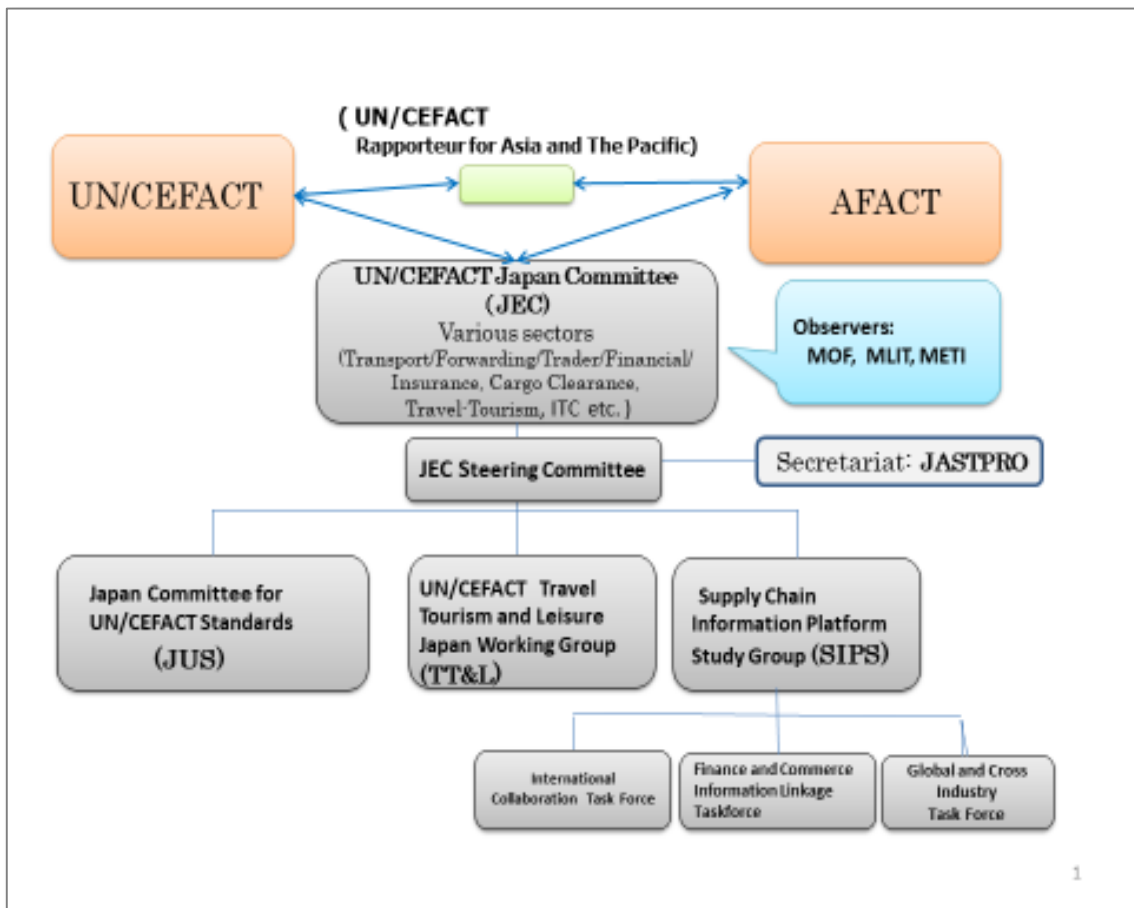


● JAPAN – Section II (EDIFACT/ebXML/XML Based Standards Development)

2.1 UN/CEFACT Japan Committee (JEC)

2.1.1 Overview

The Japan EDIFACT Committee, the predecessor of UN/CEFACT Japan Committee was founded in 1990. Its mission was to enlighten and promote the of UN/EDIFACT standard for the better business practices in Japan. The old name of the committee was renamed to the above in 2007 to propagate UN/CEFACT's mission in Japan more clearly.



JEC consists of members from various sectors (NACCS Inc., trading, financing, manufacturing, distribution, construction, transportation, bank, insurance, Travel & Tourism, ITC etc.). Ministry of Economy, Trade and Industry (METI), Ministry of finance (MOF), and Ministry of land, Infrastructure, Transport and Tourism (MLIT) join as observers. All issues of UN/CEFACT activity related with to Japan HOD are tabled to and discussed in JEC.

JAPAN – Section II (EDIFACT/ebXML/XML Based Standards Development)

Japan Association for Simplification of International Trade Procedures (JASTPRO) works for JEC as the secretariat.

2.1.2 Japan Committee for UN/CEFACT Standards (JUS)

JUS is a working group under the umbrella of JEC. Members are composed of experts in various sectors. (Business procedure and ITC)

Inquiries by UN/CEFACT are discussed and verified in detail in this committee and the results are fed back to JEC in the name of Head of Delegation Japan.

Also discussion is done as to;

- Evaluation of Data Maintenance Request (DMR) by parties in Japan
- Approval of Verification of UN/LOCODE done by JASTPRO, who was officially nominated as Japan Focal point, by the government.
- Evaluation of a new project proposal for which HOD support of Japan is applied by the project member(s)
- Coping with 'Public Review' for the draft UNECE recommendations
- etc.

Translation of UNECE recommendations and other deliverables into Japanese is another important role. Translated recommendations are placed on JASTPRO official website.

2.1.3 Supply Chain Information Platform Study Group

SIPS (Supply Chain Platform Study Group) under the UN/CEFACT Japan Committee has been conducting the information platform for business infrastructure in Japan since the year 2011.

(1) SME data linkage projects

The Small and Medium Enterprise Agency in Japan has launched the SME EDI promotion projects using UN/CEFACT standards in the year 2016-2017. SIPS has established the message registry system for supporting the message design activity for SME used in the supply chain. There have been 12 projects implementing EDI system in various domains and regions as follows.

● JAPAN – Section II (EDIFACT/ebXML/XML Based Standards Development)

- Traceability for cross boundary distribution of Tuna (Indonesia)
- The next generation EDI for SMEs in Hokkaido district (Hokkaido)
- Business matching and information sharing among SME manufacturers (Ohsaka)
- Invoicing and Billing for logistics service for export (Tokyo)
- Household goods EDI for SME wholesalers and retailers (Tokyo)
- EDI for SMEs led by Chamber of Commerce (Aichi)
- Cross Boarder manufacturing collaboration (China)
- Cloud based EDI for SMEs (Tokyo)
- Kanban process for SMEs (Aichi)
- Manufacturing collaboration with EDI (Tokyo)
- EDI for water business (Tokyo)
- Information sharing for Engineering Chain (Shizuoka)

(2) New financial network in Japan

Japanese Bankers Association has decided to start the new financial network service called ZEDI based on ISO20022 in the end of 2018. ZEDI can convey the commercial information attached to the fund transfer request. SIPS proposed the UN/CEFACT remittance advice message used as the commercial information for ZEDI.

Ministry of Economy Trade and Industry has launched 4 POC projects for supporting the settlement information management using UN/CEFACT messages on ZEDI network as follows.

- Electronic payment in local area (Hokkaido)
- Linkage project between local industry areas (Aichi & Shizuoka)
- ZEDI, ERP and EDI linkage (Tokyo)
- Food EDI (Gifu)

2.1.4 Japanese EC Promotion Organization for Travel, Tourism and Leisure (JTREC)

Reported by Akio Suzuki - Managing Director

Short description of JTREC

JTREC has been originated in Japan since 1992 among travel related businesses and those technical and business experts to work for the activities of UN/CEFACT Forum and AFACT. They also lead the JEC Travel, Tourism & Leisure WG, which



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was recently renamed from AFACT Japan Travel, Tourism & Leisure WG in UN/CEFACT Japan Committee. The major work items are listed as in the following.

2.1.4.1 . Maintenance of SLH deliverables and User Guide Creation

Maintenance work of the deliverables developed in Small scaled Lodging House (SLH) related projects and the creation of user guides on the SLH standards are under way.

2.1.4.2 Business Model for International SLH Trade

Promotion of the SLH deliverables in the real business has been discussed. And the international application has also been discussed with the partners in some of the AFACT member countries

2.1.4.3 DTI (Destination Travel Information) Project Completion

This is an important work item but still stranded because of the tight schedule. This will be resumed shortly.

2.1.4.4 Green Paper Creation

Green Paper project on experience programs has been worked to complete the parts of the assigned paper in time for the target date.

2.1.4.5 Comprehensive Data Interchange

The deliverables of SLH, DTI, and EP projects are going to be well organized to deliver comprehensive data set for their easy implementation in the future.

2.1.4.6 Block chain technologies

(1) White Paper project in UN/CEFACT Forum

Surveying the use of Block chain technologies in the travel and tourism domain of the world has been done to make a report to UN/CEFACT Forum White Paper



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Project by working cooperatively with the international experts, including those of AFACT member countries.

(2) Block chain study group

The study group on the Block chain technologies has been organized by the members of JTREC and kept working satisfactorily.

2.1.4.7 Cooperation and coordination with the experts of AFACT member countries

The regular con-calls with those experts in the domain of AFACT member countries have been held to discuss each of the work items to make a progress.

1.1.4.8. Attendance of UN/CEFACT Forum and AFACT meetings

The meetings of UN/CEFACT Forum and AFACT have been regularly covered by the experts of JTREC.

● JAPAN – Section III (International Trade Data Sharing Platform using BlockChain)

1. Benefits for International Trade Confirmed by PoCs

Based on our activities up to now, we have determined that the most useful application of block chain technology is for the trading business. To confirm this theory, we conducted two PoCs in 2016.

Phase 1

Application of block chain technology to letter of credit transactions

In June 2016, we conducted a PoC for letter of credit transactions using block chain technology. This was Japan's first case of a PoC in the area of trade finance. We developed a sample system and verified it with participant companies who used in a developed environment.

As a result, we were able to drastically reduce operating procedure time for letter of credit transactions and accelerate other procedures including amendment of letters of credit. We also confirmed the fault tolerance and high availability of block chain technology.

Phase 2

Application of block chain technology to insurance policies

In December 2016, we conducted another PoC for applying block chain technology to export marine cargo insurance policies. By using block chain technology to digitalize the insurance policies and automatically reflect the digitalized data of letters of credit and bills of landing in the insurance policies, we improved security performance and operational efficiency. We were also able to confirm its applicability to actual operations, its cost reduction effect, etc.

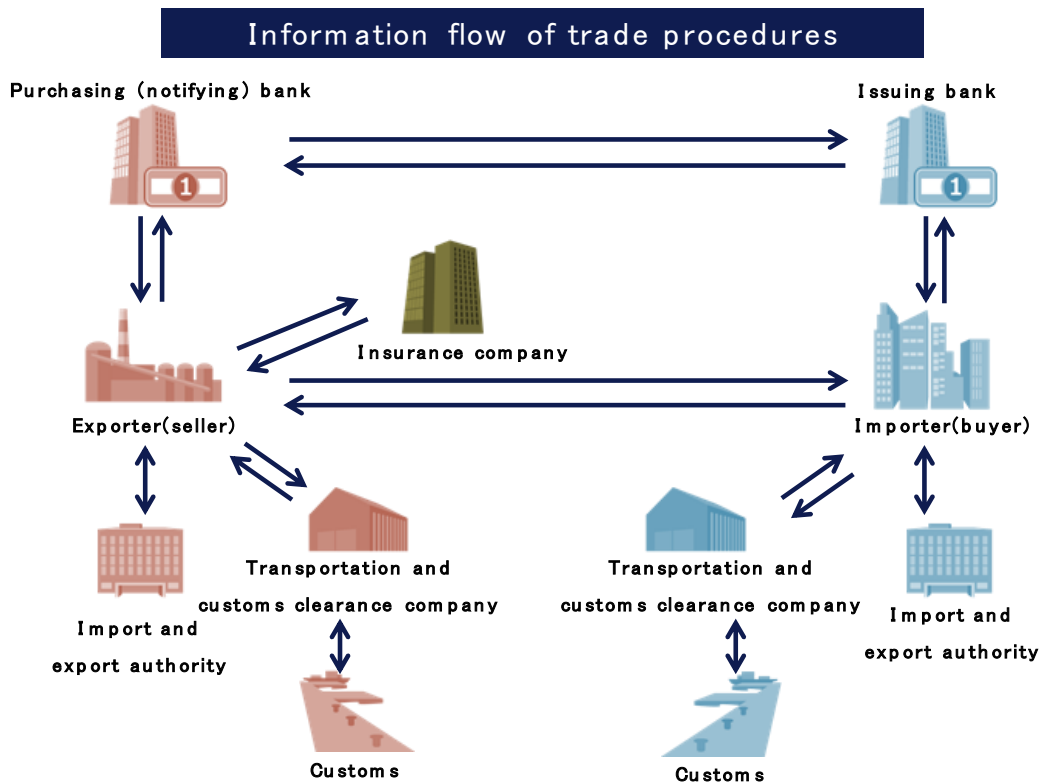
Requirements for a trade transaction system

- Equal standing of all participants in the system
- Possession of the same transaction data by participants in every country
- Gradual participation of multiple trade stakeholders
- Management of transaction status and work flow
- High level of reliability



● JAPAN – Section III (International Trade Data Sharing Platform using BlockChain)

By conducting these PoCs, we once again reached the conclusion that the characteristic features of blockchain technology are best-suited to the above requirements.



2. Toward the Next Step for Social Implementation: Launch of the First Consortium for a Trade Data Sharing Platform using Blockchain Technology in Japan

We have already confirmed the effectiveness of and objectives facing the use of blockchain technology in import and export trade operations through two PoCs, Phases 1 and 2. Consequently, we called for participation in the initiative from diverse sectors across the field of trade and launched a consortium to implement the next PoC, aimed at developing a platform for trade data sharing by leveraging blockchain technology.

International trade procedures involve various cross-national organizations such as cargo owners, maritime companies, banks, insurance companies, logistics



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companies, customs, and import and export authorities, all sharing information with one another in a complex manner. Although some parts of the trade process have already been systemized, enormous amounts of information are passed from one to the next like a broad-scale “information bucket relay.” Documents are still sent in paper form or as faxes, emails, PDFs, or Excel files, and operators visually check them and then manually enter the data into that company’s system. No matter what kind of business it is or how big the company might be, such a process is repeatedly conducted every day all over the world, and the workload is enormous. Moreover, because visual and manual checks are being conducted, it is very difficult to avoid human error. To solve these problems, we need to have a mechanism for sharing trade data. The Consortium’s mission is to discuss and examine such a mechanism and to lay the foundations for making it happen.

Over many years, NTT DATA has gained a great deal of experience in the development and operation of Japan’s trade systems, the logistics systems of cargo owners and freight forwarders, and the financial systems of banks and insurance companies. Based upon these experiences and the know-how we have obtained as a result, we utilize blockchain technology from the customer’s point of view. This is where we believe we can demonstrate our strength.

Participating Companies (as of March 2018) *In alphabetical order

Kawasaki Kisen Kaisha, Ltd. ("K" LINE)

Marubeni Corporation

Mitsui O.S.K. Lines, Ltd. (MOL)

Mitsui Sumitomo Insurance Company,
Limited

Mizuho Financial Group, Inc. / Mizuho Bank,
Ltd.

Nippon Express Co., Ltd.

NYK Line



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Sojitz Corporation

Sompo Japan Nipponkoa Insurance Inc.

Sumitomo Corporation

Sumitomo Mitsui Banking Corporation

The Bank of Tokyo-Mitsubishi UFJ, Ltd.

Tokio Marine & Nichido Fire Insurance Co., Ltd.

Toyota Tsusho Corporation

3. Proceeding with Examinations from Both the Business and System Operation Sides

The Consortium aims to build a Trade Data Sharing Platform that connects trade stakeholders and digitalizes trade documents in order to improve the efficiency and convenience of trade procedures.

To achieve this objective, we began our activities by forming two broad working groups. One is the Business/Operations Rules Study Working Group. Apart from technical issues, this group is working to standardize operations and to develop new rules through studies and cross-industry discussion. The other is a PoC Working Group. Through PoCs, the group verifies the functions and effects that the Trade Data Sharing Platform can provide. During the period from August 2017 to March 2018, a total of ten Working Group meetings were held. In addition, the Consortium General Meeting was held to share the overall progress status and any objectives to be implemented, and Sub-Working Group meetings by industry were held on an as-needed basis to discuss and examine the objectives identified by the Working Group.

Consortium General Meeting

We shared the overall progress status and objectives facing the Consortium as a whole.

Business/Operations Rules Study Working Group

Each participant's objectives and needs were identified. Then, upon identifying the themes requiring cross-industry discussion, small groups were formed to share the objectives and to discuss possible solutions, such as operational rules. The group also discussed the necessary services the Trade Data Sharing Platform should



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🇯🇵 JAPAN – Section III (International Trade Data Sharing Platform using BlockChain Technology)

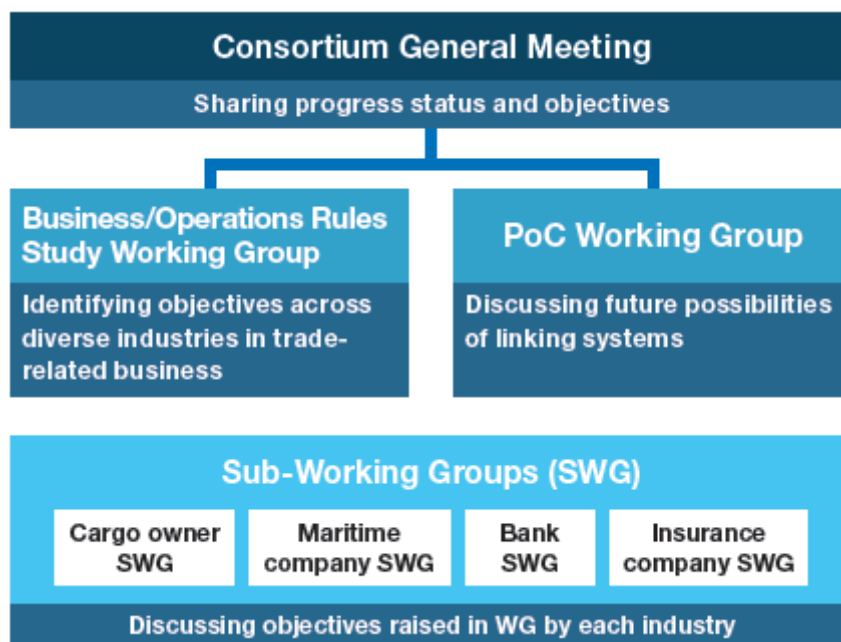
provide, and narrowed down the future vision, steps we should take, targeted services and the service menu at the initial launch stage.

PoC Working Group

From August 2017 to March 2018, the group conducted PoC Cycles 1 and 2. We verified a prototype system and interviewed participants about the result during both cycles. In Cycle 2, we updated the prototype system that was built in Cycle 1 by adding to its scope, etc. Then, by using actual past trade data in addition to sample data, we could conduct verification in a form closer to a real transaction environment. Consequently, we could confirm the functions and the expected effects of the blockchain-based Trade Data Sharing Platform, as well as its feasibility and objectives to its practical use from a system standpoint and an operational standpoint. The preparation for practical use is ongoing, with 55 functions and 83 APIs for the prototype system having already been developed.

Sub-Working Group

To find solutions for the objectives identified by the Working Group, we discussed and examined them per industry (cargo owners, maritime companies, banks, and insurance companies).





JAPAN – Section III (International Trade Data Sharing Platform using BlockChain)

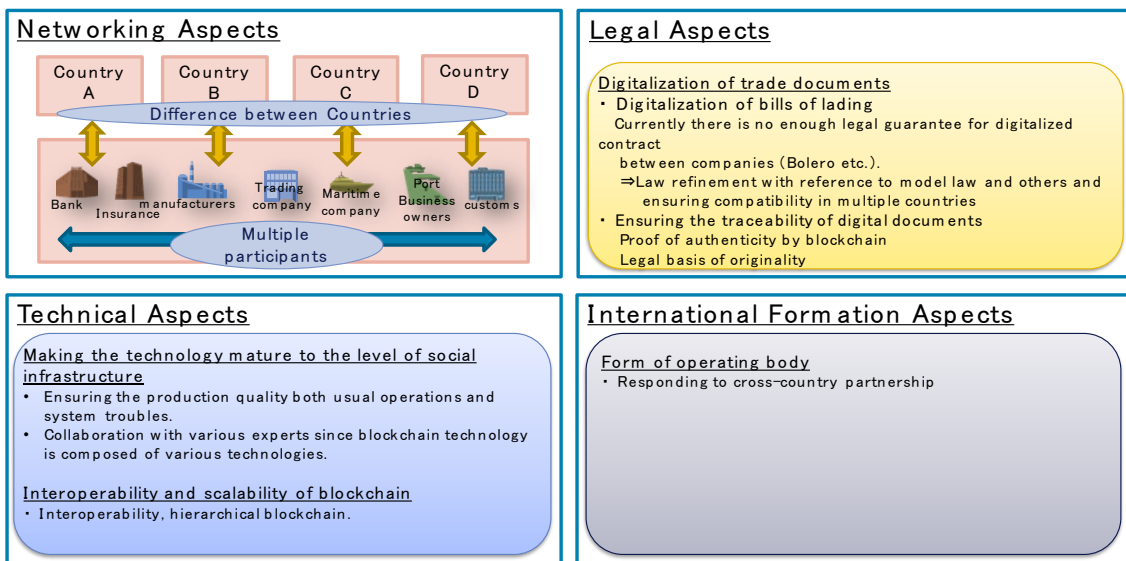
4. A PoC for Connection to Singapore’s Trade Platform

Nowadays, various countries and regions conclude economic partnership agreements aimed at achieving free trade transactions. In cross-border trade transactions, participants such as trade business owners and financial institutions exchange dozens of trading documents mainly in paper format or by email. The significant objective to be implemented in relevant countries and regions is further streamlining the handling of trading documents and accelerating their processing.

Accordingly, in parallel with the existing consortium activities, since December 2017, we have been conducting a PoC that connects our Trade Data Sharing Platform to Singapore’s National Trade Platform (NTP). To raise the safety, efficiency, and transparency of cross-border transactions, we have been identifying issues and seeking solutions through this PoC.

5. Four Objectives to the Implementation of a Trade Data Sharing Platform

In moving forward with our initiatives for implementing the Trade Data Sharing Platform in the Consortium, four main objectives have arisen. On the technical side, we need to further advance blockchain technology and combine it with the existing technology in order to achieve the level of social infrastructure that underpins international trade procedures. Meanwhile, on the business side, we still have cross-industry, cross-institution, and cross-national objectives as well as gaps in legislation and technology. To resolve these objectives, we should think about what needs to be promoted and operated in what way.





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6. Future Consortium Activities

The Consortium will continue to work on these four main objectives. Specifically, a Services Study Working Group responsible for researching and examining objectives to system implementation and functional details will take a central role, a Legal Subcommittee will examine the terms of service and the mid- and long-term legal objectives, a Public Relations Subcommittee will be responsible for public relations for the Consortium, and other subcommittees will be formed by industry, theme, etc.

By obtaining the active participation of all the companies involved in planning, the Consortium will accelerate its activities aimed toward the implementation of the Trade Data Sharing Platform.

Policies for FY2018

1. Examination of feasible services

Examinations of the details of a small start

Linkage with existing logistics information platforms and public institution systems

Overseas cooperation / PoC

2. Examination of laws and regulations

Terms of service

Legal objectives

3. Public relations activities

Distribute information both domestically and abroad

