FMI Disclosure

Foreign Exchange Yen Clearing System

Responding institution Japanese Bankers Association

Jurisdiction in which the FMI operates Japan

Authority regulating, supervising, or The Bank of Japan

overseeing the FMI

The date of this disclosure is 31 July, 2019¹

This disclosure can also be found at None

For further information, please contact Foreign Exchange Yen Clearing System

Administration Office

Operations & Clearing System

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Japanese Bankers Association

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I. Executive Summary

General Background of the FMI

The clearing of foreign exchange transactions normally takes place in an interbank system within the financial centers of nations whose currencies are employed as clearing currencies. For Japanese Yen, the Foreign Exchange Yen Clearing System (FXYCS), which was set up and is managed by the Japanese Bankers Association (JBA), handles the clearing of foreign exchange transactions, with operations entrusted to the Bank of Japan (BOJ), and conducted via the Bank of Japan Financial Network System (BOJ-NET).

The JBA manages the FXYCS as one of the JBA's systems to achieve its goals: to contribute to the economic growth of Japan as well as the prosperity of the general population through various activities such as research regarding the monetary economy and bank management, research and planning concerning the improvement of banking businesses, and the promotion of protection for bank users,

¹ This document is the English version of "FMI Disclosure on Foreign Exchange Yen Clearing System" which was published on 31 July, 2019 in Japanese.

as well as the increased convenience when using banks, with the aim to develop a sound and healthy banking system of Japan.

The FXYCS handles the exchanging and clearing of yen transactions related to foreign exchange, including large-value transactions, which encompasses dealings in foreign exchange markets, transfers to yen accounts of correspondents, and yen-denominated fund transfers. The FXYCS consigned the operations of foreign exchange yen clearing to the BOJ and the operations are conducted in the BOJ-NET, the settlement infrastructure which was built for the efficient and safe settlement of funds and Japanese government bonds (JGBs), between financial institutions and the BOJ.

All of the FXYCS transactions are conducted through real-time gross settlement (RTGS) using central bank money.

Participants

As of the end of June 2019, the FXYCS has a total of 200 financial institution participants: 26 direct participants that directly participate in the BOJ-NET, 173 indirect participants, and the CLS Bank.

[Participants] (as of the end of June 2019)

	Participants	Direct	Indirect	
		Participants	Participants	
City Banks	5	4	1	
Regional Banks	64	0	64	
Trust Banks	7	3	4	
Regional Banks II	35	1	34	
Foreign Banks	55	12	43	
Shinkin Banks	23	2	21	
Others (Note 1)	10	4	6	
TOTAL	200 (Note 2)	26	173	

(Note 1) Others are Sony Bank, SBI Sumishin Net Bank, Aeon Bank, Daiwa Next Bank, Shinhan Bank Japan, Shinsei Bank, Aozora Bank, The Shoko Chukin Bank, The Shinkumi Federation Bank and The Norinchukin Bank.

(Note 2) CLS Bank is included in the number of total participants.

Legal and Regulatory Framework

The JBA, which manages the FXYCS, is "the general incorporated association" based upon the "Act on General Incorporated Associations and General Incorporated Foundations" (the Act). The management of the FXYCS is stipulated as one of the tasks in the Articles of Incorporation of the Association of the JBA which was decided in a general meeting of the JBA.

No specific laws or regulations to rule the FXYCS exist, but the FXYCS is managed and regulated by the "Rules Governing the Foreign Exchange Yen Clearing System" (FXYCS Rules) and the "Detailed Enforcement Regulations for the Operations of the Foreign Exchange Yen Clearing System" (FXYCS Detailed Regulations), which were stipulated upon the basis of business law schemes. The FXYCS Rules stipulate organization and business relating to the FXYCS, and the FXYCS Detailed Regulations stipulate necessary matters concerning the conduct of the FXYCS Rules.

The FXYCS is subject to the oversight of the BOJ.

Main Risks

The FXYCS maintains the reliability of the legal basis. Also, the FXYCS uses the RTGS system using central bank money, and credit risks and liquidity risks resulting from the JBA, the management body of the FXYCS, are not taken into consideration. Consequently, the main envisioned risk is operational risk.

Risk Management

Activities and operations of the JBA including the FXYCS operation are conducted in accordance with the internal rules and regulations which stipulate the authorization power and procedures. In addition, the Internal Audit Department established within JBA's Secretariat conducts business and accounting audits on these activities and operations. Financial audits are also conducted by external auditors, including audits on the FXYCS Special Account related to the FXYCS operation.

As for business continuity measures for any system failures or damages at the JBA, the BOJ, or participating banks, the FXYCS stipulates the procedures to cope with these in the FXYCS Rules, etc.², and the FXYCS conducts annual BCP drills to

² FXYCS stipulates "Management Procedures Concerning Clearing Procedures in Cases

ensure the effectiveness of these measures.

II. Summary of Major Changes since the Last Update of the Disclosure

This is the third disclosure for the FXYCS and the following are major changes from the second disclosure.

- Added detailed explanations for each key consideration, instead of providing general explanations for each principle.
- In "IV. Principle-By-Principle Summary Narrative Disclosure," stipulated more details mainly in "Principle 2: Governance," "Principle 15: Business Risk," "Principle 17: Operational Risk" and "Principle 19: Tiered Participation Arrangements."

III. General Background of the FMI

<History of the FXYCS>

The clearing of yen transactions related to foreign exchange formerly took place in the following manner: the bank which received a fund transfer request from an overseas bank drew up a BOJ check and delivered it along with the payment instructions to the receiving bank, and the receiving bank then took the check to the BOJ to obtain its funds. However, the internationalization of the Japanese economy increased the use of yen as a clearing currency in international transactions. Thus the FXYCS was introduced by the former Tokyo Bankers Association³ (at present the JBA) in October 1980, to facilitate the ease and safety of such clearings.

Initially, paper-based payment instructions from participating banks were exchanged at the Tokyo Bankers Association, credit and debit amounts were offset, and the net balance was settled by transferring funds from the BOJ's current accounts which were held by the participating banks. Beginning in March 1989, the Tokyo Bankers Association (at present the JBA) consigned the operations of foreign exchange yen clearing to the BOJ, which was then processed online using the BOJ-NET.

Where a State of Emergency Occurs" (FXYCS Management Procedures), which will be used as a practical guideline, pursuant to rules and detailed regulations in case a state of emergency occurs.

The former form of JBA. On April 1, 2011, the Tokyo Bankers Association was transited as "the general incorporated association" and the new JBA was formed by changing its name of Tokyo Bankers Association after handing over and amassing all of JBA's businesses to the Tokyo Bankers Association.

In 1998, the new FXYCS was started by having the Tokyo Bankers Association act as a central counterparty, and introduced new settlement risk management measures which corresponded to international standards: the RTGS system, in which each payment instruction is settled immediately together with the designated-time net settlement (DNS). In May 2002, CLS Bank joined the FXYCS and started the payment versus payment (PVP) settlement among multiple currencies. In October 2008, the FXYCS shifted all of the FXYCS transactions from DNS to RTGS (with liquidity-saving features) using current account settlement of the BOJ. At the same time, the FXYCS abolished the DNS as well as collateral scheme and liquidity-provision scheme, as well as stopped having the Tokyo Bankers Association act as a central counterparty.

Recent changes were extending exchange hours for Ordinary Settlement Payment Instructions of the FXYCS to from 8:30 am to 7:00 pm due to the full launch of the New BOJ-NET⁴ in October 2015, which was further expanded to 9:00 pm in February 2016.

October 1980	The FXYCS is established (manual, paper-based)						
March 1989	The FXYCS goes online via the BOJ-NET						
December 1992	Temporary suspension is introduced due to the BCCI incident						
December 1994	Resolution is made to enable market participants to use the FXYCS						
	for financial exchange dealings among Japan-residing parties						
	(available for dealings after spot trades: shift from the bill and check						
	clearing system and nationwide expansion of the FXYCS: increased						
	participants from regional financial institutions)						
December 1998	Transition to the new FXYCS (Tokyo Bankers Association acts as a						
	central counterparty)						
May 2002	CLS Bank joins the FXYCS (live operation starts in September 2002)						
October 2008	Fully shifts to RTGS (Next-Generation RTGS in the BOJ-NET						
	begins)						
October 2015	Extension of operation hours associated with full launch of the New						
	BOJ-NET						

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⁴ The New BOJ-NET was structured based on the basic concepts of a) Use the latest information technology, b) Have high flexibility to adapt to changes and c) Enhance accessibility, and was launched in two stages including extension of operating hours (first stage in October 2015 and second stage in February 2016).

February 2016	Expansion of operating hours under the New BOJ-NET
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<General Information on the Performance and Statistics of the FXYCS>

The transaction volume of the FXYCS during the FY2018 (from April 2018 to March 2019) is about 7.0 million transactions and 4.2 quadrillion yen (29.4 thousand transactions and 17.4 trillion yen per day).

Foreign Exchange Yen Clearing System (FXYCS) Transaction Volume/Value for Fiscal Year 2018 (From April 1, 2018 to March 31, 2019)

(Cases, 100 million yen)

FY	In Total		(Note 1)		Simultaneous Settlement		Ordinary settlement	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
2017	7,098,482	39,687,594	1.9	0.5	7,068,375	36,906,924	30,107	2,780,670
	(28,973)	(161,990)			(28,851)	(150,641)	(123)	(11,350)
2018	7,187,185	42,630,041	1.2	7.4	7,154,374	39,671,263	32,811	2,958,778
	(29,456)	(174,713)			(29,321)	(162,587)	(134)	(12,126)

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Month, Year	In Total		(Note 2)		Simultaneous Settlement		Ordinary settlement	
iear	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Apr. 2018	554,442	3,536,670	0.1	7.7	551,245	3,297,537	3,197	239,133
	(27,722)	(176,834)			(27,562)	(164,877)	(160)	(11,957)
3.5	613,736	3,533,868	6.0	17.2	610,488	3,286,599	3,248	247,268
May. 2018	(29,226)	(168,279)			(29,071)	(156,505)	(155)	(11,775)
I . 9010	617,020	3,840,148	Δ2.0	14.6	614,447	3,577,534	2,573	262,614
Jun. 2018	(29,382)	(182,864)			(29,259)	(170,359)	(123)	(12,505)
I 1 0010	599,108	3,526,536	3.5	9.7	596,517	3,292,406	2,591	234,130
Jul. 2018	(28,529)	(167,930)			(28,406)	(156,781)	(123)	(11,149)
A 9010	611,239	3,330,958	3.7	4.7	608,409	3,119,330	2,830	211,628
Aug. 2018	(26,576)	(144,824)			(26,453)	(135,623)	(123)	(9,201)
C 0010	559,968	3,482,199	Δ6.5	4.6	556,946	3,224,872	3,022	257,328
Sep. 2018	(31,109)	(193,456)			(30,941)	(179,160)	(168)	(14,296)
Oct. 2018	631,889	3,848,817	7.5	14.8	628,691	3,580,044	3,198	268,773
	(28,722)	(174,946)			(28,577)	(162,729)	(145)	(12,217)
N 9019	597,559	3,370,662	0.9	6.4	595,096	3,156,864	2,463	213,798
Nov. 2018	(28,455)	(160,508)			(28,338)	(150, 327)	(117)	(10,181)
Dec. 2018	604,179	3,410,186	Δ0.6	0.0	601,798	3,192,247	2,381	217,939
	(31,799)	(179,483)			(31,674)	(168,013)	(125)	(11,470)
I 9010	607,260	3,641,390	5.2	14.5	604,918	3,387,034	2,342	254,356
Jan. 2019	(31,961)	(191,652)			(31,838)	(178, 265)	(123)	(13,387)
Fab 2010	549,498	3,302,196	Δ0.7	0.0	547,122	3,048,940	2,376	253,256
Feb. 2019	(28,921)	(173,800)			(28,796)	(160,471)	(125)	(13,329)
Mon 2010	641,287	3,806,411	Δ1.3	Δ2.4	638,697	3,507,857	2,590	298,554
Mar. 2019	(32,064)	(190,321)			(31,935)	(175,393)	(130)	(14,928)

(Note 1) % in increase/decrease of volume and value compared to the previous fiscal year.

(Note 2) The figures in bracket are daily average.

General Organization of the FXYCS

The JBA which manages the FXYCS is a general incorporated association under the Act, and as of the end of June 2019, it has 191 member banks including 54 foreign banks, 3 bank holding companies, and 58 regional bankers associations.

The Board of Directors of JBA is set based on the Act and the Articles of Incorporation of the Association of JBA, and as of the end of June 2019, consists of 17 directors and 4 auditors. Directors and auditors are mainly selected from bank presidents, and one of the auditors selected is a scholar who is an expert in Civil Law, Commercial Law and the management of legal entities.

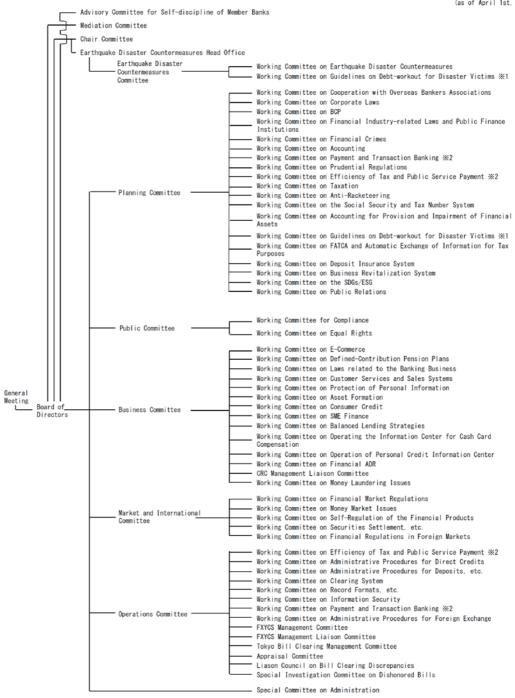
Under the Board of Directors of the JBA, various committees have been set up and one of these committees is the Operations Committee. Because dealing with issues relating to the settlement and clearing systems is one of its tasks, the FXYCS is under the jurisdiction of the Operations Committee. The members of the Operations Committee consist of executives from banks and there are 11 members as of the end of June 2019.

Furthermore, the FXYCS Management Committee is established under the Operation Committee, and handles issues relating to the management and operations of the FXYCS and delegated issues from the Operations Committee for the smooth management and operations of foreign exchange yen clearing. As of the end of June 2019, the members are comprised of 13 bankers of the division manager level.

Moreover, the FXYCS Management Liaison Committee to explain the management and operations of the FXYCS, to gather opinions and to discuss matters among the participating banks has been established, and as of the end of June 2019, 17 bankers who are of the general manager level participate in the committee.

Committees

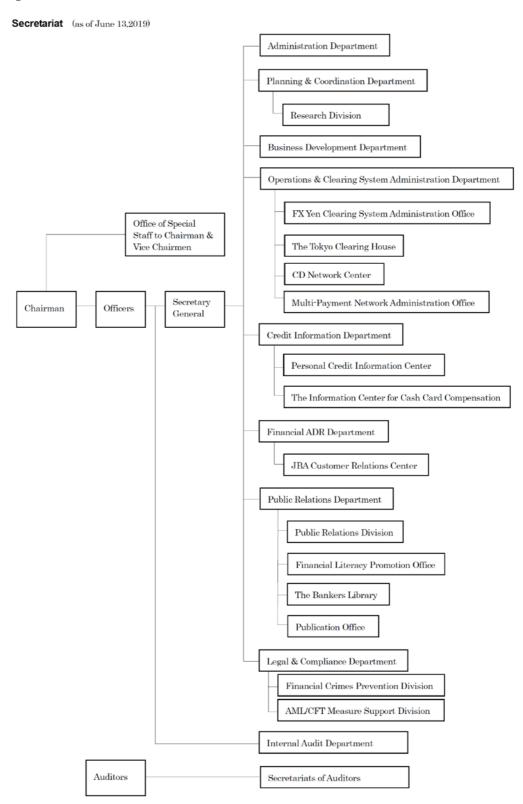
(as of April 1st. 2019)



 $[\]divideontimes$ 1 Jointly organized under both Earthquake Disaster Countermeasures Committee and Planning Committee

 $[\]divideontimes 2$ Jointly organized under both Planning Committee and Operations Committee

The secretariat of the JBA serves to manage various committees and meetings, and its organization is as follows;



Legal and Regulatory Framework

<Legal Structure>

No specific laws or regulations to operate the FXYCS exist, but the FXYCS is managed and regulated by the FXYCS Rules, the FXYCS Detailed Regulations, etc. which were stipulated upon the basis of business law schemes.

<Ownership Structure>

The JBA is the management body of the FXYCS, and it entrusts the process of foreign exchange yen clearing operations to the BOJ.

<Legal Basis for the FXYCS>

The legal jurisdiction of the FXYCS is within Japan only, and the legal basis of the FXYCS is the FXYCS Rules, the FXYCS Detailed Regulations, etc. which was stipulated upon the basis of business law schemes. Because the FXYCS requires the RTGS settlement to direct participants of the FXYCS by the FXYCS Rules, etc., it has a high reliability in settlement finality which is the utmost important aspect of the FXYCS operations.

When revising the FXYCS Rules, etc., the JBA conducts the consultation process with participating banks, as well as through discussions in the FXYCS Management Committee, while also going through a thorough examination by an internal legal department concerning consistency with other laws and regulations in Japan, thus maintaining the reliability of the legal basis. Also, the JBA consults with the BOJ and goes through the resolution process in the Operations Committee or at the Board of Directors for the revision.

< Regulatory, Supervisory, Oversight Body of the FXYCS>

The FXYCS is subject to the oversight of the BOJ.

System Design and Operations

<Management of the FXYCS>

The JBA, the management body of the FXYCS, conducts foreign exchange yen clearing and other related business, as well as the collection and distribution of materials in relation to foreign exchange yen clearing.

<Entrustment to the BOJ>

The JBA entrusts the BOJ with the conduct of the following: the transmission of electronic payment instructions and other incidental matters, and the preparation and distribution of statistics in relation to foreign exchange yen clearing. The operation by the BOJ is conducted using the BOJ-NET, which aims at effectively and safely processing the settlement of funds or JGBs, between financial institutions and the BOJ, through online procedures.

<Operating Hours of the FXYCS>

The exchange of payment instructions are conducted on banking business days. For Simultaneous Settlement⁵ Payment Instructions, the operating hours are from 8:30 am to 3:00 pm (Japan Standard Time), and for Ordinary Settlement Payment⁶ Instructions, from 8:30 am to 9:00 pm (Japan Standard Time).

In the "FXYCS Detailed Regulations" which stipulate exchange and clearing procedures and other matters, a core time of 9:00 am to 3:00 pm is set as exchange hours for payment instructions. The handling of settlements through Ordinary Settlement Payment Instructions that are exchanged with CLS Bank is stipulated separately.

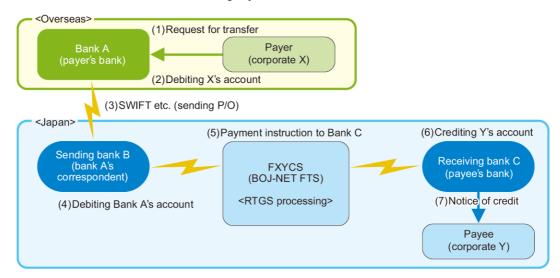
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⁵ The Simultaneous Settlement uses RTGS with liquidity-saving features, which has functions such as "queuing facility" and "bilateral or multilateral offsetting facility."

⁶ The Ordinary Settlement uses RTGS without liquidity-saving features. It is stipulated in the Management Procedures of the Foreign Exchange Yen Clearing System" (FXYCS Management Procedures) in principle, that the Ordinary Settlement Payment Instructions shall not be used other than payment instructions relating to CLS settlement. The exception is that when an urgent instructions comes in from customer and a receiving bank agrees to this instruction upon pre-notice from a sending bank.

<Settlement of the FXYCS>

The flow of the FXYCS is as displayed below:



- 1) The payer X in a foreign country instructs the payer's bank A to make a yen payment to the payer Y in Japan.
- 2) The payer's bank A debits an equivalent amount of remittance from the payer X's account, and also requests a fund transfer credit into the payee Y's account, in the account with bank C (the receiving bank in the FXYCS), mainly through SWIFT, to its correspondent bank B (the sending bank in the FXYCS), in Japan.
- 3) The sending bank B debits the amount of remittance specified in the payment instruction from the correspondent account and sends a payment instruction via FXYCS.
- 4) Upon receiving the instruction, the amount specified in the electronic payment instruction is debited from bank B's current account and credited to bank C's current account at the BOJ, through the RTGS settlement in the FXYCS (using BOJ-NET) and it is delivered to bank C.
- 5) The receiving bank C then credits the account of the payee Y, and also informs the payee Y of the notice of credit.

<Types of Payment Instructions>

There are two types of payment instructions: one is the Simultaneous Settlement Payment Instruction, the other the Ordinary Settlement Payment Instruction. For each of these two types of payment instructions, Customer Transfer and Bank Transfer exist.

The types of transactions handled at the FXYCS include the following:

- Transfer of the correspondent's yen account
- Yen proceeds accruing from a dealing in the foreign exchange market
- Proceeds arising from import and export transactions
- Remittance
- Securities-related foreign exchange transactions
- Cover transactions for remittance

IV. Principle-By-Principle Summary Narrative Disclosure

The FXYCS is categorized as a "Payment System" under the FMI Principles, and the following Principles apply: Principle 1 through 5, 7 to 9, 13, 15 through 19, and 21 to 23.

On the other hand, the FXYCS is not a central counterparty (CCP), central securities depository (CSD), securities settlement system (SSS) or a trade repository (TR) under the FMI Principles, thus Principle 6, 10, 11, 14, 20, 24 do not apply.

Also, the FXYCS is not an exchange-of-value settlement system, thus Principle 12 do not apply.

The following is a summary on the current status of the FXYCS for each applied Principle.

Principle 1: Legal Basis

An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.

Key Consideration 1: The legal basis should provide a high degree of certainty for each material aspect of an FMI's activities in all relevant jurisdictions.

The legal jurisdiction of the FXYCS is within Japan only, and the legal basis of the FXYCS is the FXYCS Rules, the FXYCS Detailed Regulations, etc. which were stipulated upon the basis of business law schemes.

Because the FXYCS requires the RTGS settlement using central bank money to Affiliate Bank of the FXYCS by the FXYCS Rules, etc., it has a high reliability in settlement finality which is the utmost important aspect of the FXYCS operations.

Key Consideration 2: An FMI should have rules, procedures, and contracts that are clear, understandable, and consistent with relevant laws and regulations.

The FXYCS publishes the FXYCS Rules and the Detailed Regulations to Participant Banks, and accepts and responds to their questions as necessary.

At the time of establishing the Rules and when revising the FXYCS Rules, etc., the JBA conducted and conducts the consultation process with participant banks, as well as through discussions in the FXYCS Management Committee, while also going through a thorough examination by an internal legal department concerning consistency with other laws and regulations in Japan.

Also, the JBA constantly consults with the BOJ and goes through the resolution process in the Operations Committee or at the Board of Directors for the revision.

Key Consideration 3: An FMI should be able to articulate the legal basis for its activities to relevant authorities, participants, and, where relevant, participants' customers, in a clear and understandable way.

The FXYCS Rules and Detailed Regulations are posted on JBA's website.

Other rules are also posted on the FXYCS website, which is accessible by all of the FXYCS Participant Banks. The details and the reasons for revisions are announced and explicitly shown to both the BOJ and Participant Banks.

Key Consideration 4: An FMI should have rules, procedures, and contracts that are enforceable in all relevant jurisdictions. There should be a high degree of certainty that actions taken by the FMI under such rules and procedures will not be voided, reversed, or subject to stays.

The FXYCS Rules pertaining to the FXYCS are enforceable with high degree of certainty under Japanese laws.

The legal basis of the FXYCS Rules is the Japanese Civil and Commercial Codes and other relevant laws and therefore the FXYCS Rules are enforceable without any violation of the laws.

Such high degree of legal certainty of the FXYCS Rules is ensured by both the consultation process with the FXYCS Management Committee and the examination by an internal legal department of the JBA.

In the past, no cases exist where the business or agreement relating to the FXYCS has been voided or reversed.

Key Consideration 5: An FMI conducting business in multiple jurisdictions should identify and mitigate the risks arising from any potential conflict of laws across jurisdictions.

The FXYCS conducts its businesses only in Japan, and does not conduct them in multiple jurisdictions. Therefore, this key consideration does not apply.

Principle 2: Governance

An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.

Key Consideration 1: An FMI should have objectives that place a high priority on the safety and efficiency of the FMI and explicitly support financial stability and other relevant public interest considerations.

One of the objectives of JBA, the managing body of the FXYCS, as stipulated in the Articles of Incorporation of the Association is "to contribute to the economic growth of Japan as well as the prosperity of the general population through various activities such as research regarding the monetary economy and bank management, research and planning concerning the improvement of banking businesses, and the promotion of protection for bank users, as well as the increased convenience when using banks, with the aim to develop a sound and healthy banking system of Japan." and explicitly support public interest considerations. As such, the activities within JBA regarding the FXYCS are conducted by placing a high priority on the safety and efficiency, while also to achieve the smooth management of the FXYCS.

Key Consideration 2: An FMI should have documented governance arrangements that provide clear and direct lines of responsibility and accountability. These arrangements should be disclosed to owners, relevant authorities, participants, and, at a more general level, the public.

The Act and the JBA's Articles of Incorporation of the Association serve as an agreement regarding the governance of the Board of Directors and executives of the JBA. The Act is public and the JBA's Articles of Incorporation of the Association can be accessed through a disclosure request which must be submitted to the Department of Justice, and it is also posted on the JBA's website which any member of the JBA can access.

The Board of the JBA authorizes the Rules for its Committees (Committee Rules) and has set up the Operations Committee based on the Committee Rules, whose members consist of directors of member banks that engage in banking business related to the FXYCS under the Committee Rules. The Operations Committee is delegated with some of authority regarding banking operations from the Board based on the Committee Rules and has set up the FXYCS Management Committee to discuss issues on the operation of the FXYCS.

The FXYCS Rules and the Detailed Regulations that set out specific activities for

the FXYCS operation are authorized by the Board and the Operations Committee respectively. Procedures for resolving agendas on the FXYCS operation is stipulated for each issue in the Rules and the Detailed Regulations.

The JBA sets up the Secretariat to conduct procedures for the FXYCS operation.

The FXYCS Rules and Detailed Regulations are posted on JBA's website.

Other rules are also posted on the FXYCS website, which is accessible by all of the FXYCS participating banks. The details and the reasons for revisions are announced and explicitly shown to both the BOJ and participant banks.

Key Consideration 3: The roles and responsibilities of an FMI's board of directors (or equivalent) should be clearly specified, and there should be documented procedures for its functioning, including procedures to identify, address, and manage member conflicts of interest. The board should review both its overall performance and the performance of its individual board members regularly.

The roles, responsibilities and liabilities of the Board of Directors of general incorporated associations are clearly stipulated in the Act and those of the JBA's are clearly stipulated in the JBA's Articles of Incorporation of the Association. The Board of Directors shall decide on the administration of business operations of a juridical person and supervise the duties of directors, and has the authority to elect or dismiss the representative director or executive directors. In addition, the resolutions at the Board of Directors require attendance of a majority of directors excluding those with special interest, and the approval of the majority of attendees.

The Operations Committee, which is one of the Committees established under the Board of the JBA, is responsible for issues regarding the payment and clearing system, and therefore the FXYCS is under the control of the Operations Committee (Article 3 of the Committee Rules). Article 4 of the Committee Rules stipulates that the members of the Committee should be the executive or managing directors of the member banks of the Board.

Key Consideration 4: The board should contain suitable members with the appropriate skills and incentives to fulfil its multiple roles. This typically requires the inclusion of non-executive board member(s).

The JBA elects auditors based on the Act and the JBA's Articles of Incorporation of the Association, and sets Board of Auditors consisting of all auditors in order to secure the JBA's proper business operations, property management, etc. The Board of Auditors audits the duties of the JBA's directors, business reports, financial statements, etc. and reports the concerned audit results to the Chairman.

As of the end of June 2019, there are 17 Directors of which 15 are external directors, and 4 auditors (three external auditors and one internal auditor).

The directors are elected from people of high ranking positions in banks as representatives of the banking industry: for example, presidents. Moreover, one of the auditors selected is a scholar who is an expert in Civil Law, Commercial Law and the management of legal entities. All members on the Board of Directors have the appropriate capabilities, experience, and knowledge.

Key Consideration 5: The roles and responsibilities of management should be clearly specified. An FMI's management should have the appropriate experience, a mix of skills, and the integrity necessary to discharge their responsibilities for the operation and risk management of the FMI.

The JBA has representative directors who directly manage the JBA, as well as executive directors. The roles, responsibilities and liabilities of representative directors and executive directors of general incorporated associations are clearly stipulated in the Act and those of the JBA's are clearly stipulated in the JBA's Articles of Incorporation of the Association. Through a cross-election among the Board of Directors, the following directors, who all have sufficient capabilities, experience, and knowledge are elected: representative directors (one is the Chairman of the JBA who is a president of a major bank and the other is the Vice Chairman/Senior Executive Director of the JBA from the directors of secretariat of the JBA. Their achievements in activity execution are regularly reported to the Board of Directors.

Key Consideration 6: The board should establish a clear, documented risk-management framework that includes the FMI's risk-tolerance policy, assigns responsibilities and accountability for risk decisions, and addresses decision making in crises and

emergencies. Governance arrangements should ensure that the risk-management and internal control functions have sufficient authority, independence, resources, and access to the board.

The FXYCS Administration Office of the Operations & Clearing System Administration Department within the JBA manages the risk of the FXYCS. To illustrate more specifically, the FXYCS Administration Office deals with the business continuity measures in case of disasters or system failures in accordance with the FXYCS Rules etc., enacted at the Board of Directors. Moreover, resolutions of the Board of the Directors are required for critical measures concerning issues in cases where a state of emergency is expected to continue for an extended period of time.

In October 2008, the FXYCS shifted all of the FXYCS transactions to RTGS using current account settlement of the BOJ. Therefore, essentially no risk is anticipated except for operational risk. Also, clearing operations are entrusted to the BOJ

Risk management is conducted aiming at basic principle of the FXYCS, one of which is smooth operation of the FXYCS

Regarding risk management, the Internal Audit Department of the JBA conducts both accounting audits and business audits. The results of these audits are reported to both Executive Directors and Board of Directors. External auditors also appropriately conduct financial audits, including audits on the FXYCS Special Account

Key Consideration 7: The board should ensure that the FMI's design, rules, overall strategy, and major decisions reflect appropriately the legitimate interests of its direct and indirect participants and other relevant stakeholders. Major decisions should be clearly disclosed to relevant stakeholders and, where there is a broad market impact, the public.

As for the decision-making body of the FXYCS, as illustrated in "General Organization of the FMI" under item III of this document, the Board of Directors holds primary authority for making decisions concerning the administration of business operations, but the Operations Committee which tasks include the FXYCS is established below the Board of Directors and the authority partially is delegated to the Committee.

The FXYCS Management Committee, which is established under the Operations Committee of the JBA, conducts the consultation about issues relating to the FXYCS operation and matters delegated from the Operations Committee.

The members of the FXYCS Management Committee are the Deputy Managers of the top 10 institutions in the FXYCS transaction volume, banks representing its business sector among banking industry, excluding the top 10 institutions, and the FXYCS Secretariat.

Further, the FXYCS Liaison Association is established in order to facilitate the mutual understanding among the Participant Banks.

The FXYCS Rules and Detailed Regulations are posted on JBA's website.

Other rules are also posted on the FXYCS website, which is accessible by all FXYCS participant banks. The details and the reasons for revisions are announced and explicitly shown to both the BOJ and participant banks.

Principle 3: Framework for the comprehensive management of risks

An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.

Key Consideration 1: An FMI should have risk-management policies, procedures, and systems that enable it to identify, measure, monitor, and manage the range of risks that arise in or are borne by the FMI.

Risk-management frameworks should be subject to periodic review.

The FXYCS Administration Office of the Operations & Clearing System Administration Department within the JBA manages the risk of the FXYCS, comprehensively. The FXYCS uses the RTGS settlement using central bank money for the fund transfers and settlement between banks, without using the JBA. Thus, credit risks and liquidity risks resulting from the JBA, the management body of the FXYCS, are not taken into consideration. Consequently the main envisioned risk is operational risk.

Business and operations of the JBA are conducted in accordance with the internal rules and regulations which stipulate the authorization power and procedures. At the same time, internal auditors set within the JBA perform business audits as well

as accounting audits. Financial audits are conducted by external auditors.

As for business continuity measures for any system failures or damages at the JBA, the BOJ, or participating banks, the FXYCS stipulates the procedures to cope with these in the FXYCS Rules, etc., and the FXYCS conducts annual BCP drills to ensure the effectiveness of these measures. The FXYCS reviews its risk management framework taking into account feedback from the Participant Banks on the BCP drills conducted annually.

Key Consideration 2: An FMI should provide incentives to participants and, where relevant, their customers to manage and contain the risks they pose to the FMI.

As for the FXYCS, it has set up a gentlemen's agreement about the sending of the FXYCS payment instructions as stipulated in the FXYCS Management Procedures. This gentlemen's agreement stipulates that 65% of the sending volume and 55% of the sending amount of the Simultaneous Settlement Payment Instructions (including those waiting in queue) should be sent by 11:00 am on the day. The JBA monitors the status using statistics provided by the BOJ, and requests the banks who do not comply to this gentlemen's agreement for their compliance. Through this procedure, FXYCS avoids a "gridlock" (i.e. a direct participant cannot provide funds because it could not receive funds from other direct participants) of transactions and settlement within the sending period for the Simultaneous Settlement Payment Instructions (from 8:30 am to 3:00 pm).

Key Consideration 3: An FMI should regularly review the material risks it bears from and poses to other entities (such as other FMIs, settlement banks, liquidity providers, and service providers) as a result of interdependencies and develop appropriate risk-management tools to address these risks.

Other entities with interdependencies include the BOJ and Affiliate Banks.

Significant risks associated with these entities include credit risk, liquidity risk and system risk which is a sub-category of operational risk. In October 2008, the FXYCS shifted all of the FXYCS transactions to RTGS using current account settlement of the BOJ. Therefore, essentially no risk is anticipated except for

operational risk.

Also, clearing operations are entrusted to the BOJ. The BOJ has established basic policies and other procedures on risk management, and appropriately identifies risks and review controls and actions in place.

Key Consideration 4: An FMI should identify scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern and assess the effectiveness of a full range of options for recovery or orderly wind-down. An FMI should prepare appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Where applicable, an FMI should also provide relevant authorities with the information needed for purposes of resolution planning.

While risk probability is extremely low, business risk associated with the FXYCS may include: (1) a case where the JBA incurs losses or damages caused by the conduct of a Participant Bank in breach of the FXYCS Rules etc., or due to a failure or malfunction in its own system, or any other reasons attributable to a Participant Bank,.(2) a case where the JBA incurs losses or damages due to a failure or malfunction in the BOJ-NET, an incident in the operation of the FXYCS, or any other reasons that are not attributable to the JBA, and (3) a case where losses or damages incur due to reasons attributable to the JBA, including operational errors in the FXYCS operation or in conducting activities as the administrator, or a case where a Participant Bank fails to pay expenses.

The FXYCS Rules, etc. stipulate methods for assuming liability for any losses or damages as set out below:

- (1) Any losses or damages caused by the conduct of a Participant Bank in breach of the FXYCS Rules etc., or due to a failure or malfunction in its own system, or any other reasons attributable to a Participant Bank, shall be borne by such a Participant Bank (Article 37, Paragraphs 1 and 2).
- (2) Any losses or damages incurred by the JBA in relation to the FXYCS due to a failure or malfunction in the BOJ-NET, an incident in the operation of the FXYCS, or any other reasons not attributable to the JBA, shall be jointly borne by the Participant Banks (Article 37, Paragraph 3 of the FXYCS Rules and Article 15 of the FXYCS Rules).

(3) As for losses or damages incur due to reasons attributable to the JBA, including operational errors in the FXYCS operation or in conducting activities as the administrator, or those incurred due to a failure of payment of expenses by Participant Banks, measures are in place to cover such losses or damages, including the use of JBA's assets or the structure to allow extraordinary expenses to be collected from participant banks (Article 15 of the FXYCS Rules). However, there is no instance of losses or damages incurred from the FXYCS operation, and extraordinary expenses have not been collected.

As for business continuity measures for any system failures or damages at the JBA, the BOJ, or participating banks, the FXYCS stipulates the procedures to cope with these in the FXYCS Rules, etc., and the FXYCS conducts annual BCP drills to ensure the effectiveness of these measures.

Principle 4: Credit risk

An FMI should effectively measure, monitor, and manage its credit exposure to participants and those arising from its payment, clearing, and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. In addition, a CCP that is involved in activities with a more complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two largest participants and their affiliates that would potentially cause the largest aggregate credit exposures to the CCP in extreme but plausible market conditions. All other CCPs should maintain, at a minimum, total financial resources sufficient to cover the default of the one participant and its affiliates that would potentially cause the largest aggregate credit exposures to the CCP in extreme but plausible market conditions.

Key Consideration 1: An FMI should establish a robust framework to manage its credit exposures to its participants and the credit risks arising from its payment, clearing, and settlement processes. Credit exposure may arise from current exposures, potential future exposures, or both.

The FXYCS has adopted the RTGS settlement using central bank money for fund transfers and settlement between banks, without using the JBA. Thus, no credit risks occur because no credit exposures arise during fund transfers, clearing, or settlement.

Key Consideration 2: An FMI should identify sources of credit risk, routinely measure and monitor credit exposures, and use appropriate risk-management tools to control these risks.

The FXYCS has adopted the RTGS settlement using central bank money for fund transfers and settlement between banks, without using the JBA. Thus, no credit risks occur because no credit exposures arise during fund transfers, clearing, or settlement.

Key Consideration 3: A payment system or SSS should cover its current and, where they exist, potential future exposures to each participant fully with a high degree of confidence using collateral and other equivalent financial resources (see Principle 5 on collateral). In the case of a DNS payment system or DNS SSS in which there is no settlement guarantee but where its participants face credit exposures arising from its payment, clearing, and settlement processes, such an FMI should maintain, at a minimum, sufficient resources to cover the exposures of the two participants and their affiliates that would create the largest aggregate credit exposure in the system.

The FXYCS has adopted the RTGS settlement using central bank money for fund transfers and settlement between banks, without using the JBA. Thus, no credit risks occur because no credit exposures arise during fund transfers, clearing, or settlement.

Key Consideration 4: A CCP should cover its current and potential future exposures to each participant fully with a high degree of confidence using margin and other prefunded financial resources (see Principle 5

on collateral and Principle 6 on margin). In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure for the CCP in extreme but plausible market conditions. All other CCPs should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure for the CCP in extreme but plausible market conditions. In all cases, a CCP should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount of total financial resources it maintains.

The FXYCS is a payment and settlement system. Therefore, this key consideration does not apply.

Key Consideration 5: A CCP should determine the amount and regularly test the sufficiency of its total financial resources available in the event of a default or multiple defaults in extreme but plausible market conditions through rigorous stress testing. A CCP should have clear procedures to report the results of its stress tests to appropriate decision makers at the CCP and to use these results to evaluate the adequacy of and adjust its total financial resources. Stress tests should be performed daily using standard and predetermined parameters and assumptions. On at least a monthly basis, a CCP should perform a comprehensive and thorough analysis of stress testing scenarios, models, and underlying parameters and assumptions used to ensure they are appropriate for determining the CCP's required level of default protection in light of current and evolving market conditions. A CCP should perform this analysis of stress testing more frequently when the products cleared or markets served display high volatility, become less liquid, or when the size or concentration of positions held by a CCP's participants increases significantly. A full validation of a CCP's risk-management model should be performed at least annually.

The FXYCS is a payment and settlement system. Therefore, this key consideration does not apply.

Key Consideration 6: In conducting stress testing, a CCP should consider the effect of a wide range of relevant stress scenarios in terms of both defaulters' positions and possible price changes in liquidation periods. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions.

The FXYCS is a payment and settlement system. Therefore, this key consideration does not apply.

Key Consideration 7: An FMI should establish explicit rules and procedures that address fully any credit losses it may face as a result of any individual or combined default among its participants with respect to any of their obligations to the FMI. These rules and procedures should address how potentially uncovered credit losses would be allocated, including the repayment of any funds an FMI may borrow from liquidity providers. These rules and procedures should also indicate the FMI's process to replenish any financial resources that the FMI may employ during a stress event, so that the FMI can continue to operate in a safe and sound manner.

The FXYCS has adopted the RTGS settlement using central bank money for fund

transfers and settlement between banks. Thus, no credit loss is anticipated.

In the event that a loss has incurred since a Participant Bank has failed to pay

expenses, the FXYCS stipulates in Article 15 of the FXYCS Rules that the structure

is established to allow extraordinary expenses to be collected from participant banks

according to the resolution of a general meeting of the JBA.

Principle 5: Collateral

An FMI that requires collateral to manage its or its participants' credit exposure

should accept collateral with low credit, liquidity, and market risks. An FMI should

also set and enforce appropriately conservative haircuts and concentration limits.

The FXYCS has adopted the RTGS settlement using central bank money for fund

transfers and settlement between banks. Thus, the FXYCS does not need to receive

collateral from the Participant Banks.

Principle 6: Margin

A CCP should cover its credit exposures to its participants for all products through

an effective margin system that is risk-based and regularly reviewed

The FXYCS is a payment and settlement system. Therefore, this principle does not

apply.

Principle 7: Liquidity risk

An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI

should maintain sufficient liquid resources in all relevant currencies to effect

same-day and, where appropriate, intraday and multiday settlement of payment

obligations with a high degree of confidence under a wide range of potential stress

scenarios that should include, but not be limited to, the default of the participant and

its affiliates that would generate the largest aggregate liquidity obligation for the

FMI in extreme but plausible market conditions.

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Key Consideration 1: An FMI should have a robust framework to manage its liquidity risks from its participants, settlement banks, nostro agents, custodian banks, liquidity providers, and other entities.

FXYCS has adopted the RTGS settlement using central bank money for fund transfers and settlement between banks. As such, the JBA does not have any obligation to pay for the settlement of Affiliate Banks, thus the JBA itself does not have any liquidity risk.

Key Consideration 2: An FMI should have effective operational and analytical tools to identify, measure, and monitor its settlement and funding flows on an ongoing and timely basis, including its use of intraday liquidity.

FXYCS has set up a gentlemen's agreement about the sending of the FXYCS payment instructions as stipulated in the FXYCS Management Procedures. This gentlemen's agreement stipulates that 65% of the sending volume and 55% of the sending amount of the Simultaneous Settlement Payment Instructions (including those waiting in queue) should be sent by 11:00 am on the day. The JBA monitors the status using statistics provided by the BOJ, and requests the banks who do not comply to this gentlemen's agreement for their compliance. Through this procedure, FXYCS avoids a "gridlock" (i.e. a direct participant cannot provide funds because it could not receive funds from other direct participants) of transactions and settlement within the sending period for the Simultaneous Settlement Payment Instructions (from 8:30 am to 3:00 pm).

Key Consideration 3: A payment system or SSS, including one employing a DNS mechanism, should maintain sufficient liquid resources in all relevant currencies to effect same-day settlement, and where appropriate intraday or multiday settlement, of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation in

extreme but plausible market conditions.

The FXYCS has adopted the RTGS settlement using central bank money for fund transfers and settlement between banks. Therefore, this key consideration does not apply.

Key Consideration 4: A CCP should maintain sufficient liquid resources in all relevant currencies to settle securities-related payments, make required variation margin payments, and meet other payment obligations on time with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions. In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should consider maintaining additional liquidity resources sufficient to cover a wider range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions.

The FXYCS is a payment and settlement system. Therefore, this key consideration does not apply.

Key Consideration 5: For the purpose of meeting its minimum liquid resource requirement, an FMI's qualifying liquid resources in each currency include cash at the central bank of issue and at creditworthy commercial banks, committed lines of credit, committed foreign exchange swaps, and committed repos, as well as highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements, even in extreme but plausible market conditions. If an FMI has

access to routine credit at the central bank of issue, the FMI may count such access as part of the minimum requirement to the extent it has collateral that is eligible for pledging to (or for conducting other appropriate forms of transactions with) the relevant central bank. All such resources should be available when needed.

The FXYCS has adopted the RTGS settlement using central bank money for fund transfers and settlement between banks. Therefore, this key consideration does not apply.

Key Consideration 6: An FMI may supplement its qualifying liquid resources with other forms of liquid resources. If the FMI does so, then these liquid resources should be in the form of assets that are likely to be saleable or acceptable as collateral for lines of credit, swaps, or repos on an ad hoc basis following a default, even if this cannot be reliably prearranged or guaranteed in extreme market conditions. Even if an FMI does not have access to routine central bank credit, it should still take account of what collateral is typically accepted by the relevant central bank, as such assets may be more likely to be liquid in stressed circumstances. An FMI should not assume the availability of emergency central bank credit as a part of its liquidity plan.

The FXYCS has adopted the RTGS settlement using central bank money for fund transfers and settlement between banks. Therefore, this key consideration does not apply.

Key Consideration 7: An FMI should obtain a high degree of confidence, through rigorous due diligence, that each provider of its minimum required qualifying liquid resources, whether a participant of the FMI or an external party, has sufficient information to understand and to manage its associated liquidity risks, and that it has the capacity to perform as required under its commitment. Where relevant to assessing a liquidity provider's

performance reliability with respect to a particular currency, a liquidity provider's potential access to credit from the central bank of issue may be taken into account. An FMI should regularly test its procedures for accessing its liquid resources at a liquidity provider.

The FXYCS has adopted the RTGS settlement using central bank money for fund transfers and settlement between banks. Therefore, this key consideration does not apply.

Key Consideration 8: An FMI with access to central bank accounts, payment services, or securities services should use these services, where practical, to enhance its management of liquidity risk.

The FXYCS has adopted the RTGS settlement using central bank money for fund transfers and settlement between banks. Therefore, this key consideration does not apply.

Key Consideration 9: An FMI should determine the amount and regularly test the sufficiency of its liquid resources through rigorous stress testing. An FMI should have clear procedures to report the results of its stress tests to appropriate decision makers at the FMI and to use these results to evaluate the adequacy of and adjust its liquidity risk-management framework. In conducting stress testing, an FMI should consider a wide range of relevant scenarios. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions. Scenarios should also take into account the design and operation of the FMI, include all entities that might pose material liquidity risks to the FMI (such as settlement banks, nostro agents, custodian banks, liquidity providers, and linked FMIs), and where

appropriate, cover a multiday period. In all cases, an FMI should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount and form of total liquid resources it maintains.

The FXYCS has adopted the RTGS settlement using central bank money for fund transfers and settlement between banks. Therefore, this key consideration does not apply.

Key Consideration 10: An FMI should establish explicit rules and procedures that enable the FMI to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations on time following any individual or combined default among its participants. These rules and procedures should address unforeseen and potentially uncovered liquidity shortfalls and should aim to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations. These rules and procedures should also indicate the FMI's process to replenish any liquidity resources it may employ during a stress event, so that it can continue to operate in a safe and sound manner.

The FXYCS adopts the RTGS settlement using central bank money for fund transfers and settlement between banks. Therefore, this key consideration does not apply.

Further, the FXYCS has set up a gentleman's agreement about the sending of the FXYCS payment instructions as mentioned in Key Consideration 2 above.

Principle 8: Settlement finality

An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.

Key Consideration 1: An FMI's rules and procedures should clearly define the point at which settlement is final.

The FXYCS has adopted the RTGS settlement using central bank money for fund transfers and settlement between banks. Therefore, settlement becomes final immediately.

Further, the FXYCS stipulates in Article 25 of the FXYCS Rules that a payment instruction shall not be cancelled once it has been delivered to the receiving bank. How to handle the payment instruction notice when the final settlement is in the process of being executed is described in the FXYCS Operations within the BOJ-NET Usage Rules of the BOJ, which is accessible on the BOJ website.

Key Consideration 2: An FMI should complete final settlement no later than the end of the value date, and preferably intraday or in real time, to reduce settlement risk. An LVPS or SSS should consider adopting RTGS or multiple-batch processing during the settlement day.

The FXYCS executes the final settlement on the value date in accordance with payment instructions. Also, since the FXYCS Rules etc., are made in accordance with the business legal framework of Japan, and also because the FXYCS has adopted RTGS settlement using central bank money, high legal reliability exists in the FXYCS. No case exists where the final settlement was postponed to the day after the value date.

Key Consideration 3: An FMI should clearly define the point after which unsettled payments, transfer instructions, or other obligations may not be revoked by a participant.

The FXYCS stipulates in Article 25 of the FXYCS Rules that a payment instruction shall not be cancelled once it has been delivered to the receiving bank.

The FXYCS Rules also stipulate that a payment instruction can be cancelled when the payment instruction is waiting in queue, or in the case of an error and the receiving bank agrees to the cancellation by transmitting a payment instruction to the sending bank with the same amount as the cancelled payment instruction. The FXYCS Rules also set changes in operating hours for payment instructions when needed which can be conducted after the consultation with the BOJ.

Principle 9: Money settlements

An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimize and strictly control the credit and liquidity risk arising from the use of commercial bank money.

Key Consideration 1: An FMI should conduct its money settlements in central bank money, where practical and available, to avoid credit and liquidity risks.

The FXYCS has adopted the RTGS settlement using central bank money for fund transfers and settlement between banks, only transfers yen-denominated transactions, and makes settlements through the current account of the BOJ.

Key Consideration 2: If central bank money is not used, an FMI should conduct its money settlements using a settlement asset with little or no credit or liquidity risk.

The FXYCS has adopted the RTGS settlement using central bank money for fund transfers and settlement between banks, only transfers yen-denominated transactions, and makes settlements through the current account of the BOJ.

Key Consideration 3: If an FMI settles in commercial bank money, it should monitor, manage, and limit its credit and liquidity risks arising from the commercial settlement banks. In particular, an FMI should establish and monitor adherence to strict criteria for its settlement banks that take account of, among other things, their regulation and supervision, creditworthiness, capitalisation, access to liquidity, and operational reliability. An FMI should also monitor and manage the concentration of credit and liquidity exposures to its commercial settlement banks.

The FXYCS does not use commercial bank money. The FXYCS has adopted the RTGS settlement using central bank money for fund transfers and settlement between banks.

Key Consideration 4: If an FMI conducts money settlements on its own books, it should minimise and strictly control its credit and liquidity risks.

The FXYCS does not conduct money settlements on its own books. The FXYCS has adopted the RTGS settlement using central bank money for fund transfers and settlement between banks.

Key Consideration 5: An FMI's legal agreements with any settlement banks should state clearly when transfers on the books of individual settlement banks are expected to occur, that transfers are to be final when effected, and that funds received should be transferable as soon as possible, at a minimum by the end of the day and ideally intraday, in order to enable the FMI and its participants to manage credit and liquidity risks.

The FXYCS stipulates in the FXYCS Rules that a payment instruction shall not be cancelled once it has been delivered to the receiving bank. Treatment of a payment instruction notice when the final settlement is executed is set out in the FXYCS Operations in the BOJ-NET Usage Rules of the BOJ. The FXYCS has adopted the RTGS settlement using central bank money for fund transfers and settlement between banks. Therefore, settlement becomes final immediately.

Principle 10: Physical deliveries

An FMI should clearly state its obligations with respect to the delivery of physical instruments or commodities and should identify, monitor, and manage the risks associated with such physical deliveries.

The FXYCS is a payment and settlement system. Therefore, this principle does not apply.

Principle 11: Central securities depositories

A CSD should have appropriate rules and procedures to help ensure the integrity of securities issues and minimise and manage the risks associated with the safekeeping and transfer of securities. A CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry.

The FXYCS is a payment and settlement system. Therefore, this principle does not apply.

Principle 12: Exchange-of-value settlement systems

If an FMI settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.

Key Consideration 1: An FMI that is an exchange-of-value settlement system should eliminate principal risk by ensuring that the final settlement of one obligation occurs if and only if the final settlement of the linked obligation also occurs, regardless of whether the FMI settles on a gross or net basis and when finality occurs.

The FXYCS is not an exchange-of-value settlement system. Therefore, this key consideration does not apply.

Principle 13: Participant-default rules and procedures

An FMI should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.

Key Consideration 1: An FMI should have default rules and procedures that enable the FMI to continue to meet its obligations in the event of a

participant default and that address the replenishment of resources following a default.

The FXYCS has adopted the RTGS settlement using central bank money for fund transfers and settlement between banks. Affiliate Bank can settle the amount indicated on the payment instruction on a real-time basis only when the bank has a sufficient amount of funds to cover the payment amount in the current account of the BOJ. Affiliate Banks adequately manage the liquidity risk by maintaining fund liquidity, utilizing various services provided by the BOJ, such as the overdraft or the liquidity-saving features by the BOJ-NET.

Because the JBA does not have any obligation to pay the Affiliate Banks as the FXYCS stipulates, it is not expected to have any obligations to the BOJ or the participating banks, if one of the participating banks goes into bankruptcy. Thus, the JBA does not have internal plans for the procedures of handling the bankruptcy of a participating bank of the FXYCS. However, the FXYCS Rules stipulate that a participating bank shall forfeit its qualification if it receives an order of commencement of bankruptcy proceedings, and shall be expelled if there are circumstances which indicate that its business is in a critical condition. In addition, Article 33 of the FXYCS Rules stipulates the default rules, including temporary suspension of sending and receiving payment instructions by the Affiliate Bank in the event of its default.

Key Consideration 2: An FMI should be well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules.

Because the JBA does not have any payment obligation to Affiliate Banks under the FXYCS, it is not expected to have any obligations to the BOJ or Participant Banks, if one of Participant Banks enter into bankruptcy. The FXYCS has developed the contingency manual for its member's defaults and has documented the emergency communication procedures.

The FXYCS Rules stipulate that a Participant Bank shall forfeit its qualification if it receives an order of commencement of bankruptcy proceedings, and shall be expelled if there are circumstances which indicate that its business is in a critical condition. In addition, Article 33 of the FXYCS Rules stipulates default rules,

including temporary suspension of sending and receiving payment instructions by the Affiliate Bank in the event of an Affiliate Bank's default.

Key Consideration 3: An FMI should publicly disclose key aspects of its default rules and procedures.

The FXYCS Rules and Detailed Regulations stipulate key aspects of its default rules and procedures which are described in Key Considerations 1 and 2.

The FXYCS Rules and Detailed Regulations are also posted on the JBA's website which any member of the JBA can access.

Key Consideration 4: An FMI should involve its participants and other stakeholders in the testing and review of the FMI's default procedures, including any close-out procedures. Such testing and review should be conducted at least annually or following material changes to the rules and procedures to ensure that they are practical and effective.

In reviewing and revising the FXYCS Rules and Detailed Regulations, committees and working groups which are comprised of representatives of Participant Banks conduct deliberation and consideration. These are also consulted with the BOJ. For revising related laws and regulations, issues such as any impact on member's default procedures and actions to be taken are consulted with the internal legal department of the JBA.

Principle 14: Segregation and portability

A CCP should have rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the CCP with respect to those positions.

The FXYCS is a payment and settlement system. Therefore, this principle does not apply.

Principle 15: General business risk

An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialise. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.

Key Consideration 1: An FMI should have robust management and control systems to identify, monitor, and manage general business risks, including losses from poor execution of business strategy, negative cash flows, or unexpected and excessively large operating expenses.

While the JBA does manage the FXYCS, it is not involved in the settlement itself. Accordingly, unless an incident is caused by the conduct of the JBA, no liability in principal shall be borne by the JBA towards the BOJ or the participating banks.

Activities and operations of the JBA including the FXYCS operation are conducted in accordance with the internal rules and regulations which stipulate the authorization power and procedures. In addition, the Internal Audit Department established within JBA's Secretariat conducts business and accounting audits on these activities and operations. Financial audits are also conducted by external auditors, including audits on the FXYCS Special Account related to the FXYCS operation.

Key Consideration 2: An FMI should hold liquid net assets funded by equity (such as common stock, disclosed reserves, or other retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. The amount of liquid net assets funded by equity an FMI should hold should be determined by its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken.

While risk probability is extremely low, business risk associated with the FXYCS

may include: (1) a case where the JBA incurs losses or damages caused by the conduct of a Participant Bank in breach of the FXYCS Rules etc., or due to a failure or malfunction in its own system, or any other reasons attributable to a Participant Bank, (2) a case where the JBA incurs losses or damages due to a failure or malfunction in the BOJ-NET, an incident in the operation of the FXYCS, or any other reasons that are not attributable to the JBA, and (3) a case where losses or damages incur due to reasons attributable to the JBA, including operational errors in the FXYCS operation or in conducting activities as the administrator, or a case where a Participant Bank fails to pay expenses.

The FXYCS Rules, etc. stipulate methods for assuming liability for any losses or damages as set out below:

- (1) Any losses or damages caused by the conduct of a Participant Bank in breach of the FXYCS Rules etc., or due to a failure or malfunction in its own system, or any other reasons attributable to a Participant Bank, shall be borne by such a Participant Bank (Article 37, Paragraphs 1 and 2).
- (2) Any losses or damages incurred by the JBA in relation to the FXYCS due to a failure or malfunction in the BOJ-NET, an incident in the operation of the FXYCS, or any other reasons not attributable to the JBA, shall be jointly borne by the Participant Banks (Article 37, Paragraph 3 of the FXYCS Rules and Article 15 of the FXYCS Rules).
- (3) As for losses or damages incur due to reasons attributable to the JBA, including operational errors in the FXYCS operation or in conducting activities as the administrator, or those incurred due to a failure of payment of expenses by Participant Banks, measures are in place to cover such losses or damages, including the use of JBA's assets or the structure to allow extraordinary expenses to be collected from participant banks (Article 15 of the FXYCS Rules). However, there is no instance of losses or damages incurred from the FXYCS operation, and extraordinary expenses have not been collected.

Key Consideration 3: An FMI should maintain a viable recovery or orderly wind-down plan and should hold sufficient liquid net assets funded by equity to implement this plan. At a minimum, an FMI should hold liquid net assets funded by equity equal to at least six months of current operating expenses. These assets are

in addition to resources held to cover participant defaults or other risks covered under the financial resources principles. However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements.

Even if damage is done to the FXYCS due to the conduct of the JBA, the asset of JBA can be utilized. As for the damage done in relation to the operations of the FXYCS, the structure is established to allow extraordinary expenses to be collected from participating banks according to the resolution of a general meeting of the JBA, which is stipulated in Article 15 of the FXYCS Rules, etc., although such extraordinary expenses have never been collected in the past.

Key Consideration 4: Assets held to cover general business risk should be of high quality and sufficiently liquid in order to allow the FMI to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions

FXYCS's liquid assets on a net basis used for funding purposes are bank deposits. Deposits can be refunded and exchanged for cash without causing loss of value.

Income for covering annual expenses for the current and future years is supplied from Participant Banks in the form of contributions to expenses. This amount is determined based on the budget amount and is borne by Participating Banks regardless of market conditions.

Furthermore, all Participant Banks are jointly liable for losses incurred by the JBA from the operation of the FXYCS. A mechanism is in place where such losses are jointly borne by all Affiliate Banks in accordance with cost burden criteria, in principle, after obtaining approval from the board of directors.

Although, no losses occurred in relation to the businesses of the FXYCS and extraordinary expenses have never been collected in the past.

Key Consideration 5: An FMI should maintain a viable plan for raising additional equity should its equity fall close to or below the amount needed. This plan should be approved by the board of directors and updated regularly.

The business is being executed within the range of budget while securing stable income for budget to be used in execution of the business by collecting allocated fees for the business budget of each fiscal year from the FXYCS participants at the beginning of the concerned fiscal year.

Even if damage is incurred to the FXYCS due to the conduct of the JBA, the asset of JBA can be utilized. As for the damage incurred in relation to the operations of the FXYCS, the structure is established to allow extraordinary expenses to be collected from participating banks according to the resolution of a general meeting of the JBA, which is stipulated in the FXYCS Rules, etc., although no loss has occurred in relation to the operation of the FXYCS and such extraordinary expenses have never been collected in the past.

Furthermore the JBA uses the RTGS settlement using central bank money for the fund transfers and settlement between banks, without using the JBA. Thus, credit risks and liquidity risks arising from the JBA, which is the administrator of the FXYCS, are not assumed. The JBA does not make any investment in marketable securities or financial instruments with the risk of a loss of principal.

Principle 16: Custody and investment risks

An FMI should safeguard its own and its participants' assets and minimise the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks

Key Consideration 1: An FMI should hold its own and its participants' assets at supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets.

The source of assets of FXYCS (equivalent to expenses in the FXYCS) is only funds collected as fees at the beginning of each year from the participating banks, which are deposited in commercial banks that are supervised by the Financial Services Agency (FSA) under the Banking Act, and are not invested.

Key Consideration 2: An FMI should have prompt access to its assets and the assets provided by participants, when required.

The FXYCS has prompt access to its assets (equivalent to expenses in the FXYCS), because they are deposited in banks.

Key Consideration 3: An FMI should evaluate and understand its exposures to its custodian banks, taking into account the full scope of its relationships with each.

The FXYCS does not utilize custodian banks. Therefore, this key this consideration does not apply.

Key Consideration 4: An FMI's investment strategy should be consistent with its overall risk-management strategy and fully disclosed to its participants, and investments should be secured by, or be claims on, high-quality obligors. These investments should allow for quick liquidation with little, if any, adverse price effect.

The FXYCS does not make any investment. Therefore, this key consideration does not apply.

Principle 17: Operational risk

An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the FMI's obligations, including in the event of a wide-scale or major disruption.

Key Consideration 1: An FMI should establish a robust operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.

In October 2008, the FXYCS shifted all of the FXYCS transactions to RTGS using current account settlement of the BOJ. Therefore, essentially no risk is anticipated except for operational risk.

Also, clearing operations are entrusted to the BOJ.

The BOJ sets detailed operational procedures for participants and itself based on the detailed analysis of FXYCS's operations and on the operational flows established to control such risks. The BOJ-NET is developed by identifying and curbing the operational risks in the design phase of system development. For business continuity planning, important IT systems are duplicated, data at BOJ's main center are reflected at its backup center near real time, and the switchover to the backup center can be executed to resume operations within two hours.

As for the system of the Affiliate Banks, it is monitored by the BOJ, and the Affiliate Banks themselves conduct risk management.

Key Consideration 2: An FMI's board of directors should clearly define the roles and responsibilities for addressing operational risk and should endorse the FMI's operational risk-management framework. Systems, operational policies, procedures, and controls should be reviewed, audited, and tested periodically and after significant changes.

In October 2008, the FXYCS shifted all of the FXYCS transactions to RTGS using current account settlement of the BOJ. Therefore, essentially no risk is anticipated except for operational risk.

Also, clearing operations are entrusted to the BOJ.

The BOJ sets detailed operational procedures for participants and itself based on the detailed analysis of FXYCS's operations and on the operational flows established to control such risks.

The FXYCS has a structure in place to review its risk management framework as necessary by taking into account feedback from the Participant Banks on the BCP drills conducted annually.

The FXYCS is audited by the Internal Audit Department of the JBA, and the audit results are reported to the Board. Representatives from Affiliated Banks and Participant Banks also engage in the assessment and review of the operation of the FXYCS conducted by the Operations Committee and the FXYCS Management

Committee.

The FXYCS Rules, which is the highest-level rules for the FXYCS, is authorized by the Board. The Detailed Regulations and other regulations are authorized by the Operations Committee, to which the Board delegates a portion of its authority.

Key Consideration 3: An FMI should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives.

The purpose of the FXYCS Rules is to govern the organization and the operation of the FXYCS managed by the JBA and, accordingly, to facilitate the smooth operation of the FXYCS. The FXYCS Rules also stipulates that each Participant Bank shall cooperate with each other in good faith in the conduct of the business.

The BOJ's purpose, under the Bank of Japan Act, "is to ensure smooth settlement of funds among banks and other financial institutions, thereby contributing to the maintenance of stability of the financial system." Under this purpose, the BOJ-NET to which the FXYCS entrusts its operations has gained credibility in its business processing because (1) it has sufficiently high operational availability, (2) it has robustness, with very few breakdowns, and (3) the system has been operating stably for a considerable period of time. Furthermore, the BOJ has been undertaking efforts, including the documentation of its security policy.

Key Consideration 4: An FMI should ensure that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.

The BOJ ensures that the BOJ-NET, to which the FXYCS entrusts its operations, has adequate capacity in business processing by conducting surveys to project future transaction volume as necessary.

Key Consideration 5: An FMI should have comprehensive physical and information security policies that address all potential vulnerabilities and threats.

The JBA has established an Information Security Policy as a comprehensive policy

concerning information security. This policy also covers physical security, such as access controls. The JBA has also established the BCP policy and practices for natural disaster.

In addition, the BOJ has documented its physical and information security policies for the BOJ-NET, to which the FXYCS entrusts its operations.

Key Consideration 6: An FMI should have a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a wide-scale or major disruption. The plan should incorporate the use of a secondary site and should be designed to ensure that critical information technology (IT) systems can resume operations within two hours following disruptive events. The plan should be designed to enable the FMI to complete settlement by the end of the day of the disruption, even in case of extreme circumstances. The FMI should regularly test these arrangements.

The JBA documented in a manual the detailed communication procedures, the items to be checked and how to handle the situation based on the FXYCS Management Procedures, and stipulated counter-actions by specifying the cause of failure. In addition, the contact list of the Participants Banks is continually updated at the FXYCS in order to be able to make immediate contact with any of the participating banks. Furthermore, the JBA conducts BCP drills for the FXYCS with the BOJ and the participating banks annually to develop the skills required for emergency action.

The BOJ-NET, which is operated by the BOJ and to which the FXYCS entrusts its operations, is developed by identifying and curbing the operational risks in the design phase of system development. For business continuity planning, important IT systems are duplicated, data at BOJ's main center are reflected at its backup center near real time, and the switchover to the backup center can be executed to resume operations within two hours. The FXYCS has established the BCP practices to complete its settlement by the end of the day of the disruption, even in case of extreme circumstances. The FXYCS has confirmed the feasibility of the BCP practices by exercising the drills.

Key Consideration 7: An FMI should identify, monitor, and manage the risks that key participants, other FMIs, and service and utility providers might pose to its operations. In addition, an FMI should identify, monitor, and manage the risks its operations might pose to other FMIs.

The FXYCS identifies and manages risks that each entity poses to the operational processing of the FXYCS as follows:

[Affiliate Bank]

Risks posed by Affiliate Banks mainly include a disruption occurred at each Affiliate Bank.

The FXYCS has established the Emergency Measures to respond to disruptions to operations of a Participant Bank. In the event a system failure occurs, the Emergency Measure requires that the disrupted bank should immediately report its disruption to the JBA and that the JBA confirms with the disrupted bank about the status of the disruption, and consult with stakeholders including the BOJ about extending the operating hours for an electronic payment instruction for the BOJ-NET.

(Other FMI)

FMI that is essential to the implementation of operations is the BOJ. Risks posed by the BOJ is the interruption of the BOJ-NET services. Under BOJ-NET's business continuity plan, critical IT systems are duplicated, data at BOJ's main center are reflected at its backup center on an almost real time basis, and the switchover to the backup center can be executed to resume operations within two hours. The BOJ-NET is developed by identifying and curbing the risks in the design phase of system development.

Principle 18: Access and participation requirements

An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.

Key Consideration 1: An FMI should allow for fair and open access to its services,

including by direct and, where relevant, indirect participants and other FMIs, based on reasonable risk-related participation requirements.

There are two types of membership qualifications for the FXYCS - Affiliate Banks and Entrusting Banks - and both types must be financial institutions established under particular laws. Moreover, there are certain criteria to fulfill in expectation when becoming an Affiliate Bank regarding the sending and receiving volume or amount of money.

The FXYCS stipulates in Articles 10 and 11 of the FXYCS Rules about Forfeiture of Qualification and Expulsion of the Affiliated Banks and Entrusted Banks.

The above criteria are stipulated in the FXYCS Rules and FXYCS Detailed Regulations which are accessible via the JBA's website.

The new entrance or the change in the status of Affiliate Banks is an issue to be consulted with the BOJ.

Key Consideration 2: An FMI's participation requirements should be justified in terms of the safety and efficiency of the FMI and the markets it serves, be tailored to and commensurate with the FMI's specific risks, and be publicly disclosed. Subject to maintaining acceptable risk control standards, an FMI should endeavour to set requirements that have the least-restrictive impact on access that circumstances permit.

The participation requirements are adequate in terms of ensuring the safety and efficiency of the FXYCS as described in Key consideration 1 of Principle 18. These requirements are reviewed to consider for any changes, taking into account changes in business environment for the FXYCS.

Key Consideration 3: An FMI should monitor compliance with its participation requirements on an ongoing basis and have clearly defined and publicly disclosed procedures for facilitating the suspension and orderly exit of a participant that breaches, or no longer meets, the participation requirements.

Article 10 of the FXYCS Rules requires the Affiliated Banks to report to the JBA when they fall under any of forfeiture events for the participation requirements.

The FXYCS Administration Office of the Operations and Clearing System Administration Department monitors publicly disclosed information from the FSA as appropriate to ensure timeliness and accuracy of the Participant Banks.

Article 10 of the FXYCS Rules stipulates that a Participant Bank forfeits its qualification when it falls under any of the following (1) it fails to meet the requirements, (2) it receives an order of commencement of bankruptcy proceedings and (3) it is expulsed.

Article 11 of the FXYCS Rules sets out that if there is a circumstance indicating that business of a Participant Bank is in a critical condition or other applicable events, the JBA may expel such a Participant Bank upon a resolution of the Board In addition, Article 33 of the FXYCS Rules stipulates that, if an event such as a material breach of the FXYCS Rules or decisions of the JBA occurs, the JBA may temporarily suspend the use of the FXYCS by such Affiliate Bank after consultation with the BOJ. Furthermore, in accordance with Article 11 of the FXYCS Rules, the JBA may expel a Participant Bank if a temporary measure is taken over an appropriate period, as prescribed in Article 33, such as a failure to pay to settle domestic currency, unless there is any special circumstance.

Principle 19: Tiered participation arrangements

An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements

Key Consideration 1: An FMI should ensure that its rules, procedures, and agreements allow it to gather basic information about indirect participation in order to identify, monitor, and manage any material risks to the FMI arising from such tiered participation arrangements.

There are two forms of FXYCS participation – "Affiliate Banks" that operate foreign exchange yen clearing by directly participating in the BOJ-NET (so-called "Affiliate Banks") and "Entrusting Banks" that participate indirectly by entrusting the operation to the Affiliate Banks (so-called "Entrusting Banks"). Then some of

"Affiliate Banks" entrusted with the operation from the Entrusting Banks are also stipulated and called as "Entrusted Banks."

As of the end of June 2019, there are 173 Entrusting Banks against 8 Entrusted Banks. The FXYCS Rules stipulate that an Entrusting Banks shall enter into an agreement with its Entrusted Bank, concerning the entrustment of operations pertaining to the processing of a payment instruction, the receipt, and the payment of the funds, specified in such processed payment instruction. Entrusted Banks shall meet the standards required for an Entrusted Bank stipulated in the FXYCS Rules, etc., and execute payment instructions and receipt and payment of funds from Entrusting Banks based on arrangements stipulated in the entrustment agreement. Even in cases such as if a certain Entrusted Bank has been damaged, Entrusting Banks who is entrusting operation can execute payment instructions through directly transferring funds from the current account at the BOJ by themselves, in addition to other measures. In addition, the FXYCS Rules, etc. stipulate that in case the concerned damages take the long term to recover, Entrusting Banks are able to switch Entrusted Banks. Therefore, the JBA has not identified systematic risk caused by the tiered participation.

With regard to Entrusting Banks of the FXYCS, the JBA maintains and updates their contact list and conducts a survey of their transaction volume (conduct a survey at the beginning of each fiscal year, which covers (1) Entrusted Bank's name and (2) the volume and value of receipt/payment) as a way to collect information regularly, and tracks transaction volume of indirect participants. Through these procedures, the JBA is enabled to specify Entrusted Banks of the FXYCS which deal with a number of Entrusting Banks, and Entrusting Banks of the FXYCS with high transaction volume and value.

Please refer to Key Consideration 3 of Principle 18 (Access and participation requirements) for significant managerial changes at Affiliated Banks including Entrusted Banks (for example, where an Affiliated Bank falls under any of the conditions including the forfeiture of the requirements, the commencement of bankruptcy proceedings and expulsion.

Key Consideration 2: An FMI should identify material dependencies between direct and indirect participants that might affect the FMI.

Please refer to the Principle 19, Key Consideration 1.

Key Consideration 3: An FMI should identify indirect participants responsible for a significant proportion of transactions processed by the FMI and indirect participants whose transaction volumes or values are large relative to the capacity of the direct participants through which they access the FMI in order to manage the risks arising from these transactions.

Please refer to the Principle 19, Key Consideration 1.

Key Consideration 4: An FMI should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate.

Please refer to the Principle 19, Key Consideration 1.

Principle 20: FMI links

An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.

The FXYCS does not have any link to other FMIs. Therefore, this principle does not apply.

Principle 21: Efficiency and effectiveness

An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.

Key Consideration 1: An FMI should be designed to meet the needs of its participants and the markets it serves, in particular, with regard to choice of a clearing and settlement arrangement; operating structure; scope of products cleared, settled, or recorded; and use of technology and procedures.

The JBA constantly consults with the participating banks of the FXYCS or through various committees, etc., of their needs. Any requests and/or inquiries for the BOJ-NET are conveyed to the BOJ and discussed as needed.

Key Consideration 2: An FMI should have clearly defined goals and objectives that are measurable and achievable, such as in the areas of minimum service levels, risk-management expectations, and business priorities.

The FXYCS Rules stipulates that the purpose of the Rules is to govern the organization and the operations of the FXYCS managed by the JBA in accordance with JBA's articles of incorporation and, accordingly, to facilitate the smooth operation of the FXYCS.

Issues identified are examined further and solutions are considered at each meeting body which are comprised of representatives of Participant Bank.

Key Consideration 3: An FMI should have established mechanisms for the regular review of its efficiency and effectiveness.

The aim of the FXYCS is to smoothly operate the system, and the following measures are taken to achieve this goal: monitoring the operation status (check daily and report monthly to the participating banks), the system failure status (assess as soon as the FXYCS receives information either from the participating banks or the BOJ), and the compliance status of the gentlemen's agreement about the sending of the FXYCS payment instructions.

Principle 22: Communication procedures and standards

An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.

Key Consideration 1: An FMI should use, or at a minimum accommodate, internationally accepted communication procedures and standards.

Because the communication procedures and any other related operations of the FXYCS are consigned to the BOJ, the communication procedures used in the FXYCS is that of BOJ-NET. As communication procedures, the Transmission Control Protocol and the Internet Protocol (TCP/IP) is used, which is the standard internationally. Since the New BOJ-NET was fully launched in October 2015, the XML format (partly ISO20022 compliant messages) is used.

Principle 23: Disclosure of rules, key procedures, and market data

An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.

Key Consideration 1: An FMI should adopt clear and comprehensive rules and procedures that are fully disclosed to participants. Relevant rules and key procedures should also be publicly disclosed.

The FXYCS Rules and the FXYCS Detailed Regulations are posted on the JBA's website. Other rules are posted on the FXYCS website, which is accessible by all of the FXYCS participating banks. The details and the reasons for revisions are announced and explicitly shown to both the BOJ and participating banks. Furthermore, the JBA gives explanation, etc. about the contents of these rules individually to new entrants or any other participating banks that seem to be unfamiliar with the rules, as necessary.

When revising the FXYCS Rules, etc., the JBA conducts the consultation process with participating banks, as well as through discussions in the FXYCS Management Committee, while also going through a thorough examination by an internal legal department concerning consistency with other laws and regulations in Japan. Also, the JBA consults with the BOJ and goes through the resolution process in the Operations Committee or at the Board of Directors for the revision.

Key Consideration 2: An FMI should disclose clear descriptions of the system's design and operations, as well as the FMI's and participants'

rights and obligations, so that participants can assess the risks they would incur by participating in the FMI.

The system structures as well as the system operations are stipulated in the BOJ-NET Usage Rules, which is accessible on the BOJ's website.

The FXYCS Rules and Detailed Regulations are posted on JBA's website.

Key Consideration 3: An FMI should provide all necessary and appropriate documentation and training to facilitate participants' understanding of the FMI's rules and procedures and the risks they face from participating in the FMI.

The FXYCS Rules and Detailed Regulations are posted on JBA's website.

Furthermore, the FXYCS provides information with a new Participant Bank by on-site meetings to facilitate its understanding.

Key Consideration 4: An FMI should publicly disclose its fees at the level of individual services it offers as well as its policies on any available discounts. The FMI should provide clear descriptions of priced services for comparability purposes.

The FXYCS Rules stipulates that the Participant Banks should pay operating expenses of the FXYCS. The cost sharing rules are also stipulated in the FXYCS Rules, the Detailed Regulations and the cost sharing rules. The FXYCS does not provide any available discounts.

Key Consideration 5: An FMI should complete regularly and disclose publicly responses to the CPSS-IOSCO Disclosure framework for financial market infrastructures. An FMI also should, at a minimum, disclose basic data on transaction volumes and values.

On July 31, 2017, the FXYCS published its official response to the disclosure framework for financial markets infrastructures (CPSS-IOSCO). This disclosure represents a periodic update of information as well as basic data on transaction

volume and value.

As to the fundamental information and statistics on performance, the transaction volume/value per day as informed by the BOJ, are provided monthly by FXYCS to participating banks, and the annual statistics (shown by the transaction volume per month) is publicly available via the JBA's website.

Principle 24: Disclosure of market data by trade repositories

A TR should provide timely and accurate data to relevant authorities and the public in line with their respective needs.

The FXYCS is not a TR, and therefore this principle does not apply.

V. List of Publicly Available Resources

Please refer to the following links for JBA's activities http://www.zenginkyo.or.jp/en/outline/ (English)

The aforementioned websites include contents such as;

- Organization
- · Committees
- Secretariat

Also, the aforementioned website (Japanese) describes the following items regarding the FXYCS;

- · Activities of JBA (only in Japanese)
 - Planning Concerning the Operation of Payment Systems
 - · Foreign Exchange Yen Clearing System
 - Rules Governing the Foreign Exchange Yen Clearing System
 - Detailed Enforcement Regulations for the Operations of the Foreign Exchange Yen Clearing System
- · Statistics (only in Japanese)
 - · Annual statistics of settlement (each fiscal year)
 - FXYCS Transaction Volume/Value