FISC Foreign Exchange Clearing System PFMI Disclosure Report

Financial Information Service Co.

June 2016

Responding institution: Financial Information Service Co.
Jurisdiction(s) in which the FMI operates: Taiwan Shilin District Court
Authority(ies) regulating, supervising or overseeing the FMI: Central Bank of the ROC, Financial Supervisory Commission

The date of this disclosure: June 30, 2016
This disclosure can also be found at http://www.fisc.com.tw
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I. Executive summary

The report has been prepared at the instruction of the Central Bank of the ROC (the " Central Bank") and in accordance with 18 payment system (PS) related principles out of the 24 principles in the principles for financial market infrastructures (PFMI) and the disclosure framework and assessment methodology for the principles for financial market infrastructures released by the Committee on Payment and Settlement Systems and the International Organization of Securities Commissions (CPSS-IOSCO). The self assessment for Financial Market Infrastructures - FISC Foreign Exchange Interbank Clearing System has been performed accordingly in order to ensure compliance with international standards and operational safety and efficiency.

For the purpose of improving payment efficiency and reducing settlement risks in foreign exchange transactions at the same time, FISC, at the instruction of the Central Bank, constructed the Foreign Exchange Interbank Clearing System (the "System") on the principles of "collateral based" and "real time gross settlement (RTGS)" in October 2012. The System was launched on March 1, 2013. The System adopts the network, structure, and message format used by the Society for Worldwide Interbank

Financial Telecommunication (SWIFT). The System provides clearing and settlement services for foreign currency transactions for financial institutions, including domestic wire transfers in U.S. Dollar, Japanese Yen, Renminbi, and Euro, cross-border wire transfers in Renminbi, cross-strait wire transfers in U.S. Dollar, payment versus payment (PvP), and delivery versus payment (DvP). The System is equipped with a liquidity saving mechanism.

FISC conducts interbank clearing/settlement services within the scope approved by the competent authority and performs interbank information transmission and exchange between financial institutions by following the "Regulations Governing Approval and Administration of Financial Information Service Enterprises Engaging in Interbank Funds Transfer and Settlement" established with the authority granted under Article 47-3 of the "Banking Act of The Republic of China".

Banks, securities dealers, and bill dealers apply to the Central Bank to conduct foreign exchange operations according to the "Regulations Governing Foreign Exchange Business of Banking Enterprises", the "Regulations Governing Foreign Exchange Business of Securities Enterprises", and the "Act Governing Bills Finance Business", respectively. A financial institution that has been issued with a certificate of authorization (for authorized banks) or a letter of approval may apply to become a participant of the System by following the "FISC Interbank Financial Business Participation Protocol"(the "Participation Protocol"). Furthermore, an authorized bank may, according to the "Regulations Governing Foreign Exchange Business of Banking Enterprises", be selected as a foreign currency settlement bank and be granted a five-year concession period.

In addition, participants of the System are required to comply with the

"FISC Regulations Governing Interbank Financial Business"(the "Governing Regulations") and the "FISC Manual for Interbank Remittance Participants" (the "Participant Manual"). Moreover, participants must enter into agreements with foreign currency settlement banks and open designated foreign currency settlement accounts (the "Settlement Accounts") at the respective foreign currency settlement banks. FISC has also entered into agreements with foreign currency settlement banks. Therefore, the Settlement Banks may, according to agreements with respective participants, transfer funds from the Settlement Accounts to the Interbank Clearing Guarantee Accounts (the "Interbank Clearing Accounts") for clearing in the System or transfer funds from the Interbank Clearing Accounts to the Settlement Accounts at FISC's instruction. Meanwhile, according to the "Regulations Governing Foreign Exchange Business of Banking Enterprises", foreign currency settlement banks shall make agreements with FISC and participants, that payment instructions can not be withdrawn once the transactions are settled in the Foreign Exchange Interbank Clearing System.

A set of fair and open standards have been established for participation in the System. Any bank, securities deal, or bill dealer that has been approved by the Central Bank to conduct foreign exchange operations may submit an application to participate in the System in accordance with the Participation Protocol. The System maintains a minimum participation threshold. In addition, when conducting DvP transactions, securities dealers and bill dealers can complete payment settlement through dealer accounts at their banks, and then have the TDCC transmit payment instructions to the System.

In accordance with the "Regulations Governing Foreign Exchange Business of Banking Enterprises", "Participation Protocol", "Governing

Regulations", "Participant Manual", and " FISC System Specifications - 6.25 Specifications of the Foreign Exchange Interbank Clearing System" and the foreign exchange clearing and settlement related guidelines and rules established by foreign currency settlement banks shall specify the responsibilities in managing credit and liquidity risks to be undertaken by FISC, foreign currency settlement banks, and participants.

The System implements collateral based real time gross settlement (RTGS) for Interbank Clearing Accounts. The System will not execute a payment instruction if the payor has an insufficient balance in the Interbank Clearing Account, and so is not subject to any credit risk. The System is equipped with a liquidity saving mechanism, and so is subject to relatively low liquidity risk.

FISC has implemented risk management mechanisms and created the Information Security Management System. Regular information security risk assessments are conducted for information assets every year in order to identify vulnerabilities and threats in the System and taken necessary risk control measures. Moreover, FISC has complied with the ISO 22301 requirements and implemented the Business Continuity System as well as guidelines including the Emergency Response Procedures and the Business Continuity Plan. The objective is to ensure that staff will be able to follow correct procedures and maintain business as usual in case of any emergency or irregularity.

To keep transaction details secure, the System is designed for data accuracy and is able to identify transaction status in order to ensure transaction accuracy and integrity. In addition, a complete defense in depth within the System is developed for areas of information security, such as network security, data protection and access control, in order to reduce the risk of cyber attacks.

II. Summary of major changes since the last update of the disclosure

This is the first disclosure by the FISC in accordance with Principle 23: Disclosure of rules, key procedures, and market data since CPSS-IOSCO released the Disclosure Framework and Assessment Methodology in December 2012.

III. General background on the FMI

General description of the FMI and the markets it serves

Cross border trading, investment and financing activities have been growing as more and more financial institutions start operating on a global scale. As a result, the combination of increasingly urgent needs of cross border financial activities and a market committed to reduce settlement risks has led to closer relationships in connection and data transmission among payment and settlement systems around the world. Since extremely high risks exist in traditional settlement methods, the Foreign Exchange Clearing System has been created for the purpose of reducing settlement risks in foreign exchange transactions. The System implements the principles of collateral based and real time gross settlement (RTGS), and establishes links to financial institutions via the SWIFT network structure in order to provide financial institutions with settlement services for foreign currency transactions.

The System is equipped with a set of fair and open participation standards. Any bank, securities deal, or bill dealer that has been approved by the Central Bank to conduct foreign exchange operations may submit an application to participate in the System in accordance with the Participation Protocol.

As of the end of 2015, 69, 60, 40, and 38 financial institutions are participating in "domestic" and "cross border" wire transfer services in U.S. Dollar, Renminbi, Japanese Yen, and Euro, respectively. A total of 1,088,200 foreign exchange transactions with a total amount of USD 1,530.4 billion were made in the year.

General organization of the FMI

To encourage financial institutions to share resources and exchange information and to facilitate full automation of the financial sector, the Ministry of Finance applied for and obtained the Executive Yuan's approval and created a task force, Financial Information System Group (FISG), in October 1984. FISG was tasked with planning, designing and implementing an interbank network. Upon completion of its tasks in August 1988, FISG was succeeded by the Financial Information Service Center ("FIS Center"). The FIS Center was subsequently restructured and incorporated by the Ministry of Finance with the Executive Yuan' approval in November 1998 in response to deregulation of financial markets and adoption of international practices. The Financial Information Service Co., Ltd. (FISC) was established with funds from the Ministry of Finance and public/private financial institutions, and assumed all operations of the FIS Center. FISC has been responsible for planning, implementing and operating the Interbank Financial Telecommunication System and providing an interbank switch and clearing/settlement services ever since.

The FISC shareholders' meeting has passed the Articles of Incorporation, and the board of directors has passed the Organizational Rules, the Guidelines for Levels of Authority, the Table of Expenditure Authorization, and the Manager Management Guidelines. The company rules and regulations establish clearly the organization and responsibilities and authorities of individual departments. Internal controls form the first line of defense; risk and compliance units that conduct self assessments in accordance with the Risk Management Policy and Procedures, the Risk Management Guidelines, and the Compliance Guidelines approved by the board of directors form the second line of defense; and the independent audit unit that conducts audits in accordance with the Internal Audit Guidelines approved by the board of directors and related policies form the third line of defense. The process is well defined in the corporate governance regulations.

Legal and regulatory framework

FISC received the competent authority's approval to implement the Foreign Exchange Clearing System on February 27, 2013, in accordance with the Regulations Governing Approval and Administration of Financial Information Service Enterprises Engaging in Interbank Funds Transfer and Settlement. Banks, securities dealers, and bill dealers that have applied to the Central Bank to conduct foreign exchange operations according to the "Regulations Governing Foreign Exchange Business of Banking Enterprises", the "Regulations Governing Foreign Exchange Business of Securities Enterprises", and the "Act Governing Bills Finance Business", respectively, and received approval may follow the FISC Participation Protocol and apply to participate in the System. In particular, banks eligible to become authorized banks may apply to the Central Bank to be selected as foreign currency settlement banks for a five-year concession period in accordance with the Regulations Governing Foreign Exchange Business of Banking Enterprises. In addition to the Participation Protocol, participants will also be required to comply with the Governing Regulations and related rules, and establish definite management guidelines for business permits and related rights and obligations.

According to the "Regulations Governing Foreign Exchange Business of Banking Enterprises", foreign currency settlement banks shall make agreements with FISC and participants, that payment instructions can not be withdrawn once the transactions are settled in the System.

System design and operations

The System connects foreign currency settlement banks and participants via SWIFTNet. The System implements collateral based settlement for Interbank Clearing Accounts and real time gross settlement (RTGS). Upon participation, participants must open Settlement Accounts at respective foreign currency settlement banks. Therefore, the Settlement Banks may, according to agreements with respective participants, transfer funds from the Settlement Accounts to the Interbank Clearing Accounts for settlement in the System or transfer funds from the Interbank Clearing Accounts to the Settlement Accounts at FISC's instruction in order to execute interbank payment requests.

The System connects to foreign currency settlement banks via SWIFTNet at 9:00 am on every business day. When incurring insufficient or excessive interbank funds as a result of cash flows, participants may perform interbank fund allocation (to increase or reduce interbank funds) between the Settlement Accounts and the Interbank Clearing Accounts through foreign currency settlement banks during business hours. The System, upon receiving a message regarding a participant increasing or reducing an interbank fund, will adjust the interbank fund level for the participant accordingly at the same time. To facilitate uninterrupted operation of the RTGS mechanism, foreign currency settlement banks will provide an intraday liquidity mechanism for Settlement Accounts, and implement guidelines for intraday liquidity management and intraday overdrafts.

The System implements collateral based real time gross settlement (RTGS) for Interbank Clearing Accounts. The System will not execute a payment instruction if the payor has an insufficient balance in the Interbank Clearing Account. Instructions involving DvP transactions will be immediately declined, and those not involving DvP transactions will be queued until the shortfall is filled. If an interbank balance remains insufficient to execute the corresponding payment instruction at the end of the day, the corresponding transaction will be declined.

The System performs daily closing and reversal at 17:00 on every business day, and calculates the balance of the Interbank Clearing Account for each participant according to its default Interbank Fund Retention Limit. A reversal message will be transmitted to the Settlement Bank to inform it of an excess, which will be transferred from the Interbank Clearing Account to the participant's Settlement Account. In addition, a Settlement Bank will be asked to proceed with settlement based on the net difference between accounts receivable and accounts payable by participants.

Ⅳ. Principle-by-principle summary narrative disclosure

Principle-by-principle summary narrative disclosure	
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.	
Disclosure	FISC received the competent authority's approval to implement the Foreign Exchange Clearing System on February 27, 2013, in accordance with the Regulations Governing Approval and Administration of Financial Information Service Enterprises Engaging in Interbank Funds

	Transfer and Settlement. Banks, securities dealers, and bill dealers that have applied to the Central Bank to conduct foreign exchange operations according to the "Regulations Governing Foreign Exchange Business of Banking Enterprises", the "Regulations Governing Foreign Exchange Business of Securities Enterprises", and the "Act Governing Bills Finance Business", respectively, and received approval may follow the FISC Participation Protocol and apply to participate in the System. In particular, banks eligible to become authorized banks may apply to the Central Bank to be selected as foreign currency settlement banks for a five-year concession period, and establish definite management guidelines for business permits in accordance with the Regulations Governing Foreign Exchange Business of Banking Enterprises. In addition, FISC complies with the Regulations Governing Approval and Administration of Financial Information Service Enterprises Engaging in Interbank Funds Transfer and Settlement and the Directions for the Central Bank of China to Govern Electronic Interbank Fund Transfers and Settlements. FISC also implements the Participation Protocol and the Governing Regulations, which establish definite rights and obligations and must be observed by all participants. Moreover, according to the Regulations Governing Foreign Exchange Business of Banking Enterprises, foreign currency settlement banks enter into agreements with FISC and the participants, which explicitly state that payment

	instructions may not be withdrawn once such instructions have been settled in the System. Therefore, debits and settlement on Interbank Clearing Accounts completed by the System according to instructions for accounts receivable/payable transmitted by participants will be legally binding and will not incur any attempt to void, withdraw, or delay such actions. Hence, the practice of establishing irrevocability through protocols or procedures can be deemed to comply with PFMI.

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.	
Disclosure	FISC understands the importance of financial market infrastructures, and so operational safety and efficiency are listed as top priorities to be monitored and reviewed on a regular basis. The decision making process is made public and transparent, and stakeholders will be invited to participate in the making of key decisions to meet public interest in safety and efficiency. Furthermore, to establish clear and transparent governance arrangements and meet regulatory requirements, the FISC shareholders meeting and the board of directors have passed rules and regulations, and the management conducts related business activities accordingly within the scope of authority granted by the

	shareholders meeting and the board of directors. The management implements an internal control system and constructs three lines of defense of internal control by the use of risk management and compliance self assessments and an independent audit office to conduct internal audits. The levels of authority and responsibility are clearly defined. To strengthen information security, FISC has implemented the Information Security Policy as approved by the board of directors. The objectives of the policy are to maintain the confidentiality, integrity, and availability of the FISC information systems, business data and personal data and to ensure information security for interbank transactions. The risk management team is responsible for compiling a risk management overview, presenting reports to the board of directors, and conducting reviews and making improvements as needed, effectively maintaining stability in the financial sector while balancing stakeholder interest and public interest.

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.	
Disclosure	The FISC Risk Management Policy and Procedures, Risk Management Guidelines, and Risk Management Manual have been implemented to establish the risk management system. Operational control procedures have been

	implemented for routine operations in order to identify, measure, monitor, and manage risks that have occurred or been undertaken. To ensure that risk management measures are enforced and the risk management system is inspected regularly, FISC has created the Risk Management Committee to oversee and review establishment and amendment of risk management policies and regulations, which will be implemented by the risk management team. In addition, an audit unit that reports directly to the board of directors has been created to be responsible for conducting internal audits to ensure ongoing effectiveness of the risk management system. FISC has implemented management mechanisms including the Information Security Management System (ISO 27001), the Personal Information Management System (BS 10012), the Business Continuity System (ISO 22301), and the Quality Management System (ISO 9001). In addition to having third party certification institutions to conduct regular reviews, FISC performs operational shock analysis and risk assessments for foreign exchange settlement transactions, and handle in a timely manner any risk identified in the assessments according to the risk level. Moreover, FISC has implemented the Emergency Response Procedures, which simulate potential irregularities that may disrupt business activities and assess the range of tolerance for disruption and the criteria for activating an offsite backup center in order to maintain business continuity for the System. The System adopts collateral based real time gross

	settlement (RTGS). A payment will be debited only if there is a sufficient balance in the account. Therefore, there is no credit risk in the payment and settlement processes. The System is equipped with a liquidity saving mechanism, and so is subject to relatively low liquidity risk. The sum of liquidity resources for foreign currency settlement banks is the sum of overdraft secured by eligible collaterals provided by participants. At present, eligible collaterals as defined by the Settlement Banks tend to be secure with extremely low risk. In addition, for effective risk management and control, Settlement Banks for various currencies will enter into overdraft agreements with participants. If a participant repays an overdraft by the agreed deadline, no interest will be charged; if a participant fails to repay an overdraft by the agreed deadline, the participant will be denied access to overdraft. Furthermore, regarding PvP services, the System, as stated in the Governing Regulations, requires that participants complete 50% of interbank settlement for the total payment amount on the day by 2:30 pm and 80% by 4:30 pm in order to avoid disruption of the entire payment system due to payment delays at some participants. FISC has also implemented the Participation Protocol, the Governing Regulations, the Participant Manual, and the Financial Information System Specifications - 6.25 Specifications of the Foreign Exchange Clearing System. These rules and regulations establish the standards to be observed by participants and facilitate management and control of procedures to be completed by participants.

	Foreign currency settlement banks are equipped with related message systems to enable their own staff and participants' operators to check funds in their accounts in real time in order to make cash flow adjustments as needed. The System also provides transaction reports and failure reports to participants to facilitate improvement. The reports also help to maintain stable operation of the System and meet the consumer demand for payment services.

Principle 4: Credit risk An FMI should effectively measure, monitor, and manage its credit exposures 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 central counterparty (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 participants and their affiliates that would potentially cause the largest aggregate credit exposure to 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 to the CCP in extreme but plausible market conditions. Note: Credit risk refers to the risk of a participant or any other institution being unable to fulfill all financial obligations at maturity or any point in the future.	
Disclosure	The System follows the principles of collateral based and real time gross settlement (RTGS). The System will not execute a payment instruction if the payor has an insufficient interbank balance in the Interbank Clearing Account. Instructions involving DvP transactions will be immediately declined, and other transactions will be queued until the shortfall is filled. Such payments cannot be withdrawn after

	settlement. If an interbank balance remains insufficient to execute the corresponding payment instruction at the end of the day, the corresponding transaction will be declined. Therefore, there is no credit risk in the System. According to the Regulations Governing Foreign Exchange Business of Banking Enterprises, a foreign currency settlement bank shall, when conducting foreign currency settlement business, maintain its financial soundness and complies with all regulatory requirements, properly manage and control its intraday liquidity and exchange rate risks, and establish guidelines of managing credit and liquidity risks.

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.	
Disclosure	The System adopts collateral based real time gross settlement (RTGS), and is therefore not subject to any credit risk. Intraday liquidity is provided by Settlement Banks, and so FISC does not require collaterals from participants.

Principle 6: Margin Not applicable. This principle is not in the scope of PS assessment.

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 multi-day 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.

Disclosure	The System is equipped with a liquidity saving mechanism. PvP transactions are subject to a combination of real time bilateral offsets and regular multilateral offsets. Non-PvP transactions will trigger multilateral offsets, which will not only reduce the chance of insufficient liquidity resources for participants, but also reduce the impact of simple or compound default. The FISC network management staff is constantly monitoring the levels of balance maintained by participants. Any insufficient balance that prevents the System from executing an instruction will prompt the staff to telephone the participant so that the participant may respond in a timely manner and reduce potential risks associated with insufficient liquidity. Participants may use the System to check available balances on their interbank funds and adjust the levels of their funds as needed in order to manage their own liquidity risks. Meanwhile, foreign currency settlement banks have

	established rules and regulations for liquidity risks, overdraft services, and collateral management in accordance with the Regulations Governing Foreign Exchange Business of Banking Enterprises. Besides providing intraday liquidity for participants as needed, foreign currency settlement banks check on a daily basis the overdraft limits for individual participants in order to effectively measure, monitor, and manage liquidity risks.

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.	
Disclosure	According to the Governing Regulations, when a payment instruction is authenticated by the System, if the balance of the participant's Interbank Clearing Account is sufficient to make the payment, the System will proceed to complete the transaction and settle the related accounts. If the balance of the participant's Interbank Clearing Account is insufficient, the System will place the instruction in the queue, and will not proceed with settlement until the balance is sufficient to make the debit. The above procedures serve as preventive measures, and will not be affected by default or bankruptcy of a participant. Net differences between accounts receivable and accounts payable will be settled for individual financial institutions at the end of the day, and the information be transmitted to Settlement Banks for

	settlement. The time of settlement by Settlement Banks will be the final time of settlement. The System implements real time gross settlement (RTGS). Participants are allowed to send messages to cancel transactions and withdraw payment instructions before the clearing process is completed. Payment instructions cannot be withdrawn if the clearing process has been completed. The timing for payment withdrawal instructions is clearly defined. The above procedures are specified in the Governing Regulations and the Financial Information System Specifications - 6.25 Specifications of the Foreign Exchange Interbank Clearing System.

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 risks arising from the use of commercial bank money.	
Disclosure	The System performs the clearing procedure only for interbank transactions made by participants, and use the network connections to Settlement Banks (including the CBC Interbank Funds Transfer System) to return clearing data so to enable Settlement Banks to settle payments between financial institutions. Foreign currency settlement banks selected by the Central Bank will meet certain requirements of financial soundness and regulatory compliance and be equipped with

	liquidity management guidelines in accordance with the Regulations Governing Foreign Exchange Business of Banking Enterprises. The concession period is five years starting on the launch date of an operation. The Central Bank will review the applications every five years. Foreign currency settlement banks should also provide the Central Bank with necessary information, and allow inspection and examination of their business activities. Therefore, while the System is based on commercial bank money settlement, the credit and liquidity risks arising from the commercial settlement banks are extremely low. Furthermore, the System currently operates in U.S. Dollar, Renminbi, Japanese Yen, and Euro, the Settlement Banks of which are Mega International Commercial Bank, Bank of China Taipei Branch, Mizuho Bank Taipei Branch, and Mega International Commercial Bank, respectively. The arrangement is able to ensure that risks are adequately diversified on a sound basis. Payment instructions completed in the System cannot be withdrawn, and payments will be transferred and final settlement completed by foreign currency settlement banks before the end of the day.

Principle 10: Physical deliveries

Not applicable. This principle is not in the scope of PS assessment.

Principle 11: Central securities depositories Not applicable. This principle is not in the scope of PS assessment.

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.	
Disclosure	PvP transactions in the System are processed by matching and earmarking funds from participants' Interbank Clearing Account. When the associated participants' Interbank Clearing Account have been confirmed to have a sufficient balance, settlement for the payment instructions will proceed promptly. Earmarked funds from Interbank Clearing Accounts may not be accessed by other payment instructions until the funds are cleared or unearmarked. The restriction prevents the funds from being subject to third party recovery. DvP transactions in the System are processed by matching and earmarking securities. When the System has confirmed sufficient funds in the participants' Interbank Clearing Account, settlement will be completed in the Clearing and Settlement System in order to ensure consistency in delivery versus payment transactions.

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.	
Disclosure	The procedures in response to participant default are established for the System in the Participation Protocol. The Protocol Compliance Committee has been created to review defaults. When a participant's default causes damage to any other participant or FISC, the participant will be held liable for compensation as stated in the Participation Protocol. Defaults will be investigated and related matters coordinated by the Protocol Compliance Committee. To handle such incidents, the Protocol Compliance Committee may request the units involved provide all relevant information, and the units must not refuse such requests. The Protocol Compliance Committee, when necessary, may bar an involved unit from accessing the interbank information system. As the System implements collateral based settlement for Interbank Clearing Accounts and real time gross settlement (RTGS), assets to be liquidated are the available balances of participants' Interbank Clearing Account at foreign currency settlement banks. As each transaction occurs, the System will execute debit instructions for a transaction only if the corresponding payor has a sufficient balance in the corresponding Interbank Clearing Account.

	The available balance for the participant will also be updated immediately. Therefore, the System will not have the problem of having to continue to fulfill a participant's debt and allocate resources after the participant has defaulted. The above rules have been disclosed on the FISC Membership Website at https://member.fisc.com.tw to give participants a clear understanding of the default regulations and procedures.

Principle 14: Segregation and portability

Not applicable. This principle is not in the scope of PS assessment.

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 materialize. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.

Disclosure	FISC has been established with the competent authority's approval and focuses on operating the Interbank Financial Telecommunication System in accordance with the Regulations Governing Approval and Administration of Financial Information Service Enterprises Engaging in Interbank Funds Transfer and Settlement established with the authority granted under Article 47-3 of the Banking Act of

	The Republic of China. To facilitate planning and implementation of overall business objectives, FISC has established the Budget Management Procedure, the Table of Expenditure Authorization, and the Accounting System. All business plans will be incorporated into the annual plans and budgets and implemented accordingly. The annual FISC budget, once approved by the board of directors, will be monitored regularly, and its status will be reported to the management and the board of directors to facilitate the decision making process. In case of any material impact on FISC operations as a result of material changes in the business environment and other extraordinary circumstances and the amount exceeding the chairman's authority, which makes it necessary to modify the annual budget plan, a proposal to amend the budget plan should be submitted to the board of directors for approval. FISC, in accordance with the Directions Governing the Internal Audit and Internal Control System of Credit Card Business Institutions, has implemented an internal control system and related operating guidelines as well as risk management measures to reinforce its risk management practice. FISC has an independent internal audit unit to perform audits, and is equipped with well established management and control systems to identify, monitor, and manage general operational risks. FISC holds 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. FISC

	has also implemented the Business Continuity Plan and related operating guidelines so that it can quickly resume normal business activities and maintain liquid net assets needed to execute the plan.

Principle 16: Custody and investment risks An FMI should safeguard its own and its participants' assets and minimize 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.	
Disclosure	FISC does not accept custody of any of the participants' assets, and so is not subject to custody risks. Utilization of FISC funds will comply with the Fund Utilization Guidelines approved by the board of directors. The scopes, limits, and criteria for custodian selection will be defined according to the attributes and risks of individual investment instruments, and the limits and risks in investment instruments will be regularly identified and assessed. When an investment loss reaches the preset threshold, an assessment report and response measures will have to be submitted to facilitate effective management of investment risks. Most counterparties in fund utilization above are financial institutions, which will have implemented sound accounting systems, custody procedures, and internal systems in accordance with the applicable financial laws and regulations and be subject to regulation, management, and inspection of the FSC. FISC has fully disclosed its investment

	instruments and financial risk management policy in its annual reports, which have been provided to shareholders and stakeholders.

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 fulfillment of the FMI's obligations, including in the event of a wide-scale or major disruption.	
Disclosure	FISC has implemented operational risk management measures and organizational structure. Management systems for quality, information security, business continuity, and personal data have been built in compliance with international standards, including ISO 9001, ISO 27001, ISO 22301, and BS 10012. Risk management structures, policies, operational procedures, and control measures have been installed and submitted to the board of directors for approval. Performance of the risk management system as a whole is reviewed regularly. In addition to self assessments, self audits, and internal audits performed by the FISC units, FISC also submits to audits and inspections by accounting firms, third party certification institutions, and competent authorities. FISC also conducts regular risk assessments for the interbank system in order to identify and respond to

	vulnerabilities and threats in the interbank system and facilitate monitoring and management of operational risks. At present, these assessments have not discovered any potential single point of failure in the system. In case of a single point of failure, the operations will resume in the backup environment. FISC sets the operational objectives for the Foreign Exchange Interbankn Clearing System every year, and track and review the progress on a regular basis. Capacity planning for the interbank information system always takes into account its scalability. Usage is constantly monitored and analyzed to enable timely response. FISC has implemented the Business Continuity Plan in compliance with the ISO 22301 requirements to handle incidents or disasters that may lead to material operational risks. FISC has established an exclusive designated offsite backup center, which is equipped with resources necessary for business operations. Regular drills and tests are performed to ensure normal operation of the System can be restored within two hours after a disaster and settlement can be completed by the end of business hours of the day. FISC has a fair, just and open recruitment policy and encourages employee education and training. FISC follows a performance management system and provides promotions and regular job rotations in order to improve quality of human resources and work performance and to reduce employee turnover and the risk of key persons leaving.

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.	
Disclosure	The standards for participating in the System are impartial, fair, and open as well as risk based. Any financial institution that has applied to the Central Bank to conduct foreign exchange operations according to the "Regulations Governing Foreign Exchange Business of Banking Enterprises", the "Regulations Governing Foreign Exchange Business of Securities Enterprises", or the "Act Governing Bills Finance Business" and been issued with a certificate of authorization may apply to become a participant of the System by following the Participation Protocol. FISC does not discriminate against any particular party. The participation procedure for participants has been stated under V. Participation Procedure of the Participation Protocol. Applications will be reviewed by FISC, and, if approved, receive assistance from FISC in completing the necessary preparations. Participants must pass the System's connection test before proceeding with normal operations. The Participation Protocol also states that a participant, in case of default, will be barred from the operations if such default has been investigated by FISC and found to be true and the case has been passed by the Protocol Compliance Committee. The Participation Protocol establishes the operational

	standards, compliance requirements, response to default and related procedures for business activities in the System. The details have been disclosed on the FISC Membership Website at https://member.fisc.com.tw.

Principle 19: Tiered participation arrangements An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.	
Disclosure	Any financial institution, including banks, securities dealers, and bill dealers, that has been approved by the Central Bank to conduct foreign exchange operations and issued with a certificate of authorization or a letter of approval may apply to become a participant. At present, credit cooperative associations and credit departments of farmers' and fishermen's associations, in accordance with the Regulations Governing Foreign Exchange Business of Banking Enterprises, may apply only to conduct purchases and sales of foreign currencies and travelers cheques. Hence, the System will not have credit cooperative associations, credit departments of farmers' and fishermen's associations or other community financial institutions participating in the System indirectly through information centers. In addition, when conducting DvP transactions, securities dealers and bill dealers can complete payment settlement through dealer accounts at their banks, and then have the TDCC transmit payment instructions to the System. The System will confirm a sufficient balance in the Interbank

	Clearing Account before proceeding to make the debit. In the DvP settlement process, the System's counterparty is the dealer's bank, which will have acquired the amount payable from the dealer's account. The process is not unlike that for investors in general. Therefore, the mechanism in which dealers make payments in the System through banks has very little effect on the System.

Principle 20: FMI links Not applicable. This principle is not in the scope of PS assessment.

Principle 21: Efficiency and effectiveness An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.	
Disclosure	Planning of all operations in the System always starts with in-house conferences or team meetings with the Bankers Association where FISC will engage participants in negotiation or discussion. Before an operation is to be launched, information sessions will be organized to further identify participants' needs. A customer service hotline and designated unit are in place, and regular satisfaction surveys are conducted to ensure that the services meet market expectations. FISC sets management system targets every year. The targets establish the benchmarks in accuracy, availability, and validity, and serve to track the progress. Management systems, including ISO 9001, ISO 27001, BS 10012, and ISO

	22301, have been implemented, and management review meetings are held regularly to review the progress. FISC also undergoes audits and certification by external parties. Certificates will be issued for certification programs that FISC passes. Mechanisms are also in place to effectively check efficiency and effectiveness. FISC has installed a customer service hotline and designated unit in order to provide a variety of communication channels that meet the needs of participants and the markets.

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.	
Disclosure	The System uses the SWIFT Standards and the SWIFTNet network to establish connection to SWIFT and account administration options. Participants and settlement banks may use the same mechanism and connect to SWIFT, thereby completing the network in the System. To facilitate efficient payment, clearing, settlement, and recording, the FISC has adopted internationally recognized (and compatible) communication procedures and standards, and engages participants in negotiation or discussion through the Bankers Association or by itself.

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.	
Disclosure	Participants will be informed by mail of the establishment or amendment of any protocol, governing regulations or operational procedure relevant to the System. The protocol, governing regulations or operational procedure will also be made available for download to authorized persons on the FISC Membership Website at https://member.fisc.com.tw. Details of shares held by shareholders are filed regularly with the competent authority. A list of members of the board of directors is filed according to the law with the Department of Commerce of the Minister of Economic Affairs (MOEA), which will disclose the information on the MOEA website at http://gcis.nat.gov.tw/pub/cmpy/cmpyInfoListAction.do. FISC is also required to submit an annual report and financial statements to the board of directors and the competent authority at the end of a fiscal year. The "Public Information" section has been made available to the general public on the Chinese version of the FISC website (http://www.fisc.com.tw). The section contains disclosure on big data including the amount of foreign exchange clearing transactions, the distribution of time slots,

	and the category of financial institution (domestic/foreign). The data will be updated once at the beginning of each month. Provided that trade secrets and information security are not breached, FISC has created in 2008 the "Rules and Regulations" section on the aforesaid website to disclose the rules and regulations relevant to the general public in compliance with the CPSS-IOSCO FMI disclosure framework. FISC discloses business and other general information in Chinese, which is the common language in the Republic of China, under the "About Us", "News", and "Consumer Services" sections. Related procedures will be updated as needed to reflect actual practices. A set of clear and detailed protocols and procedures have been established for the System to provide complete, transparent and necessary information for participants. In addition, FISC conducts meetings and trainings and issues letters and online announcements to help participants understand the risks and fee schedules and their rights and compliance and regulatory obligations. Furthermore, FISC also discloses to the public business and other general information in the common language used in the financial markets. FISC will update the PFMI disclosure framework as needed in response to material changes in the systems or the environment.

Principle 24: Disclosure of market data by trade repositories

Not applicable. This principle is not in the scope of PS assessment.

Ⅴ. List of publicly available resources

<u>Laws and regulations</u>

1. Regulations Governing Approval and Administration of Financial Information Service Enterprises Engaging in Interbank Funds Transfer and Settlement
2. Directions for the Central Bank of China to Govern Electronic Interbank Fund Transfers and Settlements
3. Banking Act of The Republic of China
4. Enforcement Rules of the Banking Act
5. Regulations Governing Foreign Exchange Business of Banking Enterprises
6. Directions for the Conduct of Intraday Overdrafts of the Central Bank of China
7. Regulations Governing the Registration, Central Depository, and Book-entry Operation for Short-term Bills
8. Regulations Governing Short-term Bills Clearing and Depository Organizations
9. Implementation Rules of Internal Audit and Internal Control System of Financial Holding Companies and Banking Industries
10. Directions Governing the Internal Audit and Internal Control System of Credit Card Business Institutions
11. Information Security Management Guidelines for Executive Yuan and related departments
12. Information Security Management Guidelines for the Ministry of Finance and related departments/agencies
13. Personal Information Protection Act
14. Fair Trade Act
15. Directions for CBC Appointed Responsible Persons for Private Enterprises with State Shareholders
16. Company Act
17. Civil Code

<u>Publicly disclosed (to participants) internal regulations</u>

1. FISC Interbank Financial Telecommunication System Participation Protocol and Addendums

2. Regulations Governing Interbank Financial Telecommunication System
3. Operating Manual for Interbank Remittance Participants in Interbank Financial Telecommunication System
4. Financial Information System Specifications - 6.25 Specifications of the Foreign Exchange Clearing System
5. Participant's Operating Manual for Disaster Recovery and Business Continuity of Interbank Financial Telecommunication System