

BASIC PRINCIPLES ON ESTABLISHING A REGIONAL SETTLEMENT INTERMEDIARY AND NEXT STEPS FORWARD

CROSS-BORDER SETTLEMENT INFRASTRUCTURE FORUM



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## Statement from CSIF Chairs

he chair and vice-chair express their heartfelt gratitude to members and observers of the Cross-border Settlement Infrastructure Forum (CSIF) for their contributions toward the success of this initiative. The chair and vice-chair hope to receive continuous support of members and observers for this initiative since this report is only the first stage in bringing the objectives of the CSIF to fruition.

Bella S. Santos Chair of the CSIF Officer-in-Charge, Information Sub-sector Bangko Sentral ng Pilipinas

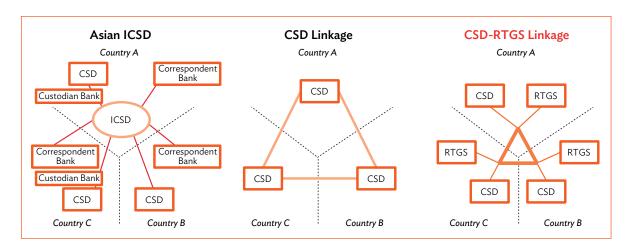
Jong-Hyung Lee Vice-chair of the CSIF Team Head, International Relations and Planning Team Korea Securities Depository

## **Executive Summary**

he Asian Bond Markets Initiative (ABMI) Task Force 4 (TF4) has conducted several studies on Regional Settlement Intermediary (RSI), including one carried out by the Group of Experts (GOE), and a subsequent reassessment of the GOE's study on legal and business feasibility study. Establishment of Cross-border Settlement Infrastructure Forum (CSIF) was endorsed at the meeting of Finance Ministers and Central Bank Governors of the Association of Southeast Asian Nations (ASEAN), the People's Republic of China, Japan, and the Republic of Korea (ASEAN+3) held in Delhi in May 2013 to facilitate discussion on the improvement of cross-border bond and cash settlement infrastructure in the region, including the possibility of establishing an RSI. The CSIF aims to: (a) enhance dialogue among policy makers and operators of bond and cash settlement infrastructure in the region; (b) assess the existing settlement infrastructure and identify comprehensive issues and requirements to facilitate cross-border bond and cash settlement infrastructure in the region; (c) develop common basic principles for cross-border bond and cash settlement infrastructure with a medium- and long-term perspective; and (d) discuss prospective models, overall roadmap and implementation plan for establishment of crossborder bond and cash settlement infrastructure in the region. Central Banks and national Central Securities Depositories (CSD) participate in the CSIF on a voluntary basis. The CSIF reports to the ABMI (TF4).

The feasibility of two RSI models, i.e., "Asian ICSD and "CSD Linkage," were analyzed by the GOE in previous studies and discussed by the TF4. The Asian ICSD is intended to operate securities and multicurrency cash accounts as an independent institution with a banking function. In the CSD Linkage model, national CSDs are linked to enable access to local bonds, in which cash is settled through correspondent banks. Many members of the CSIF stressed the difficulties and cost issues of establishing the Asian ICSD as a new institution.

Most members considered that linking existing infrastructure in a flexible way would be an achievable model for cross-border settlement infrastructure in the short and medium term. A third, new model, "CSD-RTGS Linkage" was proposed, which connects national CSDs and real time gross settlement (RTGS) systems operated by Central Banks. This enables the local bonds to be settled in Delivery versus Payment (DVP) via central bank money, which ensures safety of settlement and is compliant with the international standards as well as being cost efficient.



The three models are illustrated here.

Through the discussion on RSI options, the CSIF identified the following basic principles in planning and designing the RSI for the region.

- Principle 1: **Domesticity and cost efficiency:** Maximize utilization of existing cash and bond settlement infrastructure.
- Principle 2: **Safety:** As recommended in the "Principles for financial market infrastructures," cash settlement should use central bank money where practical and available.
- Principle 3: **Flexibility:** Allow newcomers to join when market is reasonably developed and ready.
- Principle 4: **Accessibility:** Structure that small- and medium-size local financial institutions can benefit (not just for major and global players).
- Principle 5: **Gradual integration:** Start from bilateral links. Explore possibility of centralized integration as long-term goal.
- Principle 6: **Consistency and collaboration with other initiatives:** Explore greater benefit by maintaining consistency and collaboration with other initiatives of the region.
- Principle 7: **Standardization:** Standardize market practices and technical aspects among members as much as possible to minimize costs.
- Principle 8: **Harmonization of rules and regulations:** Harmonize rules and regulations as much as practical which hinder cross-border transaction. Regulations that require holistic policy considerations such as capital control, taxation, etc., are taken as given.

The CSIF considered that the CSD-RTGS Linkage best fits with these principles and would be the possible option to pursue further in the next step.

The majority of the CSIF member countries are involved in the ASEAN Working Committee on Payment and Settlement Systems (WC-PSS), which aims to facilitate more efficient access to issuers and investors to tap the ASEAN capital markets for equities and government and corporate bonds. Therefore, cooperation and coordinating efforts will be undertaken to ensure that initiatives under the CSIF are aligned with other initiatives in the region, including those of the WC-PSS.

#### Recommendations and Next Steps:

- (i) Based on the analysis, the CSIF recommends the following.
  - (a) Each economy in the region is encouraged to establish cross-border bilateral linkages of national CSDs and RTGS systems when respective markets are sufficiently developed, infrastructures are ready to link each other and the linkages will bring significant benefits to the home economies.
  - (b) In establishing the bilateral linkages, each economy in the region should apply the Basic Principles on establishing RSI.
  - (c) Through, and in parallel with, works to establish the bilateral linkages, each economy should continue efforts to facilitate standardization, harmonization of rule and regulation as appropriate which would increase transactions and costefficiency of cross-border bonds transactions in the region.
  - (d) As long-term perspective, practical integrated solution should also be considered assuming that the number of bilateral linkages would increase to the extent that integrated model is viable.
- (ii) In order to facilitate relevant works in accordance with the recommendation above, the CSIF shall develop implementation plan in the next step. As way forward, the CSIF should conduct comprehensive analysis to identify necessary requirements of the gateway and of others for CSD-RTGS linkages. In doing this, desktop study of bilateral CSD-RTGS linkage covering legal, technical and operational aspect by volunteering members could be efficient to check viability and feasibility of the model. A basic guideline for CSD-RTGS linkages could be developed based on identified requirements by the comprehensive analysis.
- (iii) Along with the study above, the CSIF shall develop implementation roadmap of CSD-RTGS linkages as short-term and medium-term goal (by 2018) and integrated solution in accordance with the eight principles as long-term goal (around 2020).
- (iv) In order to implement the cross-border settlement facility, standardization of message flows and items is essential. The ASEAN+3 Bond Market Forum (ABMF), Subforum 2 (SF2) has been conducting extensive study on standardization of bond transaction to facilitate cross-border STP in the region. Although target area to be standardized between the ABMF SF2 and the CSIF is different, close communication and collaboration among the two forums is desirable to achieve wider-range of standardization and further efficiency.

## **Abbreviations**

ABMF ASEAN+3 Bond Market Forum

ABMI Asian Bond Markets Initiative

ASEAN Association of Southeast Asian Nations

CSD Central Securities Depository

CSIF Cross-border Settlement Infrastructure Forum

DVP Delivery versus Payment

GOE Group of Experts

GW Gateway

ICSD International Central Securities Depository

IT Information Technology

RSI Regional Settlement Intermediary

RTGS Real Time Gross Settlement

SF Subforum
TF Task Force

WC-PSS Working Committee on Payment and Settlement Systems

### Introduction

he establishment of a Regional Settlement Intermediary (RSI) has been an issue since the inception of the Asian Bond Markets Initiative (ABMI). In April 2010, the Group of Experts (GOE) published a report that analyzed the legal and business feasibility of the RSI models.

Since that time, the GOE has made a reassessment of the business feasibility of RSI models, which it completed at the end of 2012. In Delhi in May 2013, the Finance Ministers and Central Bank Governors of the Association of Southeast Asian Nations (ASEAN), the People's Republic of China, Japan, and the Republic of Korea (ASEAN+3) agreed to set up a Cross-border Settlement Infrastructure Forum (CSIF) to discuss detailed work plans and related processes for improvement of cross-border settlement in the region, which included the possibility of establishing an RSI. CSIF meetings have been held in Tokyo (Japan, July 2013), Jeju (Korea, November 2013), and Manila (Philippines, March 2014).

"We welcomed the completion of the business feasibility reassessment for the establishment of the Regional Settlement Intermediary (RSI). We agreed to set up a Cross-border Settlement Infrastructure Forum, which will be based on the voluntary participation of member countries, to discuss detailed work plans and related process for the improvement of the cross-border settlement in the region including the possibility of establishing the RSI."

The Joint Statement of the 16th ASEAN+3 Finance Ministers and Central Bank Governors' Meeting, 3 May 2013, Delhi, India

### Purpose and Function of the CSIF

Facilitating the establishment of an RSI is one of nine priorities identified in the "New Roadmap+" of the ABMI. More specifically, the CSIF is expected to be a key instrument to support Task Force 4 (TF4) of the ABMI in facilitating discussion on the improvement of cross-border bond and cash settlement infrastructure in the region.

#### The CSIF aims to:

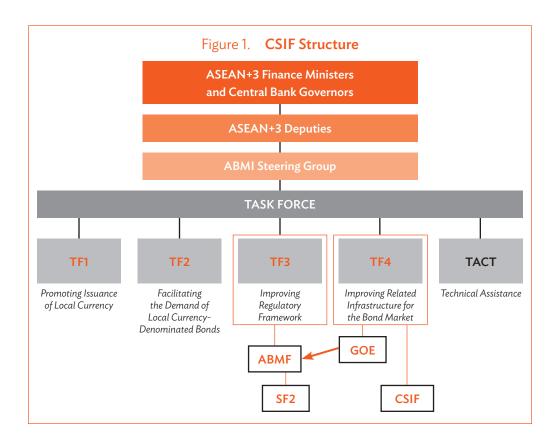
- (i) enhance dialogue among policy makers and operators of bond and cash settlement infrastructure in the region;
- (ii) assess the existing settlement infrastructure and identify comprehensive issues and requirements to facilitate cross-border bond and cash settlement infrastructure in the region;
- (iii) develop common basic principles for cross-border bond and cash settlement infrastructure with medium- and long-term perspectives; and

(iv) discuss prospective models, overall roadmap and implementation plan for establishment of cross-border bond and cash settlement infrastructure in the region.

The CSIF is expected to submit periodic progress reports, a work plan and recommendations for establishment of cross-border bond and cash settlement infrastructure to the ABMI TF4.

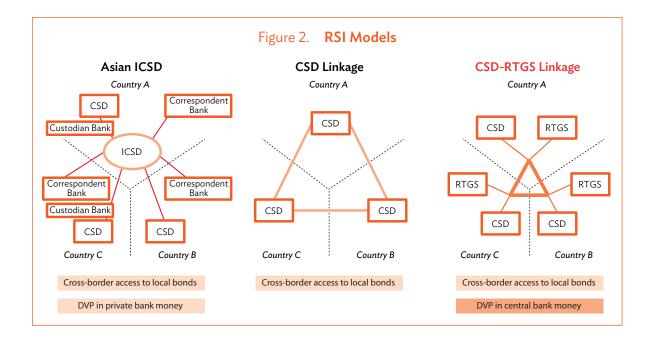
### Membership and Structure of the CSIF

Central Banks and national Central Securities Depositories (CSD) participate in the CSIF on a voluntary basis. Members, observers, and secretariats are shown in Attachment 1. Bella Santos of Bangko Sentral ng Pilipinas and Jong-Hyung Lee of Korea Securities Depository have been elected by the members as chair and vice-chair of the CSIF, respectively. The structure of the CSIF is shown in Figure 1 below.



## Overview of RSI Models

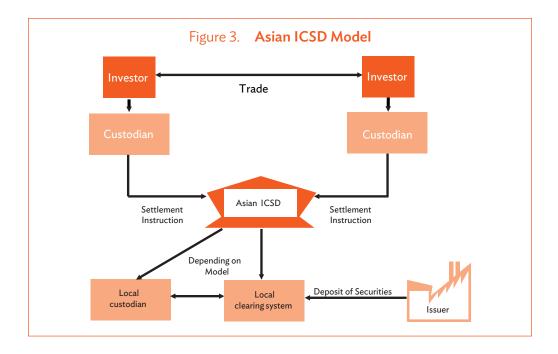
hree models—Asian ICSD, CSD Linkage, and CSD-RTGS Linkage—were analyzed by the members for potential application to the RSI (see Figure 2). The Asian ICSD and CSD Linkage are the models that had been previously studied by the GOE. The CSD-RTGS Linkage is a model that was proposed by a member as an additional RSI option, and all other members supported the conduct of further analysis of this model at the first meeting of the CSIF.



#### Asian ICSD Model

The Asian ICSD is intended to operate securities and multicurrency cash accounts as an independent institution with a banking function, modeled after other ICSDs. The main operational specifications (see Figure 3) are as follows:

- (i) delivery versus Payment (DVP) through book-entry settlement of both securities and cash within the Asian ICSD, although settlement risk using commercial bank money remains;
- (ii) external settlement for securities received from, or delivered to, local markets through direct access to local CSD or local custodian bank;



- (iii) multicurrency settlement facility through integrated foreign exchange service books of Asian ICSD;
- (iv) operation of credit/liquidity facilities and securities lending/borrowing program;
- (v) operation of collateral management services; and
- (vi) operation of principal custodial services.

### CSD Linkage Model

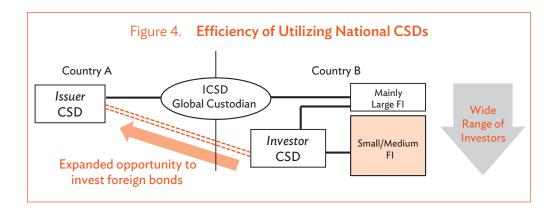
In this model, national CSD are linked to enable access to local bonds, in which cash is settled through correspondent banks. The CSD Linkage is modeled after the Link Up Markets. The main operational specifications are shown as follows:

- (i) CSD linkage infrastructure acts as communication and information platform connecting CSDs, routing and converting messages.
- (ii) Foreign CSDs are allowed to open accounts at domestic CSD.
- (iii) Core settlement services include securities and cash processing in DVP in issuer market, following existing local DVP process of issuer CSD.
- (iv) Require cash leg in commercial bank money provided by cash respondent bank.
- (v) All currencies of issuer CSD markets are available, provided those currencies are fully convertible.

The Link Up Markets were launched by multiple European CSDs in 2008.

### CSD-RTGS Linkage Model

The CSD-RTGS Linkage is based on three key features—efficiency, safety, and compatibility. The first, "efficiency," is achieved by utilizing national CSDs. Many Asian economies already have developed online-based national payment and settlement infrastructure. National CSDs that have a large potential investor base could provide expanded opportunities for cross-border investment to small- or medium-sized financial institutions in the local language. As such, the use of national CSDs would have the potential to be a cost-effective solution for cross-border securities settlement for a wider range of investors.



Secondly, "safety" of settlement can be secured by using central bank money. Principle 9 of the "Principles for financial market infrastructures" of the Committee on Payment and Settlement Systems and the Technical Committee of the International Organization of Securities Commissions articulates that "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." While private institutions (ICSDs/ custodians/ correspondent banks) continue to improve their services for cross-border settlement, considering stressed situations, it would be necessary to explore a safer substituted system which maintains functioning even in crisis. If local currencies of ASEAN+3 are involved in cross-border settlement, providing market participants with an option to use central bank money (central bank RTGS systems) would contribute to create further robust financial system in the region.

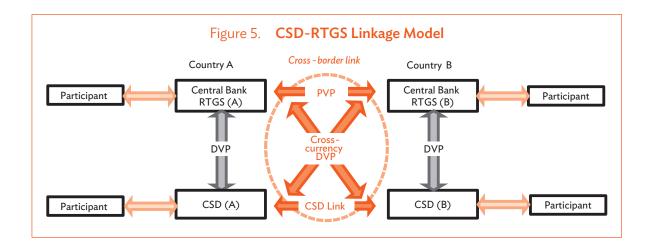
Thirdly, a model that demonstrates "compatibility" could be the most suitable solution for Asian economies with different stages of market development. Given the diversity among the financial markets of the region, and the many differences regarding currency, market openness, legal aspects, local practices, infrastructure, etc., there cannot really be a "one-sizefits-all" solution for establishing a cross-border settlement infrastructure/system. Therefore, a rather flexible and practical solution would be ideal that gives options to each ASEAN+3 economy, firstly, to participate in a regional framework at its own appropriate timing, taking into account its progress of domestic market reform and secondly, to continue to use existing

http://www.bis.org/publ/cpss101a.pdf

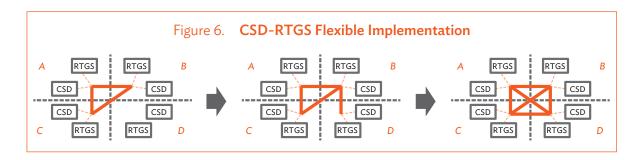
infrastructure/systems, which could be co-existing with the regional framework. This solution would facilitate a broader harmonization among relevant parties aiming for middle-/long-term goal of the region.

The CSD-RTGS Linkage model is based on a bilateral connection between two markets. By connecting national CSDs and RTGS systems operated by Central Banks, the CSD-RTGS Linkage will facilitate:

- (i) funding of foreign currency using local bonds as collateral (e.g., cross-currency repo),
- (ii) issuance of Eurobond (e.g., Dim sum bond, Shogun bond), and
- (iii) cross-border investment in local bonds.

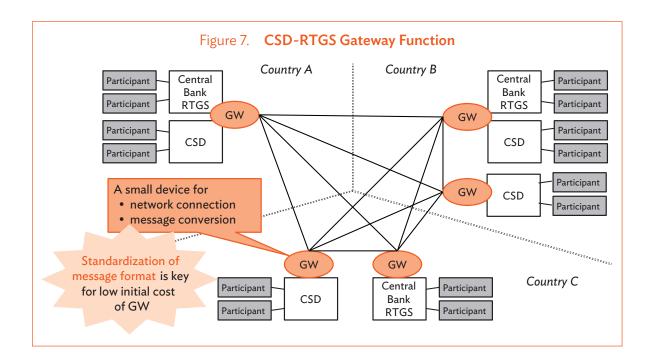


CSD-RTGS Linkage adopts a "flexible implementation" approach. Each country can choose when and how to participate in the linkage.



Under the CSD-RTGS Linkage model, each market infrastructure is connected by a gateway (GW). A GW is network equipment (a small device) with functions such as network connection and message conversion. The general concept of a GW is as follows:

- (i) "equal footing" linkage for all countries, with no central hub; and
- (ii) "flexibility" in the number of GWs in a country (e.g., free option for each country).



Standardization of the message format is key in maintaining a low initial cost for the GW. Standardization of settlement flow is also an important element to minimize information technology (IT) cost for GW development. One possible example of such standardization of settlement flow is to adopt the widely used DVP mechanism (e.g., holding/earmarking/blocking securities before funds transfer) for the cross-border/cross-currency DVP link. The cross-border/cross-currency DVP link for settlement flow is illustrated in Attachment 2.

### Salient Points of Discussion on RSI

#### **General Shared Views**

Circumstances surrounding bond market infrastructure were shared by members. Authorities, operators of financial market infrastructure and market participants of bond markets in the region have been undertaking a variety of measures to reduce risk and increase efficiency by introducing dematerialization (or immobilization) of securities, RTGS, DVP, PVP and so on. However, there remains room for improvement in terms of safety and efficiency for cross-border securities settlement. There are also increasing demands for reliable collateral and financing of local currencies for nonresidents utilizing fixed income instruments; this is a reflection of both the recent global financial crisis and regulatory reforms, as well as the good potential for growth within the ASEAN+3 economies. With regard to IT developments, there is some trend to migrate the message standard in many economies to be compatible with international standards, in particular ISO 20022, in order to promote, or in view of the need for, cross-border infrastructure linkages. Members also mentioned the importance of reducing the high transaction costs of using European ICSDs and global custodians as well as mitigating credit and foreign exchange settlement risks by establishing safer and more efficient cross-border settlement facilities in the region.

### **Discussions on RSI Options**

Sharing the general views above, members also exchanged thoughts on RSI options. The discussions mainly focused on the comparison between the Asian ICSD and CSD-RTGS Linkage models; the CSD Linkage model was considered to have challenges regarding cash settlement and liquidity that could be better addressed by the CSD-RTGS Linkage model.

Many members opined on the challenges of establishing the Asian ICSD as a new institution. These included challenges in ensuring the safety of settlements, such as access to central bank credit/liquidity facilities in jurisdictions other than the location of the Asian ICSD. In addition, many economies restrict settlement of their local currencies outside their economies for the purpose of capital control. Even in the jurisdiction where the Asian ICSD would obtain a banking license, access to central bank credit/liquidity facilities might be limited to the currency of that jurisdiction. Another issue is cost: the Asian ICSD should be able to satisfy high levels of capital requirements as a banking entity and would also involve high IT development costs, both of which were viewed as not practical to the region.

Most members viewed the CSD-RTGS Linkage as a prospective model for the RSI. Firstly, linking existing infrastructure in a flexible way was perceived as an achievable and efficient model for cross-border infrastructure of the region from short and medium term

perspective. Secondly, the CSD-RTGS Linkage model enables cross-border/cross-currency bond settlement in DVP with central bank money, which would mitigate settlement risks and ensure the safety of settlement. Safety of settlement would in turn encourage cross-border bond transactions and investments within the region. In this connection, some members addressed the importance of local currency settled domestically. Thirdly, the CSD-RTGS Linkage model would be consistent with other regional initiatives. The ASEAN Working Committee on Payment and Settlement Systems (WC-PSS) has set infrastructure linkages between the member countries as a long-term goal beyond 2015 in the roadmap toward ASEAN Financial Integration. Finally, standardization and harmonization of rules and regulations are identified as important elements to establish an RSI and foster cross-border bond transactions. CSD-RTGS Linkage was found to be the model that, overall, could take all of these various elements into account in establishing an RSI from its concept of GW to make bilateral linkage possible.

### Basic Principles on Establishing an RSI

Through the discussions on RSI options, the CSIF identified the following basic principles in planning and designing the RSI for the region.

- Principle 1: **Domesticity and cost efficiency:** Maximize utilization of existing cash and bond settlement infrastructure.
- Principle 2: **Safety:** As recommended in the "Principles for financial market infrastructures," cash settlement should use central bank money where practical and available.
- Principle 3: **Flexibility:** Allow newcomers to join when market is reasonably developed and ready.
- Principle 4: **Accessibility:** Structure that small- and medium-sized local financial institutions can benefit (not just for major and global players).
- Principle 5: **Gradual integration:** Start from bilateral links. Explore possibility of centralized integration as long-term goal.
- Principle 6: **Consistency and collaboration with other initiatives:** Explore greater benefit by maintaining consistency and collaboration with other initiatives of the region.
- Principle 7: **Standardization:** Standardize market practices and technical aspects among members as much as possible to minimize costs.
- Principle 8: **Harmonization of rules and regulations:** Harmonize rules and regulations as much as practical which hinder cross-border transaction. Regulations that require holistic policy considerations such as capital control, taxation, etc., are taken as given.

The CSIF considered that the CSD-RTGS Linkage model best fits with and could follow the basic principles identified above. A comparison of the RSI options with the basic principles is summarized in Attachment 3.

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The majority of the CSIF member countries are involved in the ASEAN WC-PSS, which aims to facilitate more efficient access to issuers and investors to tap the ASEAN capital markets for equities and government and corporate bonds. Therefore, cooperation and coordinating efforts will be undertaken to ensure that initiatives under the CSIF are aligned with other initiatives in the region, including those of the WC-PSS.

## Recommendations and Next Steps

#### Recommendations

Based on the discussions, the CSIF recommends the following.

- (i) Each economy in the region is encouraged to establish cross-border bilateral linkages of national CSDs and RTGS systems when respective markets are sufficiently developed, infrastructures are ready to link each other and the linkages will bring significant benefits to the home economies.
- (ii) In establishing the bilateral linkages, each economy in the region should apply the Basic Principles on establishing RSI.
- (iii) Through, and in parallel with, works to establish the bilateral linkages, each economy should continue efforts to facilitate standardization, harmonization of rule and regulation as appropriate which would increase transactions and cost-efficiency of cross-border bonds transactions in the region.
- (iv) As long-term perspective, practical integrated solution should also be considered assuming that the number of bilateral linkages would increase to the extent that integrated model is viable.

#### **Next Steps**

In order to facilitate relevant works in accordance with the recommendations above, the CSIF shall develop implementation plan. As way forward, the CSIF should conduct comprehensive analysis to identify necessary requirements of the gateway and of others for CSD-RTGS linkages. In doing this, desktop study of bilateral CSD-RTGS linkage covering legal, technical and operational aspect by volunteering members could be efficient to check viability and feasibility of the model. A basic guideline for CSD-RTGS linkages could be developed based on identified requirements by the comprehensive analysis.

Along with the study above, the CSIF shall develop implementation roadmap of CSD-RTGS linkages as short-term and medium-term goal (by 2018) and integrated solution in accordance with the eight principles as long-term goal (around 2020).

In order to implement the above cross-border settlement facility, standardization of message flows and items is essential. The ASEAN+3 Bond Market Forum (ABMF), Subforum 2 (SF2) has been conducting extensive study on standardization of bond transaction to facilitate cross-border STP in the region. Although target area to be standardized between the ABMF SF2 and the CSIF is different, close communication and collaboration among the two forums is desirable to achieve wider-range of standardization and further efficiency.

## **Attachments**

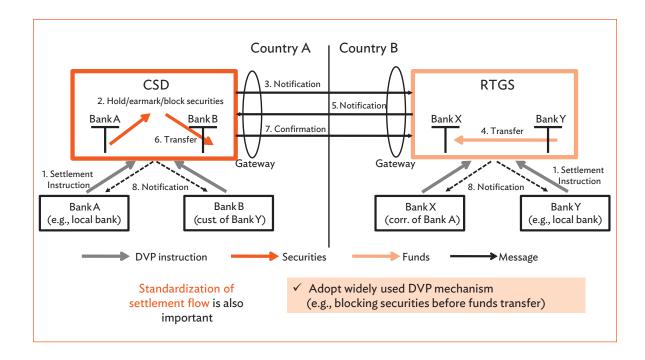
## Attachment 1: Members, Observers, and Secretariat

Country	Institution	Name
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BRU		Nurhuaida Fakhriah Damit
	Autoriti Monetari Brunei Darussalam	Noor Aznah Nayan
		Lim Shaw Fhen
		Kasiani Kassim
	The Decade's Death of China	Cheng Shigang
200	The People's Bank of China	Weihua Zhang
PRC	China Control Depository and Classing	Ruixing Fan
	China Central Depository and Clearing	Jun Cao
HKG	Hong Kong Monetary Authority	Shu-pui Li
TING	Tiong Rong Monetary Authority	Flora Wong
		Anton Daryono
INO	Bank Indonesia	Jultarda Hutagalung
		Himawan Kusprianto
		Junichi Suzuki
	Deal of leave	Hiroyuki Nishizawa
	Bank of Japan	Megumi Takei
JPN		Takahito Yamada
	Japan Securities Depository Center	Hiroshi Ikegami
	Japan Securities Depository Center	Yuji Sato
	Ministry of Finance, Japan	Kazuo Kobayashi
	Bank of Korea	Jisung Ko
	Darik Of Notea	Lee Byoung Mok
		Jong-hyung Lee
		Byong Kil Choi
KOR		Young Ho Park
	Korea Securities Depository	Euin Jin Kwon
		The Whan Lim
		So Yeon Kim
		You Na Im
		Byoungkook Kim
		Ye Ji Shin
		continued on next page

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Country	Institution	Name	
		Ji-Young Choi	
KOR	Ministry of Strategy and Finance, Korea	SangYong Lee	
		Hohyun Jang	
LAO	Ministry of Finance, Lao People's Democratic	Boualith Khounsy	
LAU	Republic	Chanpasith Sengphaathith	
MAL	Bank Negara Malaysia	Aden Nadia Jabbari	
	Pandra Cantral nd Dilinings	Bella S. Santos	
	Bangko Sentral ng Pilipinas	Dulce Maria L. Valdivieso	
PHI	Philippings Dealing Systems Holdings	Cesar Crisol	
РПІ	Philippines Dealing System Holdings	Eleanor Rivera	
	A D d d P l	Shinji Kawai	
	Asian Development Bank	Taiji Inui (consultant)	
SIN	Manager Andrews Action of Cinesan	Ho Suu Wei	
211/	Monetary Authority of Singapore	Tze Khai Poh	
		Jaturong Jantarangs	
	Bank of Thailand	Sureeratana Luckananit	
	Dank of Frialiand	Winn Varootbangkul	
THA		Chinda Yapanawech	
	Thailand Securities Depository	Udomwara Dechsongjarus	
	Ministry of Finance, Thailand (Public Debt	Laksika Tengpratip	
	Management Office)	Chotika Uesampantakits	
VIE	Ministry of Finance of Viet Nam	Phuong Thao Pham	
VIL	Ministry of Fillance of Viet Nam	Cam Chi Nguyen	

### Attachment 2: Cross-Border/Cross-Currency DVP Link



## Attachment 3: Basic Principles vs. Three RSI Options

Principle	Asian ICSD	CSD Linkage	CSD-RTGS Linkage
Principle 1: Domesticity and cost efficiency	Higher investment such as premises, IT platform, etc.	Connection of market infrastructure with central hub	Simple connection of market infrastructure
Principle 2: Safety	Private bank money	Settlement through correspondent banks (Central Bank money may or may not be used)	Central Bank money
Principle 3: Flexibility	A small market needs to follow rules and regulations to join the Asian ICSD	A small market can be connected with other markets while maintaining protection of its own market	A small market can be connected with other markets while maintaining protection of its own market
Principle 4: Accessibility	Local banks need access to economies outside their own unless the Asian ICSD is located in their economy	Local banks can be connected with national CSD	Local banks can be connected with national CSD and RTGS
Principle 5: Gradual integration	Significant number of members need to join from the beginning of operation	Some members need to join from the beginning of operation to support the hub though it may be less than the number needed for Asian ICSD	Uses current existing infrastructure, which allows flexibility for latecomers to join
Principle 6: Consistency and collaboration with other initiatives	Needs to follow rules and regulations of the economy where the Asian ICSD is located	Meeting with the requirements of ASEAN policy bodies (such as reciprocity) including Working Committee on Payment and Settlement System (WC-PSS)	Meeting with the requirements of ASEAN policy bodies (such as reciprocity) including Working Committee on Payment and Settlement System (WC-PSS)
Principle 7: Standardization	Standardization is essential to reduce cost	Standardization is essential to reduce cost	Standardization is essential to reduce cost
Principle 8: Harmonization of rules and regulations	Significant steps to remove regulatory/ legal barriers and harmonize market practices; as a single entity, bank licensing and antimoney-laundering requirements need to be considered; data privacy	No significant change in current rules and regulations may be needed, as cash and bond settlement take place domestically	No significant change in current rules and regulations may be needed, as cash and bond settlement take place domestically

### References

### Presentations at the CSIF Meetings

#### 1st CSIF

- (i) Inseok Shin, Chung-Ang University, Korea—"Presentation on Regional Settlement Intermediaries (RSI) Discussion"
- (ii) Hiroyuki Nishizawa, Bank of Japan—"Cross-border Bond Settlement Infrastructure in Asia"
- (iii) Jaturong Jantarangs and Sureeratana Luchananit, Bank of Thailand—"Payment and Settlement Infrastructure Thailand"
- (iv) Bella Santos, Bangko Sentral ng Pilipinas—"The Philippine Bond Markets"
- (v) Taiji Inui, ADB Consultant for ABMF SF2—"Recent Activities of ASEAN+3 Bond Market Forum Sub-Forum 2"

#### 2nd CSIF

- (i) Jong Hyung Lee, Korea Securities Depository—"Asian Bond Market and the Role of RSI"
- (ii) Byoung Mok Lee, Bank of Korea—"Policy Implications of RSI Discussion from Central Bank Perspective"
- (iii) Shu-pui Li, Hong Kong Monetary Authority—"Cross-border Cooperation and Development: Models and Challenges"
- (iv) Vicente Castillo, Philippines Dealing System Holdings—"Presentation to the Cross-Border Settlement Infrastructure Forum"
- (v) Chang-Gyun Park, Chung-Ang University—"RSI in the ASEAN+3 region; Road Ahead"
- (vi) Tze Khai Poh, Monetary Authority of Singapore—"Explanation of the ASEAN Trading Link¹ initiative"
- (vii) Hiroyuki Nishizawa, Bank of Japan—"Further Analysis of CSD-RTGS Linkage"
- (viiii) Yuji Sato, Japan Securities Depository Center—"Explanation of Foreign Currency Denominated Bond Outstanding Balance in Japan"

<sup>&</sup>lt;sup>1</sup> The ASEAN Trading Link is a common trading platform linking up the stock exchanges—Bursa Malaysia, the Singapore Exchange, and the Stock Exchange of Thailand—that aims to provide a single access point for ASEAN capital market products to global investors.

- (ix) Jultarda Hutagalung, Bank Indonesia—"Explanation of Current Initiatives related to Bond Settlement Infrastructure in Indonesia"
- (x) Chinda Yapanawech, Bank of Thailand—"Comments on the Importance of Central Bank Money"
- (xi) Weihua Zhang, The People's Bank of China—"Views on Asian ICSD and CSD-RTGS Linkage."

#### 3rd CSIF

- (i) Shinji Kawai, Asian Development Bank—"Basic Principles on Establishing Regional Settlement Intermediary (RSI) in the Region and the Next Step Forward"
- (ii) Jong Hyung Lee, Korea Securities Depository—"Discussion on CSIF Progress Report (Korea's View) "
- (iii) Flora Wong, Hong Kong Monetary Authority—"Case Study: Cross-border RTGS-RTGS PvP Link and CSD-RTGS DvP Link"
- (iv) Taiji Inui, Asian Development Bank consultant—"Next Step of Cross-border Settlement Infrastructure Forum"

## Basic Principles on Establishing a Regional Settlement Intermediary and Next Steps Forward

#### Cross-Border Settlement Infrastructure Forum

This report summarizes the results of discussions among ASEAN+3 central bank and central securities depository officers who voluntarily participated in the Cross-border Settlement Infrastructure Forum (CSIF). ASEAN+3 finance ministers and central bank governors endorsed the establishment of the CSIF under the Asian Bond Markets Initiative in May 2013 to facilitate discussions on the improvement of cross-border bond and cash settlement infrastructures in the region, including the possibility of establishing a regional settlement intermediary. This report shows the three regional settlement intermediary models analyzed by the CSIF members and suggests next steps moving forward.

#### About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to approximately two-thirds of the world's poor: 1.6 billion people who live on less than \$2 a day, with 733 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

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