Appendix 1
Members and Experts Including Observers and the ADB Secretariat

Table A1.1: National Members and Experts

		Institution	Name
BN	NM	Autoriti Monetari Brunei Darussalam (AMBD)	Mardini HJ Eddie
			Lim Shaw Fhen
CN	NM	China Security Regulatory Commission (CSRC)	Lu Dabiao
	NE	China Central Depository and Clearing Co., Ltd. (CCDC)	Zon Jun
			Ding Yahua
		Shanghai Clearing House (SHCH)	Pi Jianping
		China Foreign Exchange Trade System-National Interbank Funding Center(CFETS)	Cui Wei
HK	NM	Hong Kong Monetary Authority (HKMA)	Li Shu-Pui
	NE	Bank of China (Hong Kong)	Michael Dai
			Zhihuan E
ID	NM	Ministry of Finance, Indonesia	Agung Galih Satwiko
		Financial Services Authority (OJK), Ministry of Finance	Bayu Samodro
	NE	Indonesian Central Securities Depository (ICSD)	Margeret Mutiara Tang
		Indonesia Clearing and Guarantee Corporation (ICGC)	Indriani Darmawati
		Indonesia Stock Exchange (IDX)	Urip Budhi Prasetyo
JP	NM	Japan Securities Depository Center, Inc. (JASDEC)	Yuji Sato
	NE	Bank of Japan (BOJ)	Takahito Yamada
			Misa Takada
			Akira Yokoya
			Megumi Takei
			Yuya Ueda
		Mizuho Corporate Bank, Ltd.	Akihiko Mitani
KH	NM	Securities & Exchange Commission of Cambodia (SECC)	Va Sovy
KR	NM	Korea Securities Depository (KSD)	Jong Hyung Lee
		Korea Exchange (KRX)	Jae Hyun
	NE	Korea Securities Computing Corporation (KOSCOM)	Jae Moon So
LA	NM	Ministry of Finance	Boualith Khounsy
			Bounthum Lomany
		Securities and Exchange Commission Office, Bank of the Lao PDR	Saysamone Chantachack

Table A1.1 continued

		Institution	Name
MM	NM	Central Bank of Myanmar	Daw May Maung Gyi
MY	NM	Bond Pricing Agency Malaysia (BPAM)	Mohd Shaharul Zain
			Meor Amri bin Meor Ayob
			Simon Ng Sean Cho
PH	NM	Philippine Dealing System Holdings Corp.-PDS Group (PDS)	Cesar Criisol
		Bankers Association of the Philippines (BAP)	Rafael S. Algarra, Jr.
			Cesar O. Virtusio
	NE	Omgeo	Cornelia C. Dagdag
SG	NM	Singapore Exchange (SGX)	Kok Leong Lai
TH	NM	The Stock Exchange of Thailand (SET)	Chanisa Chutipat
VN	NM	Vietnam Securities Depository (VSD)	Duong Ngoc Tuan
			Luu Trung Dung
			Tran Thi Thu Huyen
		Hanoi Stock Exchange (HNX)	Tran Tuan

BN = Brunei Darussalam; CN = People's Republic of China; HK = Hong Kong, China; ID = Indonesia;
ISIN = International Securities Identification Number; JP = Japan; KH = Cambodia; KR = Republic of Korea;
LA = Lao People's Democratic Republic; MM = Myanmar; MY = Malaysia; NE = national expert; NM = national
member; PH = Philippines; SG = Singapore; TH = Thailand; VN = Viet Nam.
Source: ABMF SF2.

Table A1.2: International Experts

Institution	Name
Citibank	Rudy Ingkiriwang
BNP Paribas	Patrick Vanderbeck
Clearstream	Alton Chan
	Fei Tang
Deutsche Bank AG	Boon–Hiong Chan
	Hannah-Vina Nunez
Euroclear	Gaetan Gosset
HSBC	Patrick Edmond Cichy
J.P. Morgan	Masayuki Tagai
	Danny Tan
State Street Bank and Trust	Steven Chan
State Street Global Advisors	Hon Cheung
SWIFT	Alexandre Kech
	Antonio Delorenzo
	Mireia Guisado Parra

Table A1.2   continued

Institution	Name
The Bank of New York Mellon	Eric Chng
The Bank of Tokyo Mitsubishi UFJ Ltd	Taketoshi Mori

Table A1.3: Observers

	Institution	Name
BN	Autoriti Monetari Brunei Darussalam	Mohd Zul Azmi Haji Mohd Ali
		Hafizuddin Hassanuddin
CN	China Central Depository & Clearing Co., Ltd	Yan Jia
		Lei Huang
	China Securities Depository and Clearing Corporation	Zi Zheng
		Zepeng Hong
		Yang Liu
		Xi Zheng
		Liang Xia
	National Association of Financial Market Institutional Investors (NAFMII)	Xiaotian Mu
		Tailei Wan
		Peng Sun
		Mingzheng Gao
		Ke Sun
HK	Asia Securities Industry and Financial Markets Association	Rebecca Terner Lentchner
	Citibank, N.A. Hong Kong	Cindy Chen
	Clearstream Banking S.A	Victor Wing Tai Ng
		Stefan Lepp
		Gerd Hartung
		Fabrice Tomenko
		Davin Cheung
	Euroclear Bank	Sherry Wang
		Olivier Grimonpont
		Fennie Kwok
		Dan Kuhnel
		Carlo Minieri
	Hong Kong Monetary Authority	Shu-pui Li
		Flora Wong
		Esmond Lee
		Kwok Hung Lee
	Omgeo-DTCC	Jean-Remi Lopez
	State Street Asia Limited	Steven Chan

Table A1.3 continued

	Institution	Name
ID	Bank of Indonesia	Devi Riyante
	Fiscal Policy Agency, Ministry of Finance Indonesia	Vincentius Krisna Juli Wicaksono
	Indonesia Central Securities Depository	Delonika Yuki Eka Putra
	Indonesia Financial Services Authority (OJK)	Rezza Frisma Prisandy Jd
		Eko Rizanoordibyo
		Arif Budiman
	Indonesian Central Securities Depository	Gusrinaldy Akhyar
	Ministry of Finance	Parjiono
		Dalyono
	PT Kliring Penjaminan Efek Indonesia (KPEI)	Iding Pardi
JP	Daiwa Securities Co., Ltd.	Yutaka Yokoyama
	Japan Securities Dealers Association	Tomohiko Kamimae
		Ryuichi Shiina
	Ministry of Finance Japan	Katsuyuki Tomizawa
	Mizuho Bank, Ltd.	Yasuhiro Ono
		Koji Kawase
		Daisuke Ogawa
	Mori Hamada & Matsumoto	Toru Ishiguro
	Nomura International (Hong Kong) Limited	Tatsuya Yasuda
	Nomura Securities Co., Ltd.	Reiko Nobuhiro
	NTT DATA Corporation	Naotaka Shibasaki
	NTT DATA Institute of Management Consulting	Masahiro Nishihara
	NTT DATA Getronics Corporation	Toshio Kawakami
	Sumitomo Mitsui Banking Corporation	Hiroshi Kawagoe
		Haruyuki Takano
	Tokyo Stock Exchange	Takeshi Taniguchi
		Marl Lee
		Koji Ito
		Marina Doi
KH	Ministry of Economy and Finance, Cambodia	Sopheap Chan
		Lida Noh
		Chantha Chhoeng
		Vanny But
		Samnang Kan
	Securities and Exchange Commission of Cambodia	Likea Hor
		Leakhena Song

Table A1.3 continued

	Institution	Name
KR	Bank of Communication (Seoul Branch)	Woong Ryeol Kim
	The Bank of Korea	Sungwoo Shin
		Byoung Mok Lee
		Jeeyoung Jung
	Financial Supervisory Service	Hyun-Ju Choi
	Jeonju University	Heejoon Jeong
	Korea Capital Market Institute (KCMI)	Suk Hyun
		Hyun Suk
	Korea Exchange	Seokho Han
		In-ug Ryu
	Korea Financial Investment Association (KOFIA)	Han Jo Kim
	Korea Securities Depository(KSD)	Suju Kwon
		Mandy Ku
		Jong Hyung Lee
		Eujin Kwon
	Korea Securities Computing Corporation (KOSCOM)	Yunhak Lee
		Young Min Cho
		Wan Sung Kim
		Sun Jin Jang
		Seok Bae Lee
	Ministry of Strategy and Finance	Min Soo Kwon
		Beomseok Kim
LA	Ministry of Finance, Lao PDR	Chanpasith Sengphaathith
		Visada Sipaseuth
MY	Bank Negara Malaysia	Zainal Hasfi Hashim
		Lailatul Akma Mohd Shukor
		Aden Nadia Jabarri
	CIMB Investment Bank Berhad	Thomas Meow
		Loong Yeow Boon

Table A1.3 continued

	Institution	Name
PH	Asian Development Bank (ADB)	Kuei-Hua Wu
		Hsiao Chink Tang
		Kelly Raquel Borres
		Sheila Sombillo
		Shigeto Inukai
		Matthias Schmidt
	Bangko Sentral ng Pilipinas	Remedios Macapinlac
		Eleanor S. Turaray
		Bella Santos
	Bankers Association of the Philippines	Pinky Padronia
	Citibank N.A	Reyes Theresa
	PDS Group	Ma. Theresa Ravalo
		Karen Bahia
		Eleanor Rivera
		Apples Francisco
		Antonio Nakpil
	Securities and Exchange Commission	Vicente Graciano Felizmenio, Jr.
		Jose Vermon Filio
		Ephyro Luis Amatong
	Bureau of the Treasury	Erwin Sta. Ana
SG	Omgeo	John Wu
	Singapore Exchange	Qingyang Lim
		Megan Teo
		Jill Hong
TH	Bank of Thailand	Chinda Yapanawech
		Ketkeaw Borvornniruttisai
	Ministry of Finance, Thailand	Nadhavudh Dhamasiri
		Sukmeena Bhasavanich
	The Securities and Exchange Commission, Thailand	Chortip Svetarundra
		Jomkwan Kongsakul
	Thai Bond Market Association	Ariya Tiranaprakij
		Pisit Leeahtam
		Tada Phutthitada

Table A1.3 continued

	Institution	Name
VN	Hanoi Stock Exchange	Tran Anh Tuan
		Ngoc Anh Thi Dinh
		Ha Thi Nguyen
	Vietnam Bond Market Association	Thao Ta Thi Bich
UK	Payments Council	James Whittle

BN = Brunei Darussalam; CN = People's Republic of China; HK = Hong Kong, China; ID = Indonesia; ISIN = International Securities Identification Number; JP = Japan; KH = Cambodia; KR = Republic of Korea; LA = Lao People's Democratic Republic; MM = Myanmar; MY   = Malaysia; PH = Philippines; SG = Singapore; TH = Thailand; VN = Viet Nam; UK = United Kingdom.

Table A1.4: ADB Secretariat

Institution	Position	Name
ADB Secretariat	Deputy Head of Members and Experts Including Observers and the ADB Secretariat	Noritaka Akamatsu
	Principal Financial Sector Specialist	Satoru Yamadera (from Oct. 2014)
	Financial Sector Specialist	Kuei-Hua Wu (Jul.–Sep. 2014)
	Senior Financial Sector Specialist (Banking)	Shinji Kawai (until Jun. 2014)
	Economics Officer	Richard Supangan
	Economics Officer	Raquel Borres (until Mar. 2015)
	Officer	Sheila Sombillo
ADB Consultant for SF2	Senior Manager, NTT DATA Corporation	Taiji Inui
ADB Consultant for SF1	Custody Business Specialist	Matthias Schmidt
ADB Consultant for SF1	Professor, Waseda University	Shigehito Inukai

Appendix 2
Purpose and Governance Structure of ABMF SF2

Purpose of ASEAN+3 Bond Market Forum

The Association of Southeast Asian Nations (ASEAN)+3 Bond Market Forum (ABMF) was established in September 2010 based on the endorsement of the ASEAN+3 Finance Ministers' Meeting as a common platform to foster standardization of market practices and harmonization of regulations relating to cross-border bond transactions in the region.[1]

ABMF is expected to discuss various bond market issues to further develop liquid and well-functioning bond markets to make cross-border bond investment and settlement both smoother and cheaper; hence, the region's abundant savings will be channeled more effectively into the region's increasing investment needs.

ABMF aims to (i) assess the existing regulatory frameworks and identify recommendations on how to foster harmonization of regulations and market practices that facilitate cross-border bond transactions in the region; (ii) enhance dialogue between the private sector and ASEAN+3 officials to develop bond markets in the region and promote harmonization, standardization, and integration; and (iii) provide opportunities to exchange knowledge, expertise, and experience between the private and public sectors in the region.

ABMF took stock of the Group of Experts (GoE) report on cross-border bond transactions and settlement issues.[2]

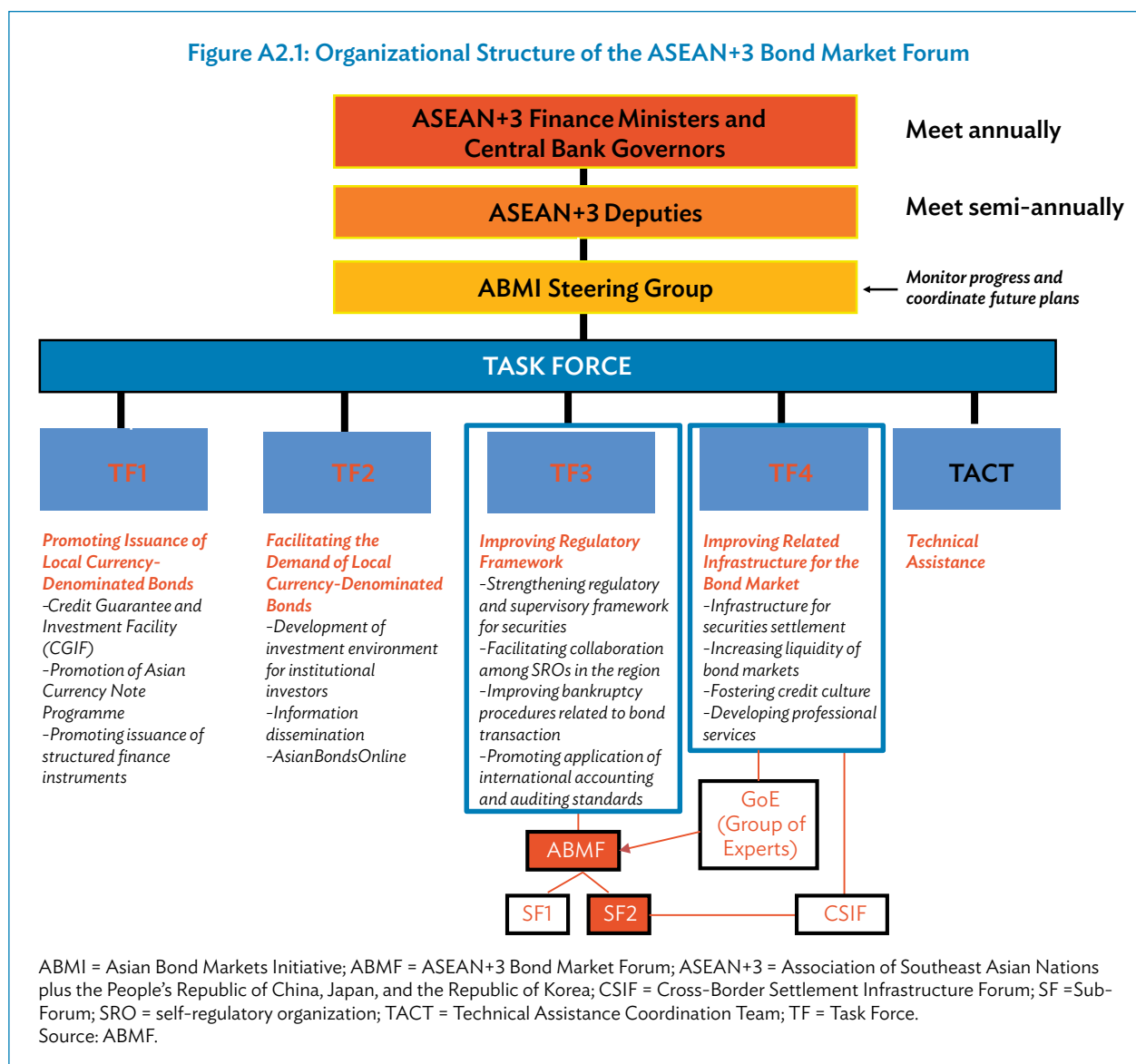## Organizational Structure and Governance

ABMF is organized under Task Force 3 (TF3) of the Asian Bond Markets Initiative (ABMI). ABMF consults with the co-chairs of TF3 in undertaking any regional activities and reports to TF3 on a regular basis regarding the progress of its activities. The organizational structure of ABMF is presented overleaf.

The ABMF consists of two sub-forums: Sub-Forum 1 (SF1) and Sub-Forum 2 (SF2) (Figure A2.1). The objective of SF1 is to close the information gap in regulations, market practices, and other areas in the region's bond markets. SF2 focuses on enhancing straight-through-processing (STP) in ASEAN+3. This report is about SF2.

---

[1]   The Joint Ministerial Statement of the 13th ASEAN+3 Finance Ministers' Meeting on 2 May 2010 in Tashkent, Uzbekistan states: "We [ASEAN+3 Finance Ministers] took note of the Group of Experts' findings and suggestions on facilitating cross-border bond transactions and settlement, and welcomed the establishment of the technical working group on Regional Settlement Intermediary (RSI) to further evaluate the policy recommendations. We endorsed the establishment of ASEAN+3 Bond Market Forum (ABMF) as a common platform to foster standardization of market practices and harmonization of regulations relating to cross-border bond transactions in the region."

[2]   ASEAN+3 Asian Bond Markets Initiatives Task Force 4. Groups of Experts Report. http://asean3goe.adb.org

Figure A2.1: Organizational Structure of the ASEAN+3 Bond Market Forum

ASEAN+3 Finance Ministers and Central Bank Governors	**Meet annually**
ASEAN+3 Deputies	**Meet semi-annually**
ABMI Steering Group	← *Monitor progress and coordinate future plans*

TASK FORCE

TF1	TF2	TF3	TF4	TACT
Promoting Issuance of Local Currency-Denominated Bonds –Credit Guarantee and Investment Facility (CGIF) –Promotion of Asian Currency Note Programme –Promoting issuance of structured finance instruments	*Facilitating the Demand of Local Currency-Denominated Bonds* –Development of investment environment for institutional investors –Information dissemination –AsianBondsOnline	*Improving Regulatory Framework* –Strengthening regulatory and supervisory framework for securities –Facilitating collaboration among SROs in the region –Improving bankruptcy procedures related to bond transaction –Promoting application of international accounting and auditing standards	*Improving Related Infrastructure for the Bond Market* –Infrastructure for securities settlement –Increasing liquidity of bond markets –Fostering credit culture –Developing professional services	*Technical Assistance*

GoE (Group of Experts)

ABMF

SF1 SF2 CSIF

ABMI = Asian Bond Markets Initiative; ABMF = ASEAN+3 Bond Market Forum; ASEAN+3 = Association of Southeast Asian Nations plus the People's Republic of China, Japan, and the Republic of Korea; CSIF = Cross-Border Settlement Infrastructure Forum; SF =Sub-Forum; SRO = self-regulatory organization; TACT = Technical Assistance Coordination Team; TF = Task Force.
Source: ABMF.

Purpose and Position of ABMF SF2

The GoE report identified various settlement barriers related to messaging formats, securities numbering, matching, and settlement cycle. Thus, the ABMF SF2 addresses these problems to enhance regional STP by harmonization of transaction procedures and standardization of messages.

It is desirable to execute cross-border transactions without any manual processes or data conversion among market infrastructures in the region. This ideal situation can be realized if all transactions are operated through a system using common standards and consistent messaging. This is not currently possible because individual economies have their own practices and standards, which is inevitable because certain transaction procedures follow national requirements to account for unique circumstances. In addition, some segments of

a market may prefer ways of handling transactions, which creates differences in transaction procedures, hence requiring additional conversion to international practices. Furthermore, differences in language remain a significant barrier as some ASEAN+3 economies use their own characters for payment systems and communications. Adopting international standards frameworks such as International Organization for Standardization (ISO) 20022 can mitigate impediments and barriers, which will enhance interoperability in ASEAN+3 bond markets.[3]

Phase 1 studies of ABMF SF2 mainly discussed business flows by focusing on government bond transactions, which are larger and relatively simpler compared with corporate bond transactions. The studies identified and standardized the procedures in trade and settlement, particularly delivery-versus-payment (DVP) of government bonds. In addition, ABMF SF2 discussed other settlement-related barriers such as securities numbering, settlement cycle, and matching to improve settlement procedures.[4]

Phase 2 studies of ABMF SF2 succeeded the agenda set forth in the GoE report and Phase 1 studies. The GoE report pointed out barriers to promoting STP in ASEAN+3 bond markets. Phase 2 studies covered five barriers that were detailed in the GoE report: messaging formats, pre-matching, securities numbering, settlement cycles, and physical certificates. Phase 2 studies also covered DVP flows of corporate bonds; government bond flows in Brunei Darussalam, Cambodia, the People's Democratic Republic, and Myanmar; flows of interest and redemption payments; message formats and items; and market practices as well as foreign exchange and cash controls to implement STP.[5]

Possible Goals of SF2

One of the possible goals of ABMF SF2 is to promote STP. To achieve this objective, SF2 has clarified differences among ASEAN+3 economies about DVP and interest payment flows, message items, and market practices. Moreover, SF2 has defined typical DVP and interest payment flows for references by operators of bond market infrastructures. Another goal is to promote ISO 20022 and related international standards, in particular International Securities Identification Number and Business Identifier Code, based on the survey results (Figure A2.2).
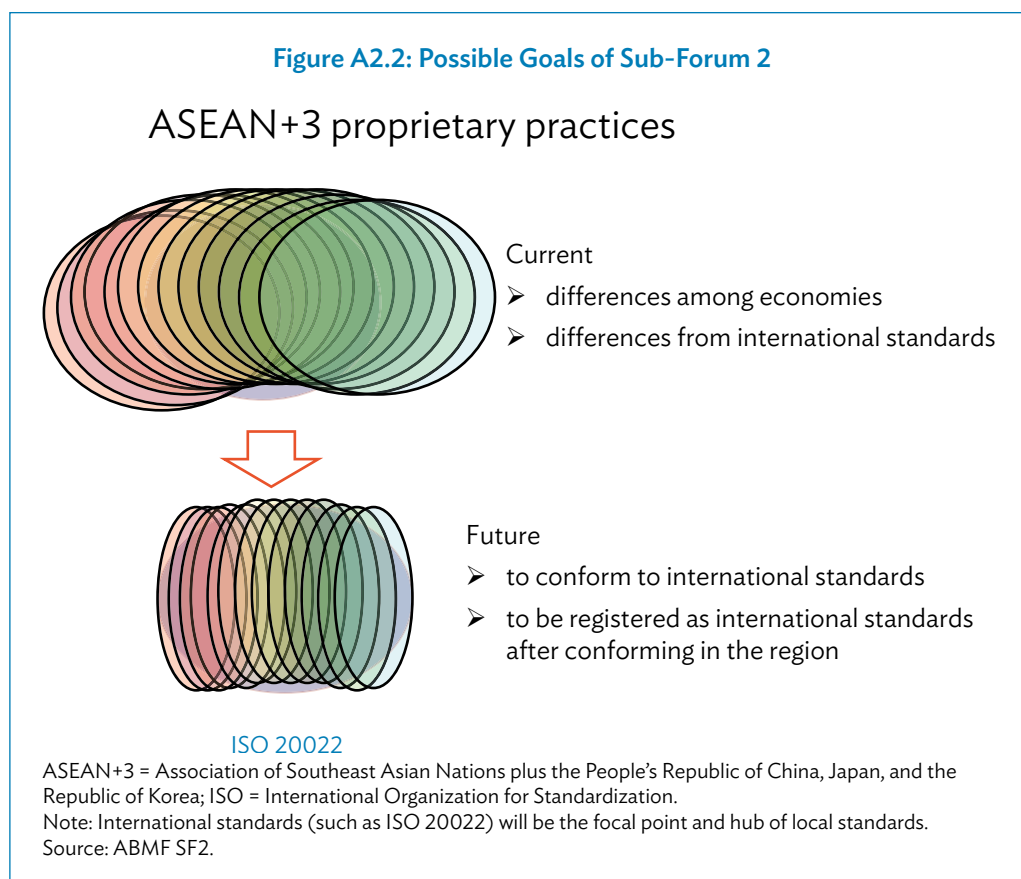
Through the Phase 1 and 2 studies, SF2 has revealed that each economy has its own DVP flow and market practices. These differences could be barriers to achieving STP. Not all ASEAN+3 economies adopt the same rules, since they have unique legal and business requirements. To promote STP, each economy is expected to adopt the same DVP and interest payment flows to the extent possible when they are in the process of reconstructing their current bond infrastructures. If all ASEAN+3 economies comply with typical flows defined by ABMF SF2, the region's barriers to STP will be reduced steadily.

---

[3]   ISO is a worldwide federation of national standards bodies. ISO 20022 provides the financial industry with a common platform for the development of messages in a standardized XML syntax.
[4]   ABMF SF2. Phase 1 Report. https://wpqr1.adb.org/LotusQuickr/asean3abmf/Main.nsf/h_Toc/ 3B92 9170855F3F0E482579D4002E9940/?OpenDocument
[5]   ABMF SF2. Phase 2 Report. http://asianbondsonline.adb.org/features/abmf_phase_2_report/ subforum2_asean+3_information_transaction_flows_settlement_infrastructures.pdf?src =spotlight

Figure A2.2: Possible Goals of Sub-Forum 2

ASEAN+3 proprietary practices

Current
➢ differences among economies
➢ differences from international standards

Future
➢ to conform to international standards
➢ to be registered as international standards after conforming in the region

ISO 20022

ASEAN+3 = Association of Southeast Asian Nations plus the People's Republic of China, Japan, and the Republic of Korea; ISO = International Organization for Standardization.
Note: International standards (such as ISO 20022) will be the focal point and hub of local standards.
Source: ABMF SF2.

Concerning message format and items, as well as numberings and coding, ASEAN+3 proprietary practices (local standards) demonstrate differences from international standards, including ISO 20022. Also, proprietary practices of ASEAN+3 are different from economy to economy and market to market.

Therefore, proprietary practices of ASEAN+3 could be changed to meet international standards. It is important to harmonize practices in the region to make the differences narrower. International standards, such as ISO 20022, should form the basis of local standards to make harmonization a reality. Also, practices in ASEAN+3 that have been identified as being at par with international standards should be considered as a benchmark (Figure A2.3).
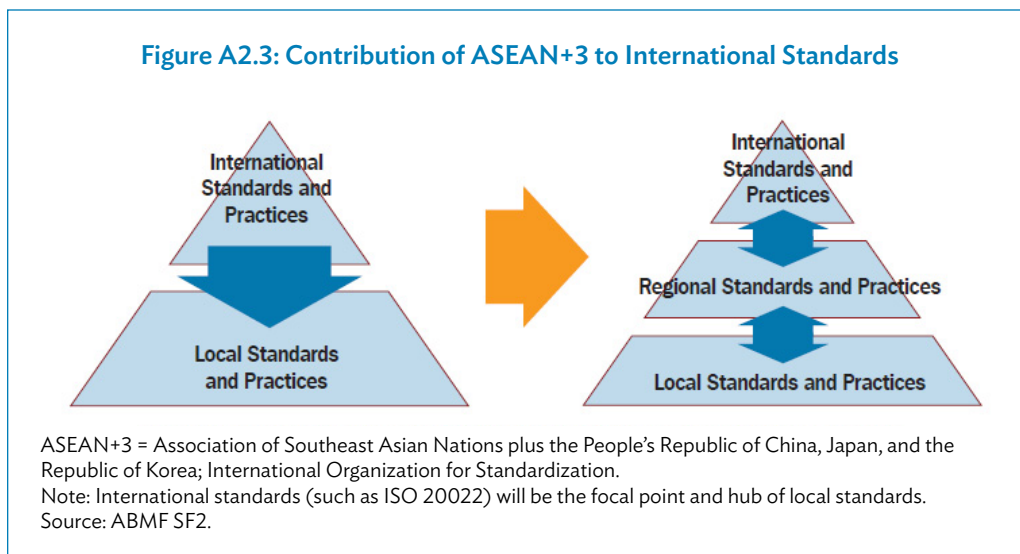
Methodology Overview

Phase 3 activities of ABMF SF2 are divided into six stages as illustrated in Figure A2.4.

Stage A: Determination of Survey Area

SF2 members agreed on the scope of the research of Phase 3 activities. Phase 2 activities covered market practices and DVP flows in corporate bond markets, and flows related to interest payments and redemption in both government and corporate bond markets. In

Figure A2.3: Contribution of ASEAN+3 to International Standards

ASEAN+3 = Association of Southeast Asian Nations plus the People's Republic of China, Japan, and the Republic of Korea; International Organization for Standardization.
Note: International standards (such as ISO 20022) will be the focal point and hub of local standards.
Source: ABMF SF2.

Phase 3, SF2 has studied a reference DVP model; message items of settlement instruction; and confirmation, ISIN, repo, and other topics related to bond settlement.

The Asian Development Bank (ADB) Consultant for ABMF SF2 drafted the survey questionnaire for ASEAN+3 economies. It was then distributed to national members and experts for their responses.

Stage B: Market (Economy) Visit

The ADB Secretariat and consultant visited each economy to validate the information and data contained in the survey responses. Furthermore, during such visits, discussions with ABMF members and experts were held to collect more information. Topics of discussion were the reference DVP model, message standards, ISIN, repo, and the roadmap, among others.
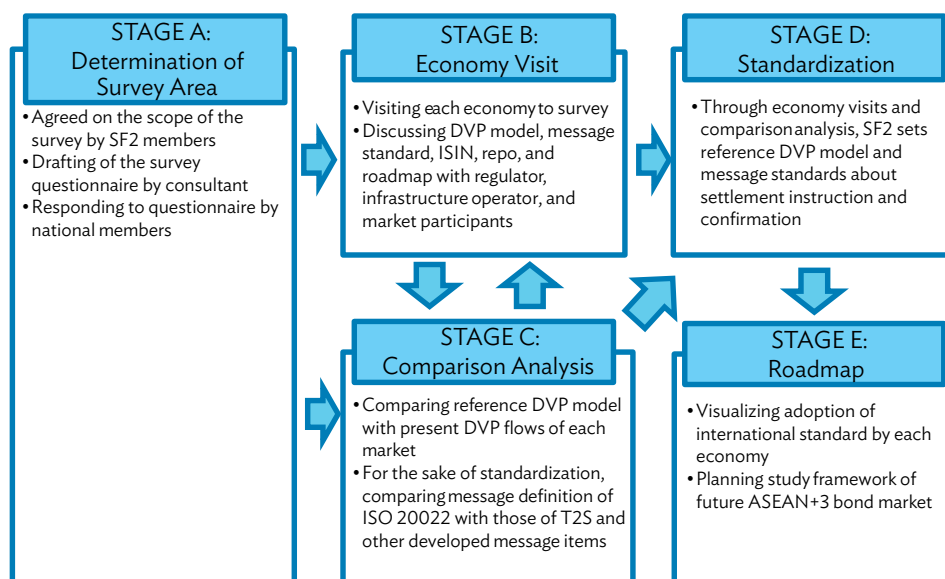
Stage C: Comparison Analysis

ABMF SF2 conducted two types of comparison analysis. One analysis was of the DVP model. ABMF SF2 has tried to create a DVP model for ASEAN+3 bond market. If each market has its own business flow for bond transactions, the realization of STP will be difficult. Acceptance of same DVP model would be a first step toward harmonization of bond settlement. Other analysis was about message standards. SF2 determined the key message corresponding with the DVP model: settlement instruction, matched result, message confirmation, cash settlement instruction, and cash settlement confirmation.

Stage D: Standardization

Through the above stages, ABMF SF2 set forth a reference DVP model and message standards for settlement instruction and confirmation for the sake of cross-border STP in the future.

Figure A2.4: Phase 3 Activities of ABMF SF2

STAGE A:
Determination of Survey Area
- Agreed on the scope of the survey by SF2 members
- Drafting of the survey questionnaire by consultant
- Responding to questionnaire by national members

STAGE B:
Economy Visit
- Visiting each economy to survey
- Discussing DVP model, message standard, ISIN, repo, and roadmap with regulator, infrastructure operator, and market participants

STAGE D:
Standardization
- Through economy visits and comparison analysis, SF2 sets reference DVP model and message standards about settlement instruction and confirmation

STAGE C:
Comparison Analysis
- Comparing reference DVP model with present DVP flows of each market
- For the sake of standardization, comparing message definition of ISO 20022 with those of T2S and other developed message items

STAGE E:
Roadmap
- Visualizing adoption of international standard by each economy
- Planning study framework of future ASEAN+3 bond market

ADB = Asian Development Bank; ASEAN+3 = Association of Southeast Asian Nations plus the People's Republic of China, Japan, and the Republic of Korea; DVP = delivery-versus-payment; ISIN = International Securities Identification Number; ISO = International Organization for Standardization; T2S = Target 2 Securities.
Source: ABMF SF2.

Stage E: Roadmap

ABMF SF2 has set out a roadmap for the future state of ASEAN+3 bond market infrastructures.

Survey Questionnaire

In order to try to reach its goals, ABMF SF2 conducted a survey on the issues related to barriers by sending a questionnaire to national members and international experts. The following are the primary topics of the ABMF SF2 Phase 3 survey:

1. reference model about DVP settlement,
2. message items related to DVP settlement,
3. settlement matching,
4. ISIN,
5. collateral and repo,
6. harmonization of market practices,
7. roadmap,
8. policy recommendations, and
9. other issues.

Appendix 3
Message Items
for Cross-Currency DVP

Examples of message items and instances to effect cross-currency delivery-versus-payment (DVP) settlement are shown as a preliminary basis for discussion in Figure A3.1.

On 15 July 2014, HSBC Securities Japan Limited (IBJPJPJT), the account owner, instructs the instructs Japan Securities Depository Center (JJSDJPJT) to receive against payment securities. The securities are to be delivered by Mizuho Bank Tokyo (MHCBJPJT). The Financial Instrument is JP3165570AC61. The quantity is the face amount JPY 7,899,300,000. This is done through a Securities Settlement Transaction Instruction (sese.023).

This instruction contains the following information details

1. Transaction Identification: HSBCTK005REC02
2. Securities Movement Type: receive
3. Payment: against payment
4. Settlement Date: 15/07/2014
5. Financial Instrument: JP316570AC61
6. Quantity: face amount 7,899,300,000
7. Safekeeping Account: 1272491
8. Securities Transaction Type: trade
9. Delivering Depository: JJSDJPJT (JASDEC)
10. Delivering Party 1: MHCBJPJT (Mizuho Bank Tokyo)
11. Receiving Settlement Party 1: IBJPJPJT (HSBC Securities Limited)
12. Debtor Agent: BLICHKHX (HSBC Bank USA, N.A.)
13. Creditor Agent: MHCBHKHH (Mizuho Bank HK Branch)
14. Settlement Amount: HKD 452,000 debit

Message items for (a) bond settlement instruction from participants to the central securities depository (CSD), (b) matched results from the CSD to participants, (h) bond settlement confirmation from the CSD to participants, (d) and (e) cash settlement instruction from participants to Real-Time Gross Settlement (RTGS) and vice versa, and (f) cash settlement confirmation from RTGS to participants are shown in Tables A3.1 through A3.5.
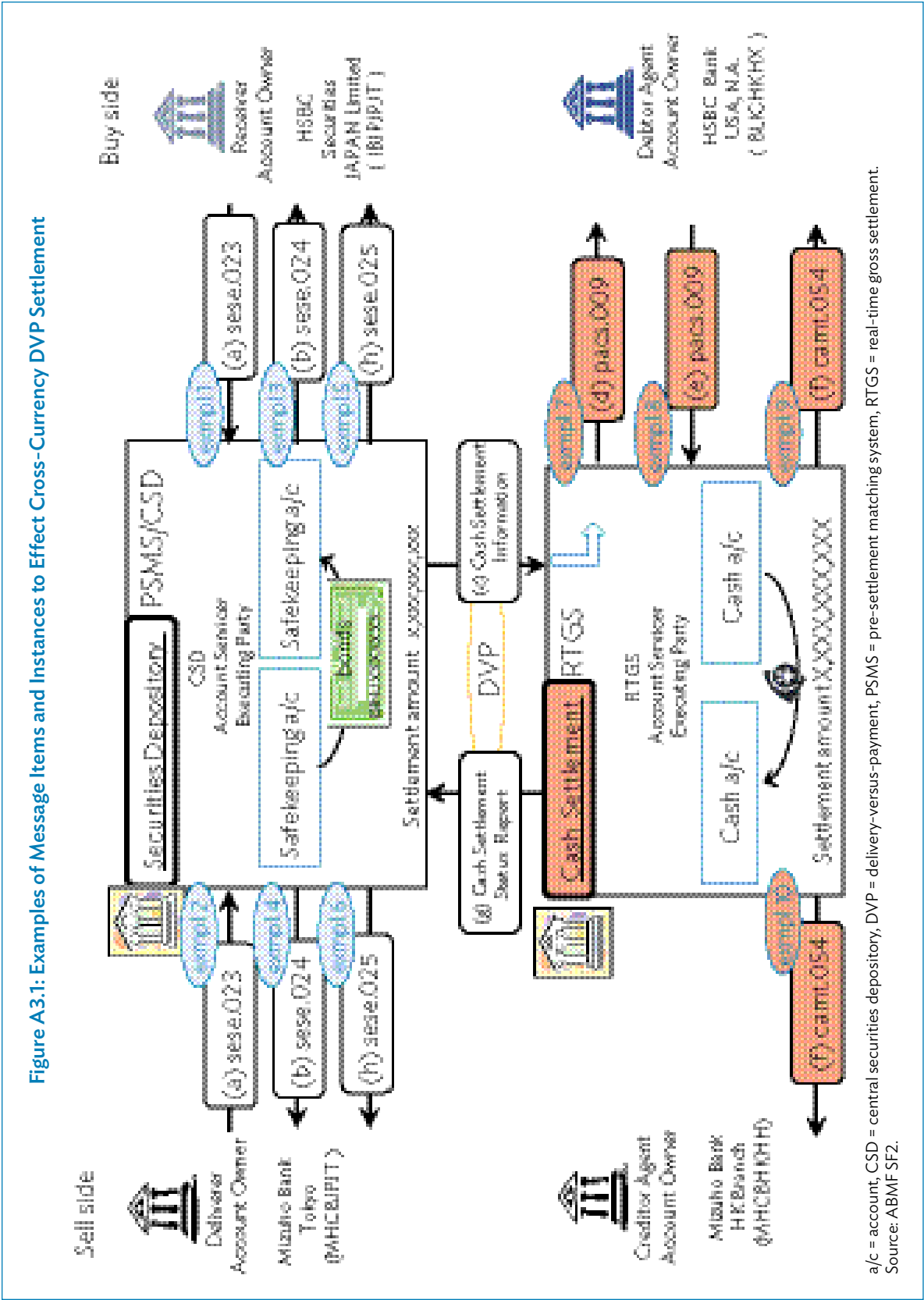
Figure A3.1: Examples of Message Items and Instances to Effect Cross–Currency DVP Settlement

a/c = account, CSD = central securities depository, DVP = delivery-versus-payment, PSMS = pre-settlement matching system, RTGS = real-time gross settlement.
Source: ABMF SF2.

Table A3.1: (a) sese.023 Securities Settlement Transaction Instruction (Bond Settlement Instruction from Participants to CSD)

Message Element	ISO20022 Multiplicity	<XML Tag>	Type	Definition	Example: HSBC Securities Limited send RVP message to JASDEC by sese.023.001	Example2: Mizuho Bank Tokyo send DVP message to JASDEC by sese.023.001
Document		<Document>		Document Root		
SecuritiesSettlementTransactionInstructionV05	[1..1]	<SctiesSttlmTxInstr>		Message Root		
TransactionIdentification	[1..1]	<TxId>	Text	Unambiguous identification of the transaction as know by the instructing party.	HSBCTK005REC02	MIZUHOTK0001
SettlementTypeAndAdditionalParameters	[1..1]	<SttlmTpAndAddtlParams>		Provides settlement type and identification information.		
SecuritiesMovementType	[1..1]	<SctiesMvmntTp>	CodeSet	Specifies if the movement on a securities account results from a deliver or a receive instruction.	RECE (receive)	DELI (deliver)
Payment	[1..1]	<Pmt>	CodeSet	Specifies how the transaction is to be settled, for example, against payment.	APMT (against payment)	APMT (against payment)
TradeDetails	[1..1]	<TradDtls>		Details of the trade.		
TradeDate	[0..1]	<TradDt>		Specifies the date/time on which the trade was executed.		
SettlementDate	[1..1]	<SttlmDt>		Date and time at which the securities are to be delivered or received.		
Date	[1..1]	<Dt>		Date in ISO format.		
Date	[1..1]	<Dt>		Specified date.	2014-07-15	2014-07-15
FinancialInstrumentIdentification	[1..1]	<FinInstrmId>		Financial instrument representing a sum of rights of the investor vis-a-vis the issuer.		
ISIN	[1..1]	<ISIN>	IdentifierSet	International Securities Identification Number (ISIN). A numbering system designed by the United Nation's International Organization for Standardization (ISO). The ISIN is composed of a 2-character prefix representing the country of issue, followed by the national security number (if one exists), and a check digit. Each country has a national numbering agency that assigns ISIN numbers for securities in that country.	JP3657oAC61 (ISIN: NTT DATA Corporation 26th unsecured straight corporate bonds)	JP3657oAC61 (ISIN: NTT DATA Corporation 26th unsecured straight corporate bonds)
QuantityAndAccountDetails	[1..1]	<QtyAndAcctDtls>		Details related to the account and quantity involved in the transaction.		
SettlementQuantity	[1..1]	<SttlmQty>		Total quantity of securities to be settled.		
Quantity	[1..1]	<Qty>		Quantity of financial instrument in units, original face amount or current face amount.		
FaceAmount	[1..1]	<FaceAmt>	Amount	Quantity expressed as an amount representing the face amount, ie, the principal, of a debt instrument.	JPY 7,899,300,000	JPY 7,899,300,000
SafekeepingAccount	[1..1]	<SfkpgAcct>		Account to or from which a securities entry is made.		
Identification	[1..1]	<Id>	Text	Unambiguous identification for the account between the account owner and the account servicer."	"272491"	0000100
SettlementParameters	[1..1]	<SttlmParams>		Parameters which explicitly state the conditions that must be fulfilled before a particular transaction of a financial instrument can be settled. These parameters are defined by the instructing party in compliance with settlement rules in the market the transaction will settle in.		
SecuritiesTransactionType	[1..1]	<SctiesTxTp>		Identifies the type of securities transaction.		
Code	[1..1]	<Cd>	CodeSet	Securities transaction type expressed as an ISO20022 code.	TRAD (trade)	TRAD (trade)
CashClearingSystem	[0..1]	<CshClrSys>		Specifies the category of cash clearing system, for example, cheque clearing.		
Proprietary	[1..1]	<Prtry>		Cash settlement system expressed as a proprietary code.		
Identification	[1..1]	<Id>		Proprietary information, often a code, issued by the data source scheme issuer.	HK01 (to be discussed)	HK01 (to be discussed)
Issuer	[0..1]	<Issr>	IdentifierSet	Entity that assigns the identification.	CSIF	CSIF
DeliveringSettlementParties	[0..1]	<DlvrgSttlmPties>		Identifies the chain of delivering settlement parties.		
Depository	[0..1]	<Dpstry>		First party in the settlement chain. In a plain vanilla settlement, it is the CSD where the counterparty requests to receive the financial instrument or from where the counterparty delivers the financial instruments.		
Identification	[1..1]	<Id>		Unique and unambiguous way to identify an organization.		
AnyBIC	[1..1]	<AnyBIC>	IdentifierSet	Unique and unambiguous way to identify an organization.	JJSDJPJT (JASDEC)	JJSDJPJT (JASDEC)
Party1	[0..1]	<Pty>		Party that, in a settlement chain, interacts with the depository.		
Identification	[1..1]	<Id>		Identification of the party.		
AnyBIC	[1..1]	<AnyBIC>	IdentifierSet	Code allocated to a financial or non-financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking - Banking telecommunication messages - Business Identifie Code (BIC)"	MHCBJPJT(Mizuho Bank Tokyo)	MHCBJPJT(Mizuho Bank)
ReceivingSettlementParties	[0..1]	<RcvgSttlmPties>		Identifies the chain of receiving settlement parties.		

Table A3.1   continued

Message Element			ISO20022 Multiplicity	<XML Tag>	Type	Definition	Example1: HSBC Securities Limited send RVP message to JASDEC by sese.023.001	Example2: Mizuho Bank Tokyo send DVP message to JASDEC by sese.023.001
Depository			[0..1]	<Dpstry>		First party in the settlement chain. In a plain vanilla settlement, it is the CSD where the counterparty requests to receive the financial instrument or from where the counterparty delivers the financial instruments.		
	Identification		[1..1]	<Id>		Unique and unambiguous way to identify an organization.		
		AnyBIC	[1..1]	<AnyBIC>	IdentifierSet	Unique and unambiguous way to identify an organization.	JJSDJPJT (JASDEC)	JJSDJPJT (JASDEC)
Party1			[0..1]	<Pty1>		Party that, in a settlement chain, interacts with the depository.		
	Identification		[1..1]	<Id>		Identification of the party.		
		AnyBIC	[1..1]	<AnyBIC>	IdentifierSet	Code allocated to a financial or non-financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking – Banking telecommunication messages – Business Identifier Code (BIC)"	IBJPJPJT (HSBC Securities Limited)	IBJPJPJT (HSBC Securities Limited)
CashParties			[0..1]	<CshPties>		Cash parties involved in the transaction if different for the securities settlement parties.		
	Debtor		[0..1]	<Dbtr>		Party that owes an amount of money to the (ultimate) creditor.		
	Identification		[1..1]	<Id>		Identification of the party.		
		AnyBIC	[1..1]	<AnyBIC>	IdentifierSet	Code allocated to a financial or non-financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking – Banking telecommunication messages – Business Identifier Code (BIC)"		
	DebtorAgent		[0..1]	<DbtrAgt>		Financial institution servicing an account for the debtor.		
	Identification		[1..1]	<Id>		Identification of the party.		
		BICFI	[1..1]	<BICFI>	IdentifierSet	Code allocated to a financial or non-financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking – Banking telecommunication messages – Business Identifie Code (BIC)"	BLICKHKHX (HSBC Bank USA, N.A.)	BLICKHKHX (HSBC Bank USA, N.A.)
	Creditor		[0..1]	<Cdtr>		Party to which an amount of money is due.		
	Identification		[1..1]	<Id>		Identification of the party.		
		AnyBIC	[1..1]	<AnyBIC>	IdentifierSet	Code allocated to a financial or non-financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking – Banking telecommunication messages – Business Identifier Code (BIC)"		
	CreditorAgent		[0..1]	<CdtrAgt>		Financial institution servicing an account for the creditor.		
	Identification		[1..1]	<Id>		Identification of the party.		
		BICFI	[1..1]	<BICFI>	IdentifierSet	Code allocated to a financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking – Banking telecommunication messages – Business Identifier Code (BIC)".	MHCBHKHH (Mizuho Bank HK Branch)	MHCBHKHH (Mizuho Bank HK Branch)
SettlementAmount			[0..1]	<SttlmAmt>		Total amount of money to be paid or received in exchange for the securities.		
	Amount		[1..1]	<Amt>	Amount	Amount of money in the cash entry.	HKD 452,000	HKD 452,000
	CreditDebitIndicator		[1..1]	<CdtDbtInd>	CodeSet	Indicates whether an entry is a credit or a debit.	DEBIT	CREDIT

Table A3.2: (b) sese.024 Securities Settlement Transaction Status Advice (Matched Results from CSD to Participants)

Message Element	ISO20022 Multiplicity	<XML Tag>	Type	Definition	Example3: HSBC Securities Limited receive sese.024.001 as matched status advice.	Example4: Mizuho Bank receive sese.024.001 as matched status advice.
Document	[1..1]	<Document>		Document Root		
SecuritiesSettlementTransactionStatusAdviceV03	[1..1]	<SctiesSttlmTxStsAdvc>		Message Root		
TransactionIdentification	[1..1]	<TxId>	Text	Provides unambiguous transaction identification information.		
AccountOwnerTransactionIdentification	[1..1]	<AcctOwnrTxId>	Text	Unambiguous identification of the transaction as known by the account owner (or the instructing	HSBCTK005RECo2	MIZUHOTK0001
AccountServicerTransactionIdentification	[0..1]	<AcctSvcrTxId>	Text	Unambiguous identification of the transaction as known by the account servicer.	JASDECo001	JASDECo001
MatchingStatus	[0..1]	<MtchgSts>		Provides the matching status of the instruction.		
Matched	[1..1]	<Mtchd>		Status is matched.	MACH (matched)	MACH (matched)
Unmatched	[1..1]	<Unmtchd>		Status is unmatched.		
NoSpecifiedReason	[1..1]	<NoSpcfdRsn>	CodeSet	Indicates that there is no reason available or to report.		
Reason	[1..n]	<Rsn>		Specifies the reason of the unmatched status.		
Code	[1..1]	<Cd>		Specifies the reason why the instruction has an unmatched status.		
Code	[1..1]	<Cd>	CodeSet	Specifies the reason why the instruction has an unmatched status.		
AdditionalReasonInformation	[0..1]	<AddtlRsnInf>	Text	Provides additional reason information that cannot be provided in a structured field.		
TransactionDetails	[0..1]	<TxDtls>		Identifies the details of the transaction.		
SafekeepingAccount	[1..1]	<SfkpgAcct>		Account to or from which a securities entry is made.		
Identification	[1..1]	<Id>	Text	Unambiguous identification for the account between the account owner and the account servicer.	1272491	
FinancialInstrumentIdentification	[1..1]	<FinInstrmId>		Financial instruments representing a sum of rights of the investor vis-a-vis the issuer.		
ISIN	[0..1]	<ISIN>	IdentifierSet	International Securities Identification Number (ISIN). A numbering system designed by the United Nations International Organization for Standardization (ISO). The ISIN is composed of a 2-character prefix representing the country of issue, followed by the national security number (if one exists), and a check digit. Each country has a national numbering agency that assigns ISIN numbers for securities in that country.	JP3165770AC61 (ISIN: NTT DATA Corporation 26th unsecured straight corporate bonds)	JP3165770AC61 (ISIN: NTT DATA Corporation 26th unsecured straight corporate bonds)
SettlementQuantity	[1..1]	<SttlmQty>		Total quantity of securities to be settled.		
Quantity	[1..1]	<Qty>		Quantity of financial instrument in units, original face amount, or current face amount.		
FaceAmount	[1..1]	<FaceAmt>	Amount	Quantity expressed as an amount representing the face amount, i.e., the principal, of a debt instrument.	JPY 7,899,300,000	JPY 7,899,300,000
SettlementAmount	[0..1]	<SttlmAmt>		Total amount of money to be paid or received in exchange for the securities.		
Amount	[1..1]	<Amt>	Amount	Amount of money in the cash entry.	HKD 452,000	HKD 452,000
CreditDebitIndicator	[1..1]	<CdtDbtInd>	CodeSet	Indicates whether an entry is a credit or a debit.	DEBIT	CREDIT
SettlementDate	[1..1]	<SttlmDt>		Date and time at which the securities are to be delivered or received.		
Date	[1..1]	<Dt>		Date in ISO format.		
Date	[1..1]	<Dt>	Date	Specified date.	2014-07-15	2014-07-15
DateTime	[1..1]	<DtTm>	DateTime	Specified date and time.		
SecuritiesMovementType	[1..1]	<SctiesMvmntTp>	CodeSet	Specifies if the movement on a securities account results from a deliver or a receive instruction.	RECE (receive)	DELI (deliver)
Payment	[1..1]	<Pmt>	CodeSet	Specifies how the transaction is to be settled, for example, against payment.		
SettlementParameters	[1..1]	<SttlmParams>		Parameters applied to the settlement of a security transfer.		
SecuritiesTransactionType	[1..1]	<SctiesTxTp>		Identifies the type of securities transaction.		
Code	[1..1]	<Cd>	CodeSet	Securities transaction type expressed as an ISO 20022 code.	TRAD (trade)	TRAD (trade)
ReceivingSettlementParties	[0..1]	<RcvgSttlmPties>		Identifies the chain of receiving settlement parties.		
Depository	[0..1]	<Dpstry>		First party in the settlement chain. In a plain vanilla settlement, it is the CSD where the counterparty requests to receive the financial instrument or from where the counterparty delivers the financial instruments.		

Table A.3.2 continued

Message Element			ISO20022 Multiplicity	\<XML Tag\>	Type	Definition	Example3: HSBC Securities Limited receive sese.024.001 as matched status advice.	Example4: Mizuho Bank receive sese.024.001 as matched status advice.
		Identification	[1..1]	\<Id\>		Identification of the party.		
		AnyBIC	[1..1]	\<AnyBIC\>	IdentifierSet	Unique and unambiguous way to identify an organisation.	JJSDJPJT (JASDEC)	JJSDJPJT (JASDEC)
	Party1		[0..1]	\<Pty1\>		Party that, in a settlement chain, interacts with the depository.		
		Identification	[1..1]	\<Id\>		Identification of the party.		
		AnyBIC	[1..1]	\<AnyBIC\>	IdentifierSet	Code allocated to a financial or non-financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking - Banking telecommunication messages - Business Identifier Code (BIC)"	IBJPJPJT (HSBC Securities Limited)	IBJPJPJT (HSBC Securities Limited)
DeliveringSettlementParties			[0..1]	\<DlvrgSttlmPties\>		Identifies the chain of delivering settlement parties.		
Depository			[0..1]	\<Dpstry\>		First party in the settlement chain. In a plain vanilla settlement, it is the CSD where the counterparty requests to receive the financial instrument or from where the counterparty delivers the financial instruments.		
		Identification	[1..1]	\<Id\>		Identification of the party.		
		AnyBIC	[1..1]	\<AnyBIC\>	IdentifierSet	Unique and unambiguous way to identify an organisation.	JJSDJPJT (JASDEC)	JJSDJPJT (JASDEC)
	Party1		[0..1]	\<Pty1\>		Party that, in a settlement chain, interacts with the depository.		
		Identification	[1..1]	\<Id\>		Identification of the party.		
		AnyBIC	[1..1]	\<AnyBIC\>	IdentifierSet	Code allocated to a financial or non-financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking - Banking telecommunication messages - Business Identifier Code (BIC)"	MHCBJPJT (Mizuho Bank)	MHCBJPJT (Mizuho Bank)

Table A3.3: (h) sese.025 Securities Settlement Transaction Confirmation (Bond Settlement Confirmation from CSD to Participants)

Message Element	ISO20022 Multiplicity	<XML Tag>	Type	Definition	Examples: HSBC Securities Limited receive SecuritiesSettlementTransactionConfirmation by using sese.025.001	Examples: Mizuho Bank receive SecuritiesSettlementTransactionConfirmation by using sese.025.001
Document		<Document>		Document Root		
SecuritiesSettlementTransactionConfirmationV05	[1..1]	<SctiesSttlmTxConf>		Message Root		
TransactionIdentificationDetails	[1..1]	<TxIdDtls>		Provides transaction type and identification information.		
AccountOwnerTransactionIdentification	[1..1]	<AcctOwnrTxId>	Text	Unambiguous identification of the transaction as known by the account owner (or the instructing party managing the account).	HSBCTK005RECo2	MIZUHOTK0001
AccountServicerTransactionIdentification	[0..1]	<AcctSvcrTxId>	Text	Unambiguous identification of the transaction as known by the account servicer	JASDECo001	JASDECo001
SecuritiesMovementType	[1..1]	<SctiesMvmntTp>	CodeSet	Specifies if the movement on a securities account results from a deliver or a receive instruction.	REDE (receive)	DELI (deliver)
Payment	[1..1]	<Pmt>	CodeSet	Specifies how the transaction is to be settled, for example, against payment.	AGMT (against payment)	AGMT (against payment)
TradeDetails		<TradDtls>		Details of the trade.		
EffectiveSettlementDate	[1..1]	<FctvSttlmDt>		Date and time at which a transaction is completed and cleared, i.e., payment is effected and securities are delivered.		
Date	[1..1]	<Dt>		Date in ISO format.		
Date	[1..1]	<Dt>		Specified date.	2014-07-15	2014-07-15
DateTime	[1..1]	<DtTm>		Specified date and time.		
FinancialInstrumentIdentification	[1..1]	<FinInstrmId>		Financial instrument representing a sum of rights of the investor vis-a-vis the issuer.		
ISIN	[0..1]	<ISIN>	IdentifierSet	International Securities Identification Number (ISIN). A numbering system designed by the United Nations International Organization for Standardisation (ISO). The ISIN is composed of a 2-character prefix representing the country of issue, followed by the national security number (if one exists), and a check digit. Each country has a national numbering agency that assigns ISIN numbers for securities in that country.	JP3165 70AC61 (ISIN: NTT DATA Corporation 26th unsecured straight corporate bonds)	JP3165 70AC61 (ISIN: NTT DATA Corporation 26th unsecured straight corporate bonds)
QuantityAndAccountDetails	[1..1]	<QtyAndAcctDtls>		Details related to the account and quantity involved in the transaction.		
SettledQuantity	[1..1]	<SttldQty>		Quantity of financial instrument effectively settled.		
Quantity	[1..1]	<Qty>		Quantity of financial instrument in units, original face amount or current face amount.		
FaceAmount	[1..1]	<FaceAmt>	Amount	Quantity expressed as an amount representing the face amount, i.e., the principal, of a debt instrument.	JPY 7,899,300,000	JPY 7,899,300,000
SafekeepingAccount	[1..1]	<SfkpgAcct>		Account to or from which a securities entry is made.		
Identification	[1..1]	<Id>		Unambiguous identification for the account between the account owner and the account	1272491	0000100
SettlementParameters	[1..1]	<SttlmParams>		Parameters which explicitly state the conditions that must be fulfilled before a particular transaction of a financial instrument can be settled. These parameters are defined by the instructing party in compliance with settlement rules in the market the transaction will settle in.		
SecuritiesTransactionType	[1..1]	<SctiesTxTp>		Identifies the type of securities transaction.		
Code	[1..1]	<Cd>	CodeSet	Securities transaction type expressed as an ISO 20022 code.	TRAD (trade)	TRAD (trade)
DeliveringSettlementParties	[0..1]	<DlvrgSttlmPties>		Identifies the chain of delivering settlement parties.		
Depository	[0..1]	<Dpstry>		First party in the settlement chain. In a plain vanilla settlement, it is the CSD where the counterparty requests to receive the financial instrument or from where the counterparty delivers the financial instruments.		
Identification	[1..1]	<Id>		Unique and unambiguous way to identify an organisation.		
AnyBIC	[1..1]	<AnyBIC>		Unique and unambiguous way to identify an organisation.	JJSDJPJT (JASDEC)	JJSDJPJT (JASDEC)
Party1	[0..1]	<Pty1>		Party that, in a settlement chain, interacts with the depository.		
Identification	[1..1]	<Id>		Identification of the party.		
AnyBIC	[1..1]	<AnyBIC>	IdentifierSet	Code allocated to a financial or non-financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking – Banking telecommunication messages – Business identifier code (BIC)"	MHCBJPJT (Mizuho Bank)	MHCBJPJT (Mizuho Bank)

Table A3.3 continued

Message Element	ISO20022 Multiplicity	<XML Tag>	Type	Definition	Examples: HSBC Securities Limited receive SecuritiesSettlementTransactionConfirmation by using sese.025.001	Examples: Mizuho Bank receive SecuritiesSettlementTransactionConfirmation by using sese.025.001
ReceivingSettlementParties		<RcvgSttlmPties>		Identifies the chain of receiving settlement parties.		
Depository	[0..1]	<Dpstry>		First party in the settlement chain. In a plain vanilla settlement, it is the CSD where the counterparty requests to receive the financial instrument or from where the counterparty delivers the financial instruments.		
Identification	[1..1]	<Id>		Unique and unambiguous way to identify an organisation.		
AnyBIC	[1..1]	<AnyBIC>	IdentifierSet	Unique and unambiguous way to identify an organisation.	JJSDJPJT (JASDEC)	JJSDJPJT (JASDEC)
Party1	[0..1]	<Pty1>		Party that, in a settlement chain, interacts with the depository.		
Identification	[1..1]	<Id>		Identification of the party.		
AnyBIC	[1..1]	<AnyBIC>	IdentifierSet	Code allocated to a financial or non-financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking – Banking telecommunication messages – Business Identifier Code (BIC)"	IBJPJPJT (HSBC Securities Limited)	IBJPJPJT (HSBC Securities Limited)
CashParties	[0..1]	<CshPties>		Cash parties involved in the transaction if different for the securities settlement parties.		
Debtor	[0..1]	<Dbtr>		Party that owes an amount of money to the (ultimate) creditor.		
Identification	[1..1]	<Id>		Identification of the party.		
AnyBIC	[1..1]	<AnyBIC>	IdentifierSet	Code allocated to a financial or non-financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking – Banking telecommunication messages – Business Identifier Code (BIC)"		
DebtorAgent	[0..1]	<DbtrAgt>		Financial institution servicing an account for the debtor.		
Identification	[1..1]	<Id>		Identification of the party.		
BICFI	[1..1]	<BICFI>	IdentifierSet	Code allocated to a financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking – Banking telecommunication messages – Business Identifier Code (BIC)"	BLICHKHX (HSBC Bank USA, N.A.)	BLICHKHX (HSBC Bank USA, N.A.)
Creditor	[0..1]	<Cdtr>		Party to which an amount of money is due.		
Identification	[1..1]	<Id>		Identification of the party.		
AnyBIC	[1..1]	<AnyBIC>	IdentifierSet	Code allocated to a financial or non-financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking – Banking telecommunication messages – Business Identifier Code (BIC)"		
CreditorAgent	[0..1]	<CdtrAgt>		Financial institution servicing an account for the creditor.		
Identification	[1..1]	<Id>		Identification of the party.		
BICFI	[1..1]	<BICFI>	IdentifierSet	Code allocated to a financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking – Banking telecommunication messages – Business Identifier Code (BIC)"	MHCBHKHH (Mizuho Bank HK Branch)	MHCBHKHH (Mizuho Bank HK Branch)
Intermediary	[0..1]	<Intrmy>		Financial institution through which the transaction must pass to reach the account with institution		
Identification	[1..1]	<Id>		Identification of the party.		
BICFI	[1..1]	<BICFI>	IdentifierSet	Code allocated to a financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking – Banking telecommunication messages – Business Identifier Code (BIC)"	HKMAHKHC (DVP settlement is done by through HKD RTGS CHATS)	HKMAHKHC (DVP settlement is done by through HKD RTGS CHATS)
SettledAmount	[0..1]	<SttlmAmt>		Amount effectively settled and which will be credited to/debited from the account owner's cash account. It may differ from the instructed settlement amount based on market tolerance level.		
Amount	[1..1]	<Amt>	Amount	Amount of money in the cash entry.	HKD 452,000	HKD 452,000
CreditDebitIndicator	[1..1]	<CdtDbtInd>	CodeSet	Indicates whether an entry is a credit or a debit.	DEBIT	CREDIT

Table A3.4: (d) and (e) pacs.009 Financial Institution Credit Transfer (Cash Settlement Instruction)

Message Element	ISO20022 Multiplicity	XML Tag	Type	Definition	example. 7	example. 8
FinancialInstitutionCreditTransferV03(pacs.009.001.03)		<FinInstnCdtTrf>				
GroupHeader	[1..1]	<GrpHdr>		Set of characteristics shared by all individual transactions included in the message.		
MessageIdentification	[1..1]	<MsgId>	Text	Point-to-point reference, as assigned by the instructing party, and sent to the next party in the chain to unambiguously identify the message. Usage: The instructing party has to make sure that the message identification is unique per instructed party for a pre-agreed period.	HKMA0001	HSBCHK0001
CreationDateTime	[1..1]	<CreDtTm>	DateTime	Date and time at which the message was created.	2014/7/15T11:30:30	2014/7/15T11:30:30
NumberOfTransactions	[1..1]	<NbOfTxs>	Text	Number of individual transactions contained in the message.	1	1
SettlementInformation	[1..1]	<SttlmInf>		Specifies the details on how the settlement of the transaction(s) between the instructing agent and the instructed agent is completed.		
SettlementMethod	[1..1]	<SttlmMtd>	CodeSet	Method used to settle the (batch of) payment instructions.	CLRG	CLRG
CreditTransferTransactionInformation	[1..*]	<CdtTrfTxInf>		Set of elements providing information specific to the individual credit transfer(s).		
PaymentIdentification	[1..1]	<PmtId>		Set of elements used to reference a payment instruction.		
EndToEndIdentification	[1..1]	<EndToEndId>	Text	Unique identification, as assigned by the initiating party, to unambiguously identify the transaction. This identification is passed on, unchanged, throughout the entire end-to-end chain. Usage: The end-to-end identification can be used for reconciliation or to link tasks relating to the transaction. It can be included in several messages related to the transaction. Usage: In case there are technical limitations to pass on multiple references, the end-to-end identification must be passed on throughout the entire end-to-end chain.	HSBCTK005REC02	HSBCTK005REC02
TransactionIdentification	[1..1]	<TxId>	Text	Unique identification, as assigned by the first instructing agent, to unambiguously identify the transaction that is passed on, unchanged, throughout the entire interbank chain. Usage: The transaction identification can be used for reconciliation, tracking, or to link tasks relating to the transaction on the interbank level. Usage: The instructing agent has to make sure that the transaction identification is unique for a pre-agreed period.	HSBCTK005REC02	HSBCTK005REC02
InterbankSettlementAmount	[1..1]	<IntrBkSttlmAmt>	Amount	Amount of money moved between the instructing agent and the instructed agent.	HKD 452,000	HKD 452,000
Debtor	[1..1]	<Dbtr>		Financial institution that owes an amount of money to the (ultimate) financial institutional creditor.		
FinancialInstitutionIdentification	[1..1]	<FinInstnId>		Unique and unambiguous identification of a financial institution, as assigned under an internationally recognised or proprietary identification scheme.		
BICFI	[0..1]	<BICFI>	IdentifierSet	Code allocated to a financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking - Banking telecommunication messages – Business Identifier Code (BIC)"	IBJPJPJT	IBJPJPJT
DebtorAgent	[0..1]	<DbtrAgt>		Financial institution servicing an account for the creditor.		
FinancialInstitutionIdentification	[1..1]	<FinInstnId>		Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme.		
BICFI	[0..1]	<BICFI>	IdentifierSet	Code allocated to a financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking - Banking telecommunication messages – Business Identifier Code (BIC)"	BLICHKHX	BLICHKHX
CreditorAgent	[0..1]	<CdtrAgt>		Financial institution servicing an account for the creditor.		
FinancialInstitutionIdentification	[1..1]	<FinInstnId>		Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme.		
BICFI	[0..1]	<BICFI>	IdentifierSet	Code allocated to a financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking - Banking telecommunication messages – Business Identifier Code (BIC)"	MHCBHKHH	MHCBHKHH
Creditor	[1..1]	<Cdtr>		Financial institution that receives an amount of money from the financial institutional debtor.		
FinancialInstitutionIdentification	[1..1]	<FinInstnId>		Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme.		
BICFI	[0..1]	<BICFI>	IdentifierSet	Code allocated to a financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking - Banking telecommunication messages – Business Identifier Code (BIC)"	MHCBJPJT	MHCBJPJT

Table A3.5: (f) camt.054 Bank to Customer Debit Credit Notification (Cash Settlement Confirmation)

Message Element	ISO20022 Multiplicity	XML Tag	Type	Definition	Example. 9	Example. 10
BankToCustomerDebitCreditNotificationV03(camt.054.001.03)		<BkToCstmrDbtCdtNtfctn>				
GroupHeader	[1..1]	<GrpHdr>		Common information for the message.		
MessageIdentification	[1..1]	<MsgId>	Text	Point-to-point reference, as assigned by the account servicing institution, and sent to the account owner or the party authorized to receive the message, to unambiguously identify the message. Usage: The account servicing institution has to make sure that the message identification is unique per account owner for a pre-agreed period.	HKMA0001	HKMA0001
CreationDateTime	[1..1]	<CreDtTm>	Date Time	Date and time at which the message was created.	2014-7-15T11:30:45	2014-7-15T11:30:45
Notification	[1..*]	<Ntfctn>		Notifies debit and credit entries for the account.		
Identification	[1..1]	<Id>	Text	Unique identification, as assigned by the account servicer, to unambiguously identify the account notification.	100001	100001
CreationDateTime	[1..1]	<CreDtTm>	Date Time	Date and time at which the message was created.	2014-7-15T11:30:40	2014-7-15T11:30:40
Account	[1..1]	<Acct>		Unambiguous identification of the account to which credit and debit entries are made.		
Identification	[1..1]	<Id>		Unique and unambiguous identification for the account between the account owner and the account servicer.		
Other	[1..1]	<Othr>		Unique identification of an account, as assigned by the account servicer, using an identification scheme.		
Identification	[1..1]	<Id>	Text	Identification assigned by an institution.	200	100
Entry	[0..*]	<Ntry>		Set of elements used to specify an entry in the debit credit notification. Usage: At least one reference must be provided to identify the entry and its underlying transaction(s).		
Amount	[1..1]	<Amt>	Amount	Amount of money in the cash entry.	HKD 452,000	HKD 452,000
CreditDebitIndicator	[1..1]	<CdtDbtInd>	CodeSet	Indicates whether the entry is a credit or a debit entry.	CRDT	DBIT
Status	[1..1]	<Sts>	CodeSet	Status of an entry on the books of the account servicer.	BOOK (booked)	BOOK (booked)
BankTransactionCode	[1..1]	<BkTxCd>		Set of elements used to fully identify the type of underlying transaction resulting in an entry.		
Proprietary	[0..1]	<Prtry>		Bank transaction code in a proprietary form, as defined by the issuer.		
Code	[1..1]	<Cd>	CodeSet	Proprietary bank transaction code to identify the underlying transaction.	(to be discussed)	(to be discussed)
EntryDetails	[0..*]	<NtryDtls>		Provides details on the entry.		
TransactionDetails	[0..*]	<TxDtls>		Provides information on the underlying transaction(s).		
CreditDebitIndicator	[1..1]	<CdtDbtInd>	CodeSet	Indicates whether the transaction is a credit or a debit transaction.	CRDT	DBIT
RelatedParties	[0..1]	<RltdPties>		Set of elements used to identify the parties related to the underlying transaction.		
Debtor	[0..1]	<Dbtr>		Party that owes an amount of money to the (ultimate) creditor.		
Identification	[0..1]	<Id>		Unique and unambiguous identification of a party.		
OrganisationIdentificat	[1..1]	<OrgId>		Unique and unambiguous way to identify an organisation.		
AnyBIC	[0..1]	<AnyBIC>	IdentifierSet	Code allocated to a financial or non-financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking – Banking telecommunication messages - Business Identifier Code (BIC)"	IBJPJPJT	IBJPJPJT
DebtorAgent	[0..1]	<DbtrAgt>		Financial institution servicing an account for the creditor.		
FinancialInstitutionIdentific	[1..1]	<FinInstnId>		Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme		
BICFI	[0..1]	<BICFI>		Code allocated to a financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking – Banking telecommunication messages – Business Identifier Code (BIC)".	BLICHKHX	BLICHKHX

Table A3.5 continued

| Message Element	ISO20022 Multiplicity	XML Tag	Type	Definition	Example. 9	Example. 10
BankToCustomerDebitCreditNotificationVo3(camt.o54.oo1.o3)		<BkToCstmrDbtCdtNtfctn>				
CreditorAgent	[0..1]	<CdtrAgt>		Financial institution servicing an account for the creditor.		
FinancialInstitutionIdentific	[1..1]	<FinInstnId>		Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme.		
BICFI	[0..1]	<BICFI>		Code allocated to a financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking - Banking telecommunication messages – Business Identifier Code (BIC)".	MHCBHKHH	MHCBHKHH
Creditor	[0..1]	<Cdtr>		Party that owes an amount of money to the (ultimate) creditor.		
Identification	[0..1]	<Id>		Unique and unambiguous identification of a party.		
OrganisationIdentificat	[1..1]	<OrgId>		Unique and unambiguous way to identify an organisation.		
AnyBIC	[0..1]	<AnyBIC>	IdentifierSet	Code allocated to a financial or non-financial institution by the ISO 9362 Registration Authority, as described in ISO 9362 "Banking – Banking telecommunication messages – Business Identifier Code (BIC)"	MHCBJPJT	MHCBJPJT

Appendix 4
Overview of the International Organization for Standardization

Overview of International Standards

The International Organization for Standardization (ISO) is an independent, nongovernmental organization made up of members from national standards bodies of 165 countries as of January 2015. Members play a vital role in how ISO operates through the General Assembly that decides strategic objectives. There are three member categories (full member, subscriber member, and correspondence member). The Central Secretariat in Geneva, Switzerland coordinates the system directed by the Secretary-General (Figure A4.1).

ISO standards are developed by the people that need them, through a consensus process. Experts from all over the world develop the standards that are required by their sector. These experts are proposed by national members. ISO develops technical standards in many areas including technology, product safety, and energy management. More than 19,000 ISO

Figure A4.1: ISO Governance Structure
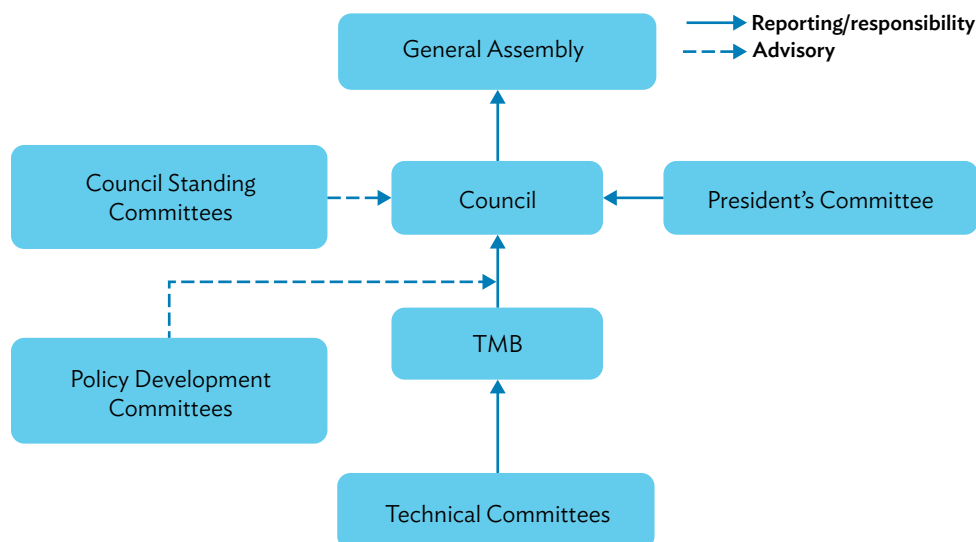
ISO = International Organization for Standardization, TMB = Technical Management Board
Note: The Secretary General is a member of the President's Committee, report to the President and to Council and receives advice from the policy and advisory groups (who also advise Council). The Central Secretariat is responsible for supporting the governance and policy and advisory structure and the operations of ISO.
Source: ISO website, http://www.iso.org/iso/home/about/about_governance.htm

standards have been published. The work is divided between technical committees. The development process is carried out through experts participating in committees and working groups. Agreement and approval of a standard reflects a double layer of consensus: first within the industry (market players) and then with the ISO country members.

ISO Technical Committee 68 (TC68) for Financial Services

There are two levels of country membership: participating member and observing member. Also, there are liaison organizations which are international or broadly based regional organizations working or interested in similar or related fields. Liaison organizations are categorized into three levels: level A (to participate at the technical committee or subcommittee levels and their working groups), level B (to receive information about the technical committees, subcommittees, and/or their working groups; mainly for intergovernmental organizations), and level C (to participate at the working group level only).

TC68 created important financial standards:

1. ISO 4217   Codes for the Representation of Currencies and Funds
2. ISO 6166   International Securities Numbering System (ISIN)
3. ISO 9362   Business Identifier Code (BIC)
4. ISO 9564   Personal Identification Number (PIN)
5. ISO 10383   Codes for Exchanges and Market Identification (MIC)
6. ISO 10962   Classification of Financial Instruments (CFI code)
7. ISO 13616   International Bank Account Number (IBAN)
8. ISO 15022   Scheme for Messages (Data Field Dictionary)
9. ISO 20022   Universal Financial Industry Message Scheme
10. ISO 17442   Legal Entity Identifier (LEI)

The governance and decision-making processes of ISO TC68 are as follows:

The international standards are developed through a worldwide network of national standards bodies. Such development work is performed within technical committees, their subcommittees, and working groups. There were 163 national standards bodies represented within the ISO Framework as of January 2015. The ISO standards development process is carried out through experts participating in committees and working groups. Agreement and approval of a standard reflects a double layer of consensus: first within the industry (market players) and then across ISO member countries (Figure A4.2).

Registration Management Group

The Registration Management Group (RMG) is the highest ISO 20022 registration body: it monitors the overall registration process and has oversight of the Registration Authority. It reports directly to ISO TC68 and is the umbrella organization that deals with all matters related to ISO 20022. The RMG membership comprises senior industry experts nominated by ISO member countries or category A liaison organizations.

The role of RMG is to promote and support the involvement of financial service actors to facilitate the registration and maintenance of high-quality, globally relevant, ISO 20022 compliant business models for the exchange of information for financial services.

Figure A4.2: ISO TC68 for Financial Services
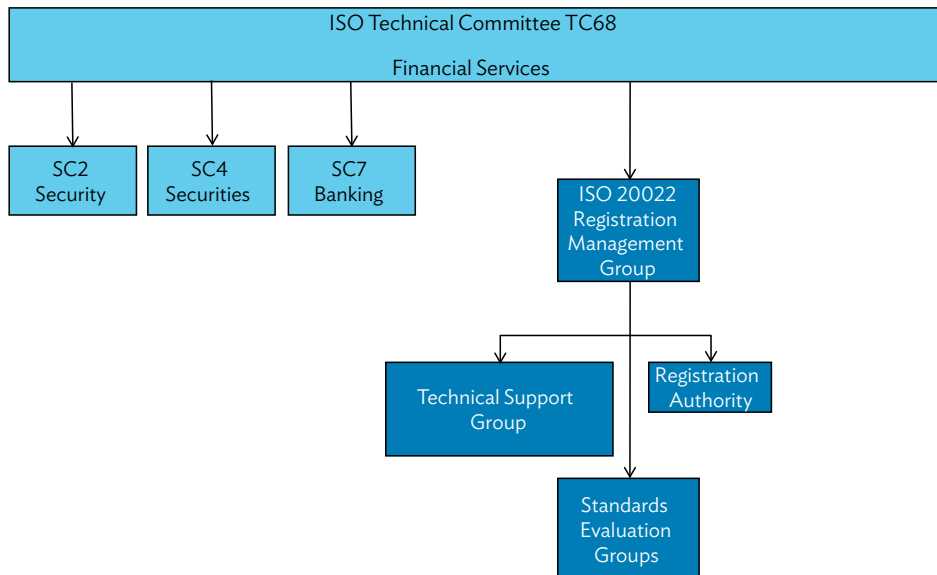
ISO = International Organization for Standardization, SC = steering committee, TC = technical committee.
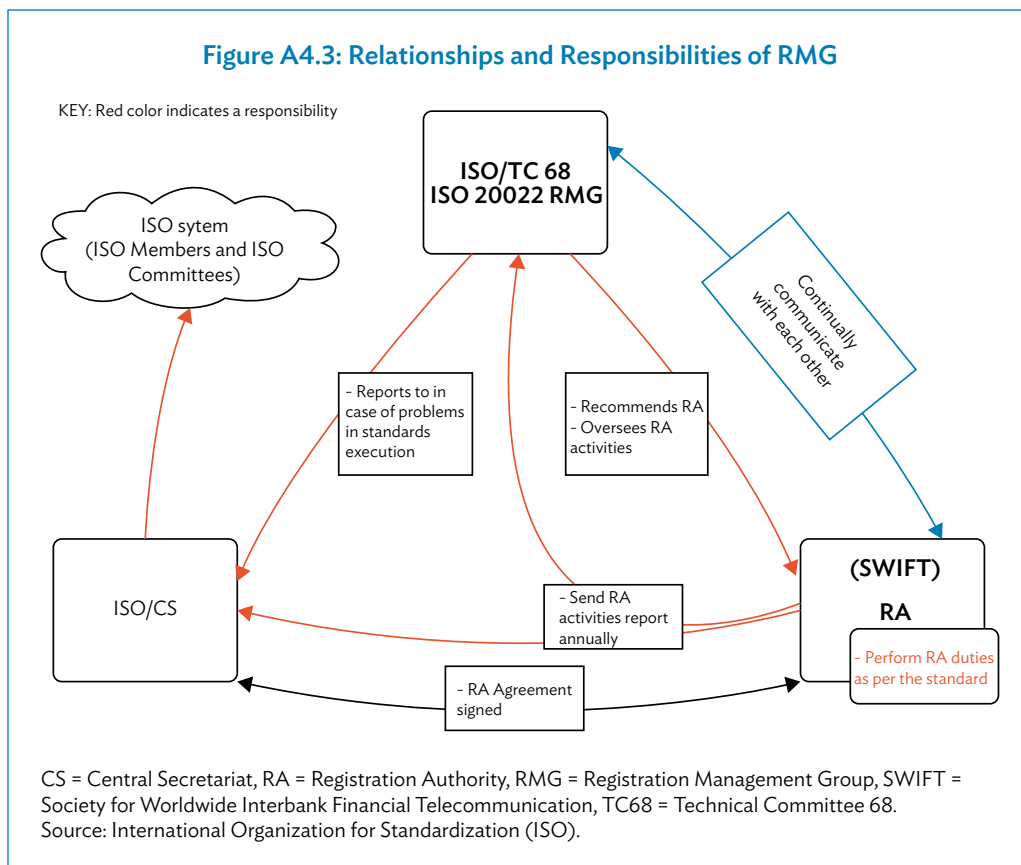Source: ISO.

Essential activities of the RMG in support of this objective are to

1. oversee the ISO 20022 Registration Authority (RA);
2. ensure the Registration Process operates effectively and responds to technical and business challenges in support of the Registration Authority, including the setup and disbandment of sub-groups (e.g., Standards Evaluation Groups);
3. review and approve Business Justifications to manage the business scope of the ISO 20022 repository seeking to achieve full coverage of financial service activities;
4. provide a contact point for any organization wishing to engage with the standard; and
5. proactively communicate on all matters related to ISO 20022.

The mission of RMG is to ensure that ISO 20022 is a trusted standard providing high-quality business models for the exchange of information for financial services.

The key dimensions in support of this mission that the RMG must strive to deliver are

1. continuous engagement: trust that the registration process, and the management of that process, is open, accessible, and founded on a fair, reasonable, and non-discriminatory governance model;
2. effectiveness and efficiency: an efficient registration process that produces high-quality ISO 20022 compliant deliverables in a sustainable, timely, and accessible manner; and
3. delivery: ensure that the registration process produces deliverables that are relevant to the business needs of financial services.

Figure A4.3: Relationships and Responsibilities of RMG

KEY: Red color indicates a responsibility

ISO/TC 68 ISO 20022 RMG

ISO sytem (ISO Members and ISO Committees)

Continually communicate with each other

- Reports to in case of problems in standards execution

- Recommends RA
- Oversees RA activities

(SWIFT) RA

- Perform RA duties as per the standard

ISO/CS

- Send RA activities report annually

- RA Agreement signed

CS = Central Secretariat, RA = Registration Authority, RMG = Registration Management Group, SWIFT = Society for Worldwide Interbank Financial Telecommunication, TC68 = Technical Committee 68.
Source: International Organization for Standardization (ISO).

The relationships and responsibilities of RMG are shown in Figure A4.3.

ISO 20022 RMG registration and maintenance processes are listed below:

1. The RMG plays a critical role in the registration process, since representative engagement from the industry is important.
2. The key document that the RMG focuses on is the Business Justification that describes the scope and need for new ISO 20022 messages.
3. These Business Justifications are, in fact, like a proposal from a community of users who are expressing a need to define ISO 20022 messages.
4. The critical role of the RMG membership is to avoid overlapping scopes of ISO 20022 messages, and to manage the resources needed for the registration process (1 month).
5. The submitting organization retains any intellectual property rights.
6. The Standards Evaluation Groups (SEGs) are critical in that they evaluate the ISO 20022 messages from a business perspective. Again, representative engagement from the industry is important (maximum of 3 months).
7. Messages become available in the ISO 20022 repository after evaluation, and the status of a submission is fully transparent
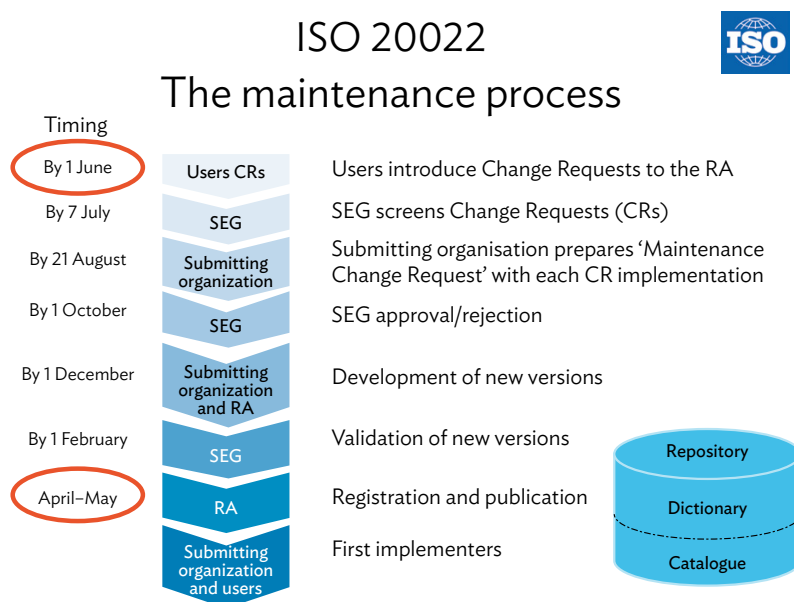
Figures A4.4 and A4.5 show the registration and maintenance processes, respectively, of ISO 20022.

Figure A4.4: Registration Processes of ISO 20022

ISO 20022
The registration process

RMG monitors		Submitting organization	Financial industry group or standards body
Business justification	Business justification
RMG	Project approval and allocation to a SEG
Submitting organization and RA	Development and provisional registration
SEG	Business validation
RA	Official registration and publication
Submitting organization and users	Optional pilot testing or first implementers

Repository
Dictionary
Catalogue

RA = Registration Authority, RMG = Registration Management Group, SEG = Standards Evaluation Group.
Source: International Organization for Standardization (ISO).

Figure A4.5: Maintenance Processes of ISO 20022

ISO 20022
The maintenance process

Timing		
By 1 June	Users CRs	Users introduce Change Requests to the RA
By 7 July	SEG	SEG screens Change Requests (CRs)
By 21 August	Submitting organization	Submitting organisation prepares 'Maintenance Change Request' with each CR implementation
By 1 October	SEG	SEG approval/rejection
By 1 December	Submitting organization and RA	Development of new versions
By 1 February	SEG	Validation of new versions
April–May	RA	Registration and publication
	Submitting organization and users	First implementers

Repository
Dictionary
Catalogue

RA = Registration Authority, SEG = Standards Evaluation Group.
Source: International Organization for Standardization (ISO).

Benefits of ISO 20022 financial services standardization

Industry standards are critical to the safe operation of the payments industry. The strategic benefits include

1. reduced operational costs: improved operational efficiency and reduced indirect costs;
2. reduced cost of compliance and risk management: reduced indirect costs associated with operational and legal compliance testing and maintenance;
3. improved Integrity at less cost: interoperability across networks and infrastructure;
4. greater service provider choice at reduced cost: open standards will improve the range and choice of service providers;
5. faster and cheaper industry innovation: easier to reuse and extend common services, reducing time to market; and
6. end-user benefits: common standards for payments aid straight-through-processing and the simplification of back-office operations.

By introducing ISO 20022, the following benefits can be realized:

1. the capability to extend both payment and remittance data in support of emerging requirements, such as enhanced data or fraud intelligence data sharing;
2. improved industry interoperability between counterparties, both within the economy and cross-border in other markets and currencies, thereby reducing complexity, costs, and risk of data manipulation and conversion in the interbank space and between banks and end users;
3. improved payments resilience via cross-scheme interoperability for scheme participants, and easier redirection of payment flows irrespective of payment type for end users, particularly in times of crisis or during service disruptions; and
4. reduced barriers to entry to the economy payments infrastructure and supply market, including banks.

Standards Evaluation Group (SEG)

The ISO 20022 SEGs are made up of industry experts in specific business domains of the financial industry as defined by ISO 20022. SEG members are nominated by ISO TC68 member countries and liaison organizations (Table A4.1).

The role of an SEG is threefold:

1. to ensure that the right industry groups are informed of proposed developments to ensure all business requirements will be addressed;
2. to validate the newly developed message definitions from a business perspective as representative of future users in order to ensure that what will be posted in the ISO 20022 repository by the Registration Authority really addresses the needs of future communities of users as described in the Business Justification accepted by the RMG in the first place; and
3. to approve changes to existing message definitions.

Table A4.1: SEG-ISO 20022 Standards Evaluation Groups

	ISO member	TC68 member	RMG	PSEG	SSEG
BN	Correspondent member (ABCI)				
KH	Correspondent member (ISC)				
CN	Full member (SAC)	Participant member	Member (PBOC)		
HK	Correspondent member (ITCHKSAR)	Observing member			
ID	Full member (BSN)				
JP	Full member (JISC)	Participant member	Member (BOJ)	Member (BOJ, Zenginkyo, NTT Data, JPMC, BTMUFJ)	Member (BOJ, JASDEC, Mizuho Bank, BTMUFJ, NTT Data)
KR	Full member (KATS)	Participant member	Member (KFTC and KATS)	Member (KFTC)	
LA	Subscriber member (DISM)				
MY	Full member (DSM)	Observing member			
MM	Correspondent member (MSTRD)				
PH	Full member (BSP)	Observing member			
SG	Full member (SPRING SG)	Participant member	Member (Standard Chartered Bank, Deutsch Bank)	Member	Member (Standard Chartered Bank)
TH	Full member (TISI)	Observing member			
VN	Full member (STAMEQ)				

ABCI = Authority for Building Control and Construction Industry of Brunei; ASEAN+ 3 = Association of Southeast Asian Nations plus the People's Republic of China, Japan, and the Republic of Korea; BN = Brunei Darussalam; BOJ = Bank of Japan; BSN = Badan Standardisasi Nasional (National Standardization Agency of Indonesia); BSP = Bangko Sentral ng Pilipinas; BTMUFJ = Bank of Tokyo Mitsubishi UFJ; CN = People's Republic of China; DISM = Department of Intellectual Property, Standardization, and Metrology; DSM = Department of Standards Malaysia; HK = Hong Kong, China; ID = Indonesia; ISC = Institute of Standards of Cambodia; ISO = International Organization for Standardization; ITCHKSAR = Innovation and Technology Commission of the Government of the Hong Kong Special Administrative Region; JASDEC = Japan Securities Depository Center; JISC = Japanese Industrial Standards Committee; JP = Japan; JPMC = J.P. Morgan Chase Bank; KATs = Korean Agency for Technology and Standards; KH = Cambodia; KR = Republic of Korea; LA = Lao People's Democratic Republic; MM = Myanmar; MSTRD = Myanmar Scientific and Technological Research Department; MY = Malaysia; PBOC = People's Bank of China; PH = Philippines; PSEG = Payments Standards Evaluation Group; RMG = Registration Management Group; SAC = Standardization Administration of China; SG = Singapore; SPRING SG = Standards, Productivity, and Innovation Board, Singapore; SSEG = Securities Standards Evaluation Group; STGAMEQ = Directorate for Standards, Metrology, and Quality of Viet Nam; TC68 = Technical Committee 68; TH = Thailand; TISI = Thai Industrial Standards Institute; VN = Viet Nam.
Source: ISO.

Payments SEG. The scope of the Payments SEG includes the messages supporting transactions and business processes related to credit transfers, direct debits, and checks.

Securities SEG. The scope of the Securities SEG includes the messages supporting transactions and business processes related to equities, fixed income, funds, and derivatives.

Introduction

The International Organization for Standardization (ISO) 6166 provides a uniform structure for the International Securities Identification Numbering (ISIN) system that uniquely identifies securities (bonds). The latest version of the ISO Standard 6166 was adopted and implemented (effective 1 August 2014). The ISIN consists of a prefix using the alpha-2 country code, the basic number which is nine characters in length, and a check digit. Figure A5.1 provides an example of an ISIN for a government bond.

The issuing economy of a bond is determined by the economy where the bond is registered in a depository of the economy, regardless of the economy of issuer or currency of denomination. ISIN is allocated by the national numbering agency (NNA) of an economy.

By adopting ISIN, local markets will gain more visibility in the global financial marketplace, enabling stronger cross-border flows in both directions.

Due to agreements among all members of the Association of National Numbering Agencies (ANNA), each NNA has unrestricted access to all other members' ISINs and defined data elements.

Overview of ANNA and NNA

ANNA is a Belgian cooperative incorporated in 1992 and acts as the Registration Authority for ISO 6166 (ISIN). As of June 2015, ANNA had 116 NNA members, consisting of 90 full members and 26 partners, representing ISIN adoption and usage in 122 economies worldwide. ANNA does not appoint entities to act as NNAs. The steps required to establish an NNA are described later in this appendix.

The objectives of ANNA are to
1. globally develop and promote standards under ANNA's control;
2. commit to work for the benefit of the financial industry;
3. codify, classify, and make data accessible and available to industry participants;
4. contribute to the ISO standards development process; and
5. ensure timeliness, accuracy, and quality in the application of standards.

An overview of ANNA-related international standards is shown in Figure A5.2.

ANNA-related organizations are shown in Figure A5.3.

Figure A5.1: Sample ISIN Code Structure for a Government Bond
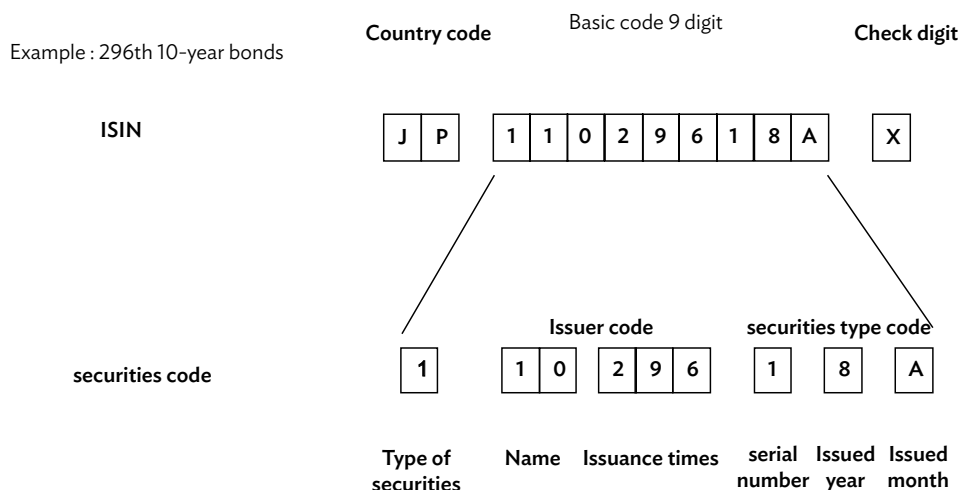
Example : 296th 10-year bonds

Country code   Basic code 9 digit   **Check digit**

ISIN

| J | P | 1 | 1 | 0 | 2 | 9 | 6 | 1 | 8 | A | X |

securities code

| 1 | | 1 | 0 | | 2 | 9 | 6 | | 1 | 8 | A |

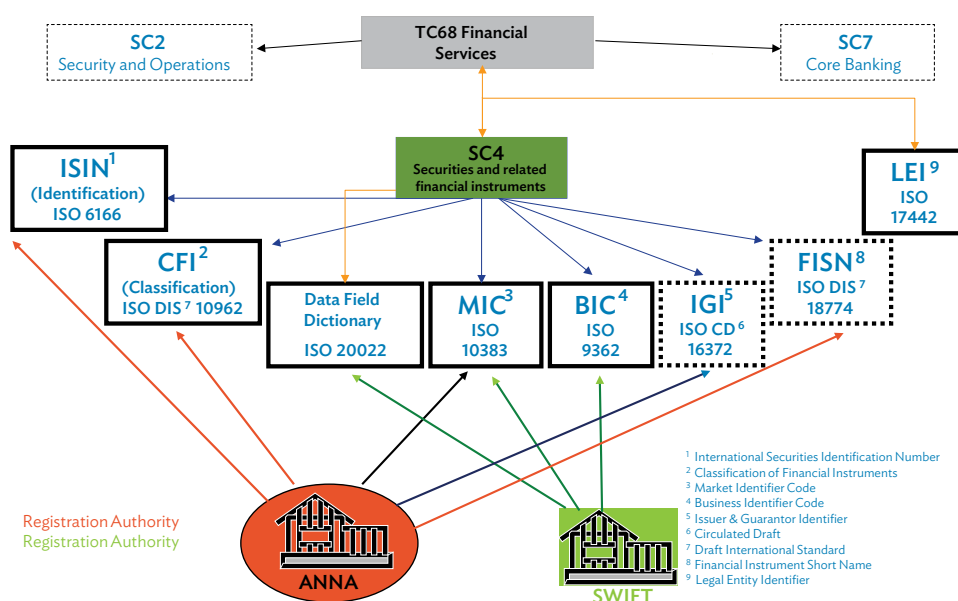**Issuer code**   **securities type code**

Type of securities   **Name**   **Issuance times**   **serial number**   **Issued year**   **Issued month**

ASEAN+ 3 = Association of Southeast Asian Nations plus the People's Republic of China, Japan, and the Republic of Korea; BN = Brunei Darussalam; CN = People's Republic of China; CUSIP = Committee on Uniform Security Identification Procedures; HK= Hong Kong, China; ID = Indonesia; ISIN = International Securities Identification Number; ISO = International Organization for Standardization; JP = Japan; KH = Cambodia; KR = Republic of Korea; LA = Lao People's Democratic Republic; MM = Myanmar; MY = Malaysia; PH = Philippines; SG = Singapore; TH = Thailand; US = United States; VN = Viet Nam.
Source: NTT DATA Corporation.

Figure A5.2: Overview of ANNA-Related International Standards

SC2 Security and Operations

TC68 Financial Services

SC7 Core Banking

ISIN[1] (Identification) ISO 6166

SC4 Securities and related financial instruments

LEI[9] ISO 17442

CFI[2] (Classification) ISO DIS[7] 10962

Data Field Dictionary ISO 20022

MIC[3] ISO 10383

BIC[4] ISO 9362

IGI[5] ISO CD[6] 16372

FISN[8] ISO DIS[7] 18774

ANNA

SWIFT

Registration Authority
Registration Authority

[1] International Securities Identification Number
[2] Classification of Financial Instruments
[3] Market Identifier Code
[4] Business Identifier Code
[5] Issuer & Guarantor Identifier
[6] Circulated Draft
[7] Draft International Standard
[8] Financial Instrument Short Name
[9] Legal Entity Identifier

SC = steering committees, SWIFT = Society for Worldwide Interbank Financial Telecommunication, TC68 = Technical Committee 68.
Source: Association of National Numbering Agencies (ANNA).

Figure A5.3: ANNA-Related Organizations

Source: Association of National Numbering Agencies (ANNA).
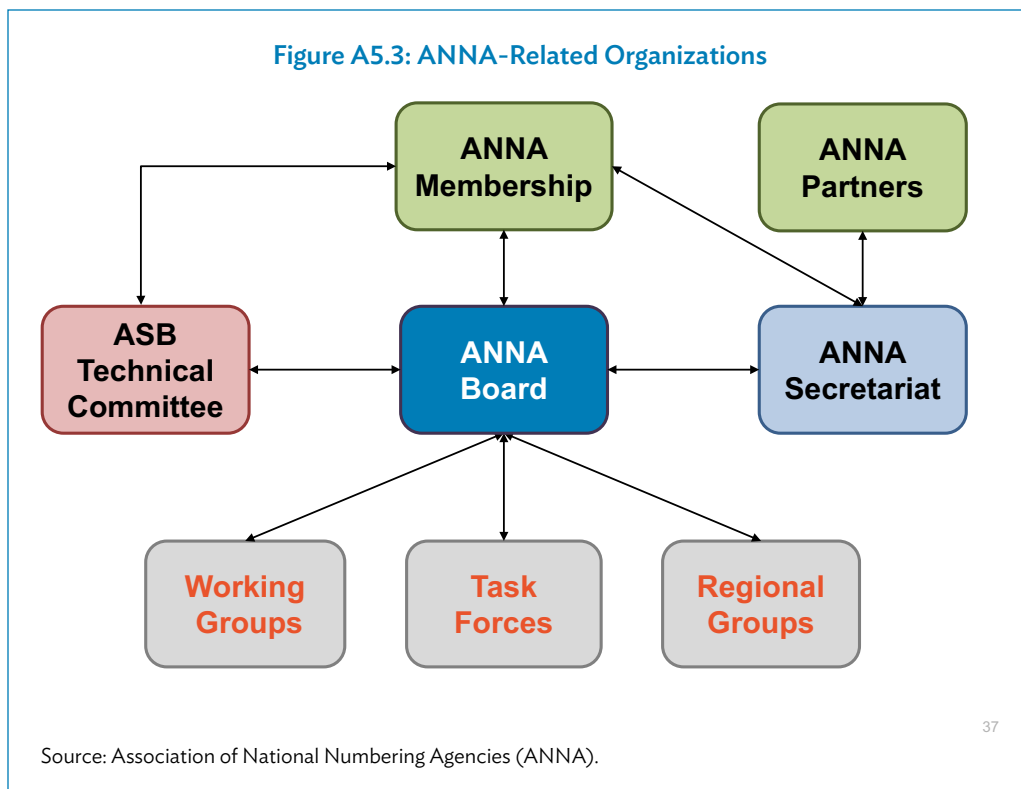
In ASEAN+3, the 10 economies in which bond markets already exist have each established an NNA, although NNA responsibilities in the Philippines will (possibly) be transitioning from the Philippines Dealing & Exchange Corp. to the Securities and Exchange Commission. Table A5.1 shows the NNAs in ASEAN+3 economies.

Steps to Establishing an NNA

There steps required to establish an NNA include the following:

1. The jurisdiction's capital market endorses the move to adopt ISO standards for financial instruments.
2. The regulator or market supervisory body appoints the entity to act as the NNA for that jurisdiction; ANNA recommends that only one entity is appointed.
3. An application is submitted to ANNA when the entity is in a position to start allocating ISIN.
4. Upon successful adherence to partnership requirements, application for full membership can be made; the application is voted on by full members of ANNA.
5. The documents and agreements required are ANNA's Articles of Incorporation, a partnership agreement (only applicable for partnership), an application for membership (only applicable for full membership), a letter of understanding (only applicable for full membership), and membership guidelines (for full members and partners). Membership guidelines are regularly updated and approved at general meetings.

Table A5.1: NNAs in ASEAN+3

ASEAN+3 (existing)			
Country Code	**National Numbering Agency**	**Market Segment**	**Total ISINs allocated** (July 2014)
CN	China Securities Regulatory Commission	Regulator	17,778
HK	Hong Kong Exchanges and Clearing, Ltd.	Stock Exchange	20,404
ID	Indonesian Central Securities Depository	CSD	6,117
JP	Tokyo Stock Exchange	Stock Exchange	37,094
KR	Korean Exchange	Stock Exchange	499,074
MY	Bursa Malaysia	Stock Exchange	8,627
PH	**Transitional phase (currently covered by the US NNA)**	**Regulator (Q2 – Q3 2015)**	1,555
SG	Singapore Exchange Limited	Stock Exchange	2,627
TH	Thailand Securities Depository	CSD	21,068
VN	Vietnam Securities Depository	CSD	2,622
ASEAN+3 economies (pending NNA appointment)			
Country Code	**National Numbering Agency**	**Substitute NNA**	**ISINs assigned** (July 2014)
BN	Brunei Darussalam	Germany	3
KH	Cambodia	Germany	1
LA	Lao People's Democratic Republic	Germany	1
MM	Myanmar	Germany	1

BN = Brunei Darussalam; CN = People's Republic of China; HK = Hong Kong, China; ID = Indonesia; ISIN = International Securities Identification Number; JP = Japan; KH = Cambodia; KR = Republic of Korea; LA = Lao People's Democratic Republic; MM = Myanmar; MY= Malaysia; NNA = national numbering authority; PH = Philippines; SG = Singapore; TH = Thailand; VN = Viet Nam.
Source: Association of National Numbering Agencies.

Allocation of ISIN

The NNA in each economy is responsible for issuing the ISIN for bonds issued in that economy (Figure A5.4). NNAs are coordinated through ANNA. One of the ANNA's recommendations states that the NNAs should allocate ISINs within 24 hours following the request, while also making the ISIN available to users at the same time.

Global ISIN Database and ANNA Service Bureau

ANNA developed the ANNA Service Bureau (ASB) to collect and disseminate ISIN information via a common platform to meet the needs of its members. ASB's services are also available to external market participants via subscription. This development emphasizes ANNA's commitment to moving the industry toward straight-through-processing. Working in conjunction with the NNAs, the ASB assists with improving all aspects of the timely, accurate, and standardized identification of financial instruments, as well as equitable distribution of this information. The ASB and its partners, Swiss Infrastructure and Exchange (SIX) Financial (Switzerland) and the Committee on Uniform Securities Identification
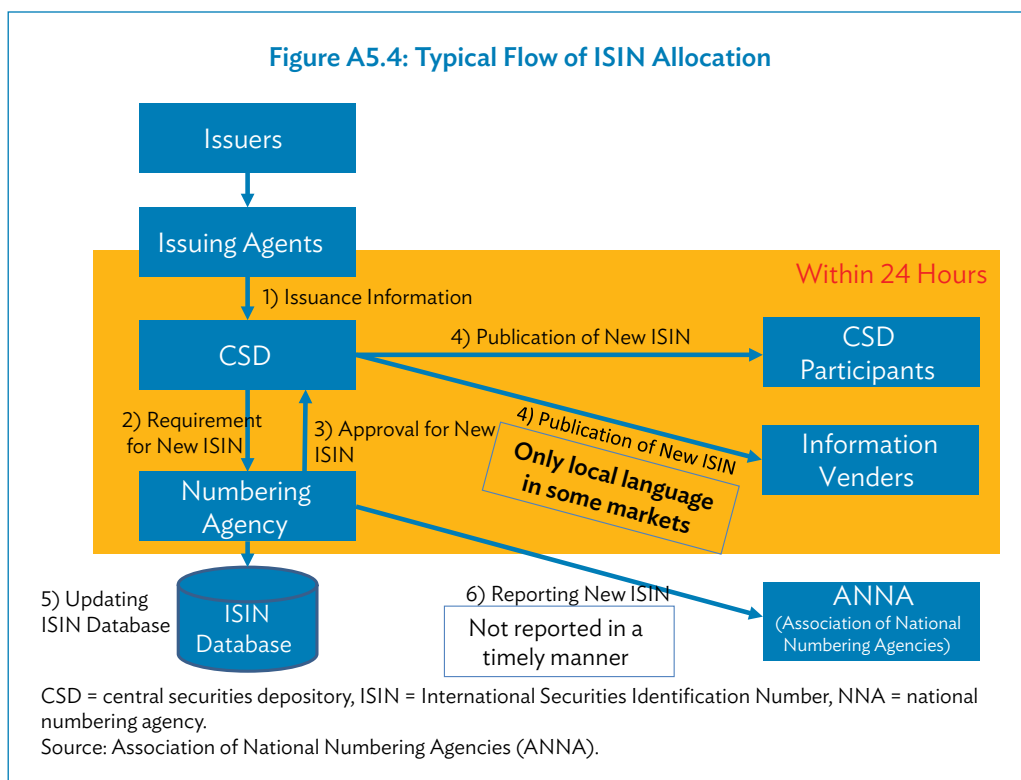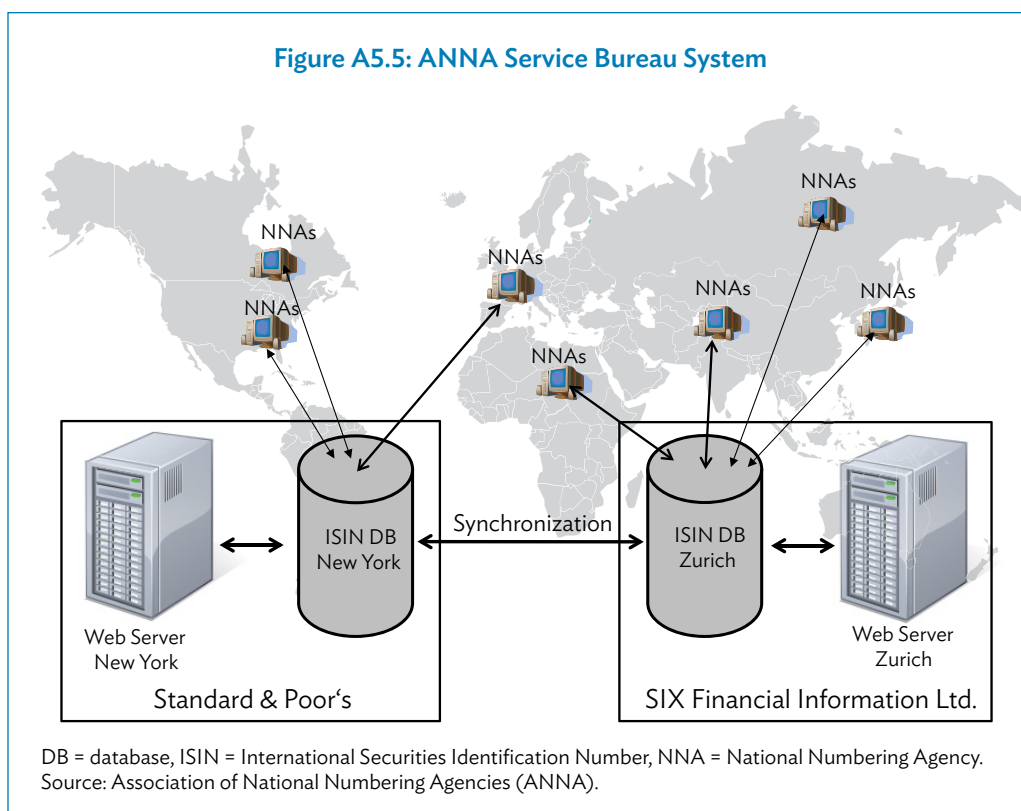
Figure A5.4: Typical Flow of ISIN Allocation

Issuers

Issuing Agents

Within 24 Hours

1) Issuance Information

CSD

4) Publication of New ISIN → CSD Participants

2) Requirement for New ISIN

3) Approval for New ISIN

4) Publication of New ISIN
Only local language in some markets → Information Venders

Numbering Agency

5) Updating ISIN Database

ISIN Database

6) Reporting New ISIN
Not reported in a timely manner

ANNA (Association of National Numbering Agencies)

CSD = central securities depository, ISIN = International Securities Identification Number, NNA = national numbering agency.
Source: Association of National Numbering Agencies (ANNA).

Figure A5.5: ANNA Service Bureau System

NNAs
NNAs
NNAs
NNAs
NNAs
NNAs
NNAs

Web Server New York

ISIN DB New York

Synchronization

ISIN DB Zurich

Web Server Zurich

Standard & Poor's

SIX Financial Information Ltd.

DB = database, ISIN = International Securities Identification Number, NNA = National Numbering Agency.
Source: Association of National Numbering Agencies (ANNA).

Procedures (CUSIP) Global Services (United States), operate as a central hub to receive and consolidate ISIN data from all ANNA members and partners, and assists in the dissemination of this information to global market participants. Figure A5.5 shows illustrates the functions of the ASB.

Key Issues Related to ISIN

Universal acceptance of ISIN is important in meeting the goal of cross-border straight-through-processing, which is the electronic handling of trade clearing and settlement without manual intervention. ISINs are used by share custodians to track the holdings of institutional investors in a format that is consistent across markets worldwide.

The ASEAN+3 Bond Market Forum Sub-Forum 2 is promoting the following ISIN-related standards:
- ISIN is available within 24 hours following the request of issuance,
- the sharing of ISIN with investors in other markets, and
- all information is written in English.

Appendix 6
Cross-Border Use of Collateral and Repo

The ASEAN+3 Bond Market Forum Sub-Forum 2 (ABMF SF2) has entered into Phase 3. This phase includes a survey on the cross-border use of collateral. This issue has many facets, including key factors influencing the demand for cross-border use of collateral; the current environment with central banks, internationally active banks, markets, and infrastructures; policy considerations; arrangements for the use of foreign collateral; and potential central bank actions. The mandate of ABMF SF2 in this respect is interpreted in such a manner that this survey should not result in empirical research with regard to market developments in the area of cross-border use of collateral, but rather in an overview of the legal and logistical complexities requiring further attention and resolution in order to facilitate such use. It starts with the domestic situation on an economy-by-economy basis. From there, it turns to cross-border use of collateral. Indeed, the complexities of the cross-border use of collateral can only be properly analyzed based on a thorough understanding of collateralization in a national context.[1]

Eligible Collateral

Theoretically, most tangible and non-tangible assets may be used as collateral in order to ensure the fulfillment of obligations. For example, in the Settlement Finality Directive (SFD) of the European Union (EU),[2] collateral security is defined as "all realizable assets provided under a pledge (including money provided under a pledge), a repurchase or similar agreement, or otherwise, for the purpose of securing rights and obligations potentially arising in connection with a system, or provided to central banks of the Member States or to the future European central bank."[3] However, in the financial markets, collateral consists usually of bonds, shares, or other debt instruments. This is also called financial collateral. In the Financial Collateral Arrangements Directive (FCAD) of the EU,[4] this notion is defined as "shares in companies and other securities equivalent to shares in companies and bonds and other forms of debt instruments if these are negotiable on the capital market, and any other securities which are normally dealt in and which give the right to acquire any such shares, bonds or other securities by subscription, purchase or exchange or which give rise to a cash settlement (excluding instruments of payment) including units in collective investment undertakings, money market instruments and claims relating to or rights in or in respect of any of the foregoing."[5]

---

[1]   This document was originally drafted by Mr. Erwin Nierop of the European Central Bank when he was a secondee of the ADB. The ADB Secretariat appreciates his contribution, including insightful comments and advice, to this initiative.

[2]   European Parliament. 1998. Directive 98/26/EC of the European Parliament and of the Council of 19 May 1998 on Settlement Finality in Payment and Securities Settlement Systems.

[3]   European Parliament. 1998. Directive 98/26/EC of the European Parliament and of the Council of 19 May 1998 on Settlement Finality in Payment and Securities Settlement Systems, Article 2(m).

[4]   European Parliament. 2002. Directive 2002/47/EC of the European Parliament and of the Council of 6 June 2002 on Financial Collateral Arrangements.

[5]   European Parliament. 2002. Directive 2002/47/EC of the European Parliament and of the Council of 6 June 2002 on Financial Collateral Arrangements, Article 2.1(e).

Theoretically, the bonds may be in the form of individual or global certificates or in the form of book-entry rights. Individual certificates may be held individually and may be held in, for example, bank safes. Global certificates may be co-owned by different owners and are usually deposited with central securities depositories. In the FCAD, book entry rights are under book-entry securities collateral defined as follows: "financial collateral provided under a financial collateral arrangement which consists of financial instruments, title to which is evidenced by entries in a register or account maintained by or on behalf of an intermediary."[6] As in the case of payments with money in scrip form, transfers of book-entry securities are relatively easy in that they do not require physical transfers of certificates or, alternatively, documents proving the transfer of rights. Such transfers may be made to an own account of the collateral taker (in the case of repos) or to a pledge account (in the case of pledge). Collateralization of physical certificates is of course nothing new; in fact, it used to be practice before the introduction of book-entry securities. However, both in the case of repos as well as pledge, it raises a number of issues which are less important in dematerialized systems with book-entry rights. For example, in a repo transaction, the owner of the physical certificate could become temporarily the holder (in Latin: *traditio brevi manu*). If the physical security is held in the vaults of a bank, this bank could become from holder for the original owner holder for the new temporary owner (in Latin: *traditio longa manu*). In pledge constructions, it is usually necessary to bring the pledged assets out of the sphere of control of the collateral provider, which means in the case of physical assets that they have to be deposited somewhere else or, in the case of keeping by a third party, that they would have to be earmarked as having been pledged.

Repurchase Agreements (repos)

As far as relevant here, repos are transactions where parties agree to buy and sell bonds and reverse these transactions at a certain date against a certain price. In essence, this entails a (temporary) transfer of full ownership from the seller to the buyer. In the FCAD, this is under title transfer financial collateral arrangement defined as "an arrangement including repurchase agreements, under which a collateral provider transfers full ownership of financial collateral to a collateral taker for the purpose of securing or otherwise covering the performance of relevant obligations."[7]

Repos are an attractive method for collateralization. First, they make the collateral taker independent of the collateral provider in case of the latter's insolvency. Second, the collateral taker may stipulate that he or she may resell the collateral and, instead of returning the original securities, return securities of the same type. Third, statutory provisions allowing, the collateral taker may appropriate the securities and hold or sell at his or her discretion. In certain jurisdictions, the problem though with repos may be that they may be considered as sham constructions hiding under the veil of an outright transaction that its actual purpose is only a temporary transfer of ownership for collateralization, thus avoiding statutory provisions on pledge, which are usually more cumbersome for the collateral taker. This could lead to invalidity and unenforceability of repos. Another challenge may be that repos in certain jurisdictions may be considered as contracts of speculation or gambling, which may for example be the case in jurisdictions applying Shariah law.

---

[6] European Parliament. 2002. Directive 2002/47/EC of the European Parliament and of the Council of 6 June 2002 on Financial Collateral Arrangements, Article 2.1(g).

[7] European Parliament. 2002. Directive 2002/47/EC of the European Parliament and of the Council of 6 June 2002 on Financial Collateral Arrangements, Article 2.1(b).

In view of the importance of repos for the smooth functioning of the financial markets and collateralization in particular, the above uncertainties have led the EU to adopt in the SFD and the FCAD the principle that repos are legally valid and enforceable and EU member states had to implement this principle in their national legislation. In addition, the International Swaps Dealers Association took up on this topic and it developed a Master Repurchase Agreement, which is multi-jurisdictional, multiproduct, and multi-lingual. It is intended to be legally valid and enforceable in all relevant jurisdictions. It covers a number of financial products in separate annexes to the body of the agreement, and it is available in a number of different languages. In order to ensure the point of legal validity and enforceability, the International Swaps Dealers Association has submitted the Master Repurchase Agreement to legal counsel in the relevant jurisdictions in order to seek confirmation that it is legally valid and enforceable in these jurisdictions with generally positive replies.

Pledge Agreements (pledge)

Pledge agreements are transactions where the pledger or collateral provider agrees to establish a priority right in favor of the pledgee or collateral taker in case the collateral provider does not fulfill its financial obligations. In the FCAD, this is under security financial collateral arrangement defined as "an arrangement under which a collateral provider provides financial collateral by way of security in favor of, or to, a collateral taker, and where the full ownership of the financial collateral remains with the collateral provider when the security right is established."[8] Thus, in contrast to the situation in the case of repos where there is a full transfer of ownership from the collateral provider to the collateral taker, in the case of pledge there is no such transfer of full ownership but merely the establishment of a priority right.

This usually raises a number of questions. First, are there any specific formalities to establish a pledge? Second, are there any other parties with priority rights, possibly of a higher ranking, which may cover the pledged assets as well? These may, for example, be tax authorities on the basis of statutory provisions or other counterparties of the collateral provider on the basis of concurrent contracts. Third, in case of nonfulfillment of contractual obligations by the collateral provider, may the collateral taker—although he does not have the full ownership of the collateral—nevertheless realize the collateral? If the nonfulfillment is due to insolvency, could the liquidating authority postpone the realization of the collateral and for how long? If the waiting period is very long, this may hamper the smooth functioning of the financial markets. Fourth, is the collateral taker authorized to use the collateral during the duration of the pledge agreement? Indeed, immobilization of collateral for the duration of the pledge agreement may hamper the smooth functioning of the financial markets. Fifth, how can the collateral taker be protected against a situation where the collateral provider pledges the assets more than once at the same time? Obviously, answers to these questions may usually be found in statutory provisions and case law, but it is important to identify the relevant issues at stake. Indeed, the more and the heavier the conditions for pledge, the less suitable the instrument becomes for financial collateral, where eventually considerations of financial stability impose the possibility of the fast realization of collateral. That said, many systems are pledge-based and this is in itself not prohibitive for financial collateral, but it is important to (i) achieve clarity on the situation and (ii) identify those impediments which are so grave that they may hamper the smooth functioning of the financial markets, pose a threat to financial stability, and thus require contractual or statutory solutions.

---

[8]   European Parliament. 2002. Directive 2002/47/EC of the European Parliament and of the Council of 6 June 2002 on Financial Collateral Arrangements, Article 2.1(c).

Comparing repos and pledge, it is clear that from a perspective of the security of the collateral taker repos achieve the stronger protection (provided of course that they are valid and enforceable). The collateral taker obtains full ownership, may use the collateral without restrictions, and can realize it immediately (also through appropriation) whenever relevant. Repos may, therefore, be the preferred option for collateral taking. However, there may be other considerations which may rather support the use of pledge for collateral taking. As indicated above, the most important consideration may be that there are already pledge-based systems in place and that they seem to work well, which reduces the business case to switch over to pledge-based systems.

Other Techniques

There are other techniques for the establishment of collateral such as the creation of pools of collateral. For example, while repos are nowadays widely used for the taking of collateral, there may be other types of agreements being used for the collateralization of financial obligations. Furthermore, in certain countries collateral pools are established, which are governed by specific statutory provisions.

Cherry-Picking

In case of insolvency, many jurisdictions allow a liquidating authority to pick and choose which obligations will be fulfilled (the transactions in-the-money) and which ones will not (the transactions out-of-the-money). In the first case, the collateral taker will usually not have to fulfill his or her obligations as long as the collateral provider does not do so from his or her side (in Latin: *exceptio non adimpleti contractus*). In the latter case, the collateral taker will, one way or another, have to realize the collateral and after realization file a claim as a general creditor in the bankrupt estate in case of any losses.

Netting

The notion of netting was introduced in the financial markets in the 1980s in order to diminish systemic or Herstatt risk.[9] It was intended to provide for the possibility of compensation or set-off of mutual rights and obligations between counterparties in transactions leading to a situation where only the net (hence, netting) debt had to be paid without a possibility for cherry-picking. Netting may be bilateral between two parties or multilateral (between more than two parties). In the SFD, the notion of netting is defined "the conversion into one net claim or one net obligation of claims and obligations resulting from transfer orders which a participant or participants either issue to, or receive from, one or more other participants with the result that only a net claim can demanded or a net obligation be owed."[10] The most advanced form of netting is close-out netting. In the FCAD, under close-out netting provision this is defined as "a provision of a financial collateral

---

[9] Herstatt was a relatively small commercial bank established in Cologne, Germany, which went bankrupt in 1984. Since it was relatively small, normally the contagion or spillover effect of this bankruptcy on the financial markets as a whole would have been limited. However, it appeared that a number of other banks had exposure to Herstatt and that they had hedged these exposures in the financial markets with other counterparts, leading to the risk of a domino effect of the Herstatt bankruptcy in that other banks would also fail to fulfill their obligations and thus be drawn into insolvency as well.

[10] European Parliament. 1998. Directive 98/26/EC of the European Parliament and of the Council of 19 May 1998 on Settlement Finality in Payment and Securities Settlement Systems, Article 2(k).

arrangement, or of an arrangement of which a financial collateral arrangement forms part, or, in the absence of any such provision, any statutory rule by which, on the occurrence of an enforcement event, whether through the operation of netting or set-off or otherwise:

- the obligations of parties are accelerated so as to be immediately due and expressed as an obligation to pay an amount representing their estimated current value, or are terminated and replaced by an obligation to pay such an amount; and/or
- an account is taken of what is due from each party to the other in respect of such obligations, and a net sum equal to the balance of the account is payable by the party from whom the larger amount is due to the other party.[11]"

Cross-Border Use of Collateral

In a cross-border context, there is an additional element to the financial collateral: it is denominated in a foreign currency or located in a foreign jurisdiction.

Apart from logistical challenges, the main challenge from a legal point of view is the fact that in principle two legal systems become relevant. The first one is the law governing the credit operation. The second one is the law governing the collateral. In dematerialized book-entry right systems, the latter is usually the law of the economy where the book-entry system is located. These two legal systems may differ as far as the establishment, administration, and realization of collateral are concerned and it would have to be explored whether these differences are so grave that they are prohibitive for the cross-border use of collateral.

There are several instruments to foster cross-border use of collateral, namely through International Central Securities Depositories (ICSDs), links between Securities Settlement Systems (SSS), remote access to SSSs, and Correspondent Bank Models. In the ICSD variant, the collateral is deposited in the ICSD and the collateral provider and the collateral taker both keep accounts with the ICSD, thus allowing them to transfer the collateral from one account to another. In the links between SSS option, the interconnected SSSs would provide for the possibility that an SSS in economy A (the economy where the credit operation takes place and the collateral taker is located) would keep collateral located in economy B at an SSS in economy B. In the third construction, the collateral taker in economy A would have remote access to an SSS in economy B. In the fourth approach, the credit operation would take place in economy A and the collateral would be established, administered, and where appropriate realized in economy B on behalf of the collateral taker located in economy A. These models are further elaborated in a report on cross-border collateral arrangements prepared by the Committee on Payment and Settlement Systems of the Bank for International Settlements (BIS) and published by the BIS in January 2006.

Standards

In the EU, the SFD was adopted in order to foster the smooth operation of payment systems at a time when national payment systems were interconnected through the Trans-European Real-Time Gross Settlement Payment System in order to facilitate the free flow of the EU's single currency, the euro, throughout the euro area. In addition, since SSS resemble payment

---

[11] European Parliament. 2002. Directive 2002/47/EC of the European Parliament and of the Council of 6 June 2002 on Financial Collateral Arrangements, Article 2.1(c), Article 2.1(n).

systems, the SFD was also declared applicable to SSS. More in particular, the SFD provides for the following:

application to designated funds transfer systems and their participants;
- irrevocability of transfer orders once entered into a system;
- validity and enforceability of bilateral and multilateral netting arrangements;
- irrevocability of payments entered into a system before a bankruptcy declaration is published (no retroactive effect of bankruptcies, no so-called zero-hour rules, whereby the effects of a bankruptcy work back to 12 midnight of the day of the bankruptcy leading to the possible unwinding of transactions after that time, but before the bankruptcy declaration);
- the law governing the system determines the rights and obligations of an insolvent participant; and
- insulation of collateral provided in the framework of participation in a system from the insolvency of the provider, whereby the law applicable to book-entry securities provided as collateral is the law of the jurisdiction where the relevant register, account, or centralized deposit system is located.

In the same vein, the FCAD was adopted in order to create an EU regime for the provision of securities and cash as collateral under both security interest and title transfer structures including repos. This was intended to contribute to the integration and cost-efficiency of the financial markets as well as to the stability of the financial system in the EU, thereby supporting the freedom to provide services and the free movement of capital in the single market in financial services. The FCAD focuses on bilateral financial collateral arrangements. In order to ensure the legal certainty of financial collateral arrangements, member states had to ensure that certain provisions of insolvency law would not apply to such arrangements, in particular those that would inhibit the effective realization of financial collateral or cast doubt on the validity of techniques such as bilateral close-out netting, the provision of additional collateral in the form of top-up collateral and substitution of collateral. In particular, the FCAD provides for the following:

- application of effective, simple regimes for the creation of collateral under title transfer (repo) or pledge structures (twin track);
- abolition of formalities and procedures to create and enforce financial collateral (financial instruments and cash);
- recognition of the right to reuse pledged collateral;
- protection of collateral from certain insolvency effects (through recognition of substitution, top-up collateral, and close out netting); and
- creation of legal certainty on applicable law regarding book-entry securities by extending the above SFD principle).

Both directives, therefore, support financial stability but, admittedly, to the detriment of those general creditors of a bankrupt institution, who cannot claim this privileged position. This has sometimes led to differences of opinion between representatives of ministries of finance (and central banks) focusing on financial stability on the one hand and ministries of justice defending the interest of general creditors as protected in general provisions of bankruptcy law on the other hand. The two directives, therefore, attempt to strike a balance between the different interests at stake. They are binding on EU member states and they require implementation at a national level. The question may be raised if and to what extent the two directives could be used as examples for countries and regions in other parts of the world if and when they adopt rules on collateral. In this context, it is acknowledged that the two directives are in their presentation obviously determined by EU specificities. However,

on the substance they address issues, which are relevant for collateral issues around the globe, and this in a concise fashion (the SFD consist of only 14 and the FCAD of only 13 articles).

In addition to the EU's SFD and FCAD, there are several other initiatives that are relevant to collateralization and cross-border use of collateral:

- The Hague Convention on the law applicable to certain rights in respect of securities held with an intermediary. This is an International Convention with 53 members, adopted on 13 December 2002 in the Hague, the Netherlands, which determines which countries' laws apply with regard to book-entry securities.
- The Standards of the Committee on Payment and Settlement Systems of the Bank for International Settlements and the International Organization of Securities Regulators. These comprise 19 standards. Standard 1 on the legal framework reads as follows: "Securities clearing and settlement systems should have a well-founded, clear, and transparent basis in the relevant jurisdictions."[12]
- Unidroit Project on Harmonised Substantive Rules Regarding Indirectly Held Securities. This is an international initiative supported by countries such as Australia, Canada, and Japan, as well as the EU, in order to adopt an international convention with regard to book-entry securities.

---

[12] Bank for International Settlements. Committee on Payment and Settlement Systems. https://www .bis.org/Thecpmi/

Appendix 7
Foreign Exchange and Cash Control

	CN	HK	ID	JP	KR	MY	PH	SG	TH	VN	Summary	Observation
FX Trades with Underlying Investment	Yes. Funds maintained in the QFII's foreign currency accounts and special CNY accounts cannot be used for the purposes other than onshore securities investment.	No. Foreign investors are not subject to any restrictions.	Yes. All FX forward value transactions must match with the underlying securities transactions.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	Yes. Nonresidents buy or sell MYR must confirm that it is in relation to a firm underlying commitment, which may include buy or sales on Bursa Malaysia Securities.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	Yes and No. THB is freely convertible for SPOT value. FX against THB for all other value dates requires proper underlying transactions.	Yes. Custodians may be able to provide foreign investors with both foreign currency and VND cash accounts for the purpose of facilitating the funding of securities transactions and repatriation of proceeds.	The PRC, Indonesia, Malaysia, Thailand, and Viet Nam have a regulation about FX trades with underlying investment.	Investors need to consider the timing of local currency arrangement.
Prohibition of Offshore FX Trading for Investment	Yes. Offshore FX is not permitted.	No. Foreign investors are not subject to any restrictions.	Yes. IDR cannot be transferred offshore.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	Yes. MYR can only be traded onshore.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	Yes. VND must be performed onshore with an authorized financial institution.	The PRC, and Indonesia prohibit offshore FX trading for nonresidents.	Investors may not be able to obtain local currency when needed.
Pre-funding	Yes. Pre-funding for securities settlement is required.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	Yes. FX should be completed, at the latest, for value 1 day before the settlement date to fund purchases. Market practice requires all securities transactions to be 100% pre-funded.	The PRC, and Viet Nam have the regulation about pre-funding.	Investors need to make funds available before sending trade orders.
Prohibition of Third-Party FX	Yes. Although there is no explicit regulation prohibiting third-party FX to obtain CNY, the CSRC regulations require a subcustodian to execute FX for its QFIIs. Therefore, it is effectively not possible to execute third-party FX to obtain CNY.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	No. Foreign investors are not subject to any restrictions.	Only the PRC prohibit third-party FX	

	CN	HK	ID	JP	KR	MY	PH	SG	TH	VN	Summary	Observation
FX Reporting	Yes. Upon approval of investment license and quota, QFIIs must remit the investment fund within 6 months. Total inbound remittances should not exceed the approved investment amount. If the principal is not fully remitted, but it is more than the equivalent of USD 20 million within the prescribed deadline, the investment quota is reduced to the actual remitted-in amount.	No. Foreign investors are not subject to any restrictions.	Yes. Regulation requires documentation of an underlying transaction to support the credit of IDR into investor accounts. Purchase of foreign currency(ies) against IDR above USD 100,000 or equivalent per month/legal entity, across all banks in Indonesia, must be supported by underlying documents and a yearly statement confirming non-speculative nature of the transactions.	No. Foreign investors are not subject to any restrictions.	Yes. For providing Loans. -Amounts up to KRW 1billion: no declaration required. -Amounts of more than KRW 1billion to 30 billion: Nonresidents are required to make a pre-declaration to the FX bank. -Borrowing more than KRW 30 billion: Non-residents are required to make a pre-declaration to the Governor of the Bank of Korea, stating the purpose of the loan.	No. Foreign investors are not subject to any restrictions.	Yes. The Consolidated FX Rules and regulations by the BSP, under Circular 1389, requires foreign investments to be registered with the BSP in order to obtain a BSRD which is required if foreign exchange will be purchased from the banking system to service future remittances of profits and earnings and/or capital repatriation.	No. Foreign investors are not subject to any restrictions.	Yes. Any payments made from or received into accounts from a residents THB account requires proper documentation support.	Yes. The purchase of foreign currency against VND is subject to strict conditions and documentation requirements. The documents may include the client's incoming remittance instructions, FX conversion instructions, securities sales proceeds advice, and settlement instructions.	The PRC, Indonesia, the Republic Korea, the Philippines, Thailand and Viet Nam impose FX reporting for foreign investors.	Reporting makes investors and custodians impose extra paper-work to create the documents.
Control of Overdraft and Cash Balance for Non-residents	Yes. Overdrafts are not permitted.	No. Overdrafts are permitted for foreign investors.	Yes. Cash accounts of foreign investors are not allowed to be overdrawn.	No. Overdrafts are permitted for foreign investors.	Yes. Overdrafts are not permitted for foreign investors currently.	Yes. Overdrafts are not allowed for non-residents.	Yes. Overdrafts are not allowed under local regulations.	No. Overdrafts up to SGD5 million are permitted for foreign investors, unless the overdrafts are backed by economic activity.	Yes. Foreign Investors have an end-of-day limit of THB 300 million for each type of account (NRBS and NRBA). Overdrafts for non-residents are allowed, but the BOT does require the foreign investor to sign an overdraft agreement with the onshore commercial bank prior to having the credit facility in place.	Yes. Overdrafts are not allowed for foreign investors.	The PRC, Indonesia, Malaysia, and Viet Nam do not permit overdraft for nonresidents. Thailand regulate the amount of cash balance for foreign investors.	These limitations restrict for efficient use of local currency for non-residents.

	CN	HK	ID	JP	KR	MY	PH	SG	TH	VN	Summary	Observation
Limitation on Repatriation	Yes. For defined open-ended funds, after-tax profits and principal can be repatriated once per month after a 3-month lock-up period (from the initial USD 20 million remittance). Repatriation above USD 50 million requires SAFE's prior approval. For other investor types, SAFE approval is always required to repatriate after-tax profits or any part of the principal after the 1-year lock-up period. After-tax profits can be repatriated once each fiscal year, while the principle can be repatriated with SAFE pre-approvals. Repatriation of principal reduces the quota correspondingly.	No. Non-resident investors freely fund trades and/or repatriate funds.	Yes. IDR cannot be repatriated offshore.	No. Non-resident investors freely fund trades and/or repatriate funds.	No. There are no restrictions on repatriations of sales proceeds or income collection.	No. There are no restrictions on the repatriation of capital, profits, and income.	Yes. The Consolidated FX Rules and regulations by the BSP, under Circular 1389, requires foreign investments to be registered with the BSP in order to obtain a BSRD which is required if FX will be purchased from the banking system to service future remittances of profits and earnings and/or capital repatriation.	No. Non-resident investors freely fund trades and/or repatriate funds.	No.	Yes. Interest income and capital gains can be freely repatriated with the provision of supporting documents indicating that the money had been remitted and invested in the Vietnamese market and evidence/clearance from the tax office that all tax obligations have been fulfilled.	Indonesia prohibits repatriation. The PRC has some limitation for repatriation. The Philippines and Viet Nam require non-residents to submit appropriate documents.	Limitation on repatriation is the barrier for foreign investors, when they try to do efficient fund management.

BOT = Bank of Thailand; BSP = Banko Sentral ng Pilipinas; BSRD = Bangko Sentral Registration Document; CN = People's Republic of China; FX = foreign exchange; HK= Hong Kong, China; ID = Indonesia; IDR = Indonesian rupiah; ISIN = International Securities Identification Number; ISO = International Organization for Standardization; JP = Japan; KR = Republic of Korea; KRW = Korean won; MY = Malaysia; MYR = Malaysian ringgit; NRBA = Nonresident Baht Account; NRBS =Nonresident Baht Account for Securities; PH = Philippines; QFII = Qualified Foreign Institutional Investors; SAFE = State Administration of Foreign Exchange; SG = Singapore; SGD = Singapore dollar; TH = Thailand; THB = Thai baht; USD = US dollar; VN = Viet Nam; VND = Vietnamese dong.

Source: ABMF SF2 members, experts, and observers compiled by ADB consultant for ABMF SF2.

Appendix 8
Resource Information

Association of National Numbering Agencies (ANNA). http://www.anna-web.org/index.php

ANNA. Service Bureau. http://www.anna-web.org/files/ASB.pdf

Bank for International Settlements, Committee on Payment and Settlement Systems. 2006. *Cross-Border Collateral Arrangements*. Basel.

European Parliament. Directive 98/26/EC of the European Parliament and of the Council of 19 May 1998 on Settlement Finality in Payment and Securities Settlement Systems.

European Parliament. 2002. Directive2002/47/EC of the European Parliament and of the Council of 6 June 2002 on Financial Collateral Arrangements.

International Organization for Standards (ISO). Standards Evaluation Groups. http://www .iso20022.org/ standards_evaluation_groups.page

———. Payments Standards Evaluation Group. http://www.iso20022.org/ payments _standards_evaluation_group.page

———. Securities Standards Evaluation Group. http://www.iso20022.org/ securities _standards_evaluation_group.page

———. 2014. *ISO 20022 Settlement and Reconciliation Maintenance 2013–2014: Message Definition Report-Part 2*. Geneva.

———. 2013. *ISO 20022 Payments Clearing and Settlement August 2013: Message Definition Report*. Geneva.

———. 2013. *ISO 20022 Bank-to-Customer Cash Management May 2013: Message Definition Report-Part 2*. Geneva.

Ministry of Finance (Japan). 2014. Debt Management Report 2014. http://www.mof.go.jp/ english/jgbs/publication/debt_management_report/2014/saimu2-1-2.pdf

ADB. 2013. ASEAN+3: Information on Transaction Flows and Settlement Infrastructures http://www.adb.org/publications/asean3-information-transaction-flows-and -settlement-infrastructures

———. 2014. Basic Principles on Establishing a Regional Settlement Intermediary and Next Steps Forward: Cross-Border Settlement Infrastructure Forum. http://www.adb.org/ publications/basic-principles-establishing-regional-settlement-intermediary-next -steps

———. 2015. Progress Report on Establishing a Regional Settlement Intermediary and Next Steps: Implementing Central Securities Depository–Real-Time Gross Settlement Linkages in ASEAN+3. http://www.adb.org/publications/progress-report -establishing-regional-settlement-intermediary-and-next-steps

16th ASEAN+3 Bond Market Forum Sub-Forum 2 (ABMF SF2) on 2 September in Hong Kong, China

- A pioneering industry approach based on partnership by Mr. Stefan Lepp, Chief Executive Officer, Clearstream
- Securities numbering, including allocation of International Securities Identification Number, by Mr. Dan Kuhnel, Chairman, Association of National Numbering Agencies
- Linking Asian capital markets with the international ecosystem by Olivier Grimonpont, General Manager, Regional Head, Asia-Pacific, Euroclear
- Possible roadmap and policy recommendations (tour de table session) by members and experts

17th ABMF SF2 in Manila, Philippines

- IS0 20022 management process and governance by Mr. James Whittle, UK Payments Council
- Function and importance of National Market Practice Group by Mr. Taketoshi Mori, Bank of Mitsubishi–Tokyo UFJ
- Progress of implementation of international standards by Dr. Taiji Inui, ADB Consultant for ABMF SF2 and Senior Manager NTT DATA Corporation

18th ABMF SF2 in Manila, Philippines
- Next Steps of ABMF by Mr. Satoru Yamadera, Asian Development Bank Secretariat
- Phase 3 Report by Dr. Taiji Inui

Attachment
Typical Flow and Possible Example
of Bonds Numbering
– Government Bond and Corporate Bond –

Typical flows and possible examples of allocating International Securities Identification Number to government bonds and corporate bonds in the region were created based on information collected through market visits and answers from the questionnaire sent to the SF2 members.

BN: (Government Bond) Possible Example of Bonds Numbering

National Numbering Agency (NNA)

It is not intended to force this flow as a typical flow of bonds numbering in the market. It is an example of the possible flows.

within 24 hours

MOF

1. Issuance Information

2. Allocation of New ISIN

AMBD

3. Publication of New ISIN

Market Participants

4. Reporting New ISIN

5. Updating ISIN Database

ISIN Database

ANNA

AMBD - Autoriti Monetari Brunei Darussalam
ANNA - Association of National Numbering Agencies

BN: (Government Bond) Possible Example of Bonds Numbering

1. MOF sends issuance information to AMBD.
2. AMBD allocates ISIN within 24 hours.
3. AMBD announces new ISIN to market participants.
4. AMBD reports new ISIN to ANNA.
5. AMBD updates ISIN database.

BN = Brunei Darussalam, ISIN = International Securities Identification Number, MOF = Ministry of Finance.

BN: (Corporate Bond) Possible Example of Bonds Numbering

National Numbering Agency (NNA)

Issuers

within 24 hours

It is not intended to force this flow as a typical flow of bonds numbering in the market. It is an example of the possible flows.

Issuer

1. Issuance Information

2. Allocation of New ISIN

AMBD

3. Publication of New ISIN → Market Participants

4. Reporting New ISIN

5. Updating ISIN Database

ISIN Database

ANNA

AMBD – Autoriti Monetari Brunei Darussalam
ANNA – Association of National Numbering Agencies

BN: (Corporate Bond) Possible Example of Bonds Numbering

1. Issuance agent sends issuance information to AMBD.
2. AMBD allocates ISIN within 24 hours.
3. AMBD announces new ISIN to market participants.
4. AMBD reports new ISIN to ANNA.
5. AMBD updates ISIN database.

BN = Brunei Darussalam, ISIN = International Securities Identification Number.

CN:(Government Bond) Typical Flow of Bonds Numbering

within 48 hours

National Numbering Agency (NNA)

MOF

1. Issuance Information

CCDC

2. Forwarding Issuance Information

3. Allocating New ISIN

4. Updating ISIN Database

CSRC/CSISC

5. Announcing New ISIN

Market Participants

ISIN Database

ANNA

6. Reporting New ISIN
in about a few weeks

CCDC - China Central Depository & Clearing Co., Ltd
CSISC - China Securities International Standards Committee
CSRC - China Securities Regulatory Commission
ANNA – Association of National Numbering Agencies

CN: (Government Bond) Typical Flow of Numbering

1. MOF as the directly issuer sends issuance information to CCDC.
2. CCDC forwards the information of the bond to CSRC/CSISC to allocate new ISIN. CCDC also forwards the information of the bond to China Securities Information Technology Services (CSITS) to allocate new ISIN on behalf of CSRC (NNA)
3. CSRC/CSISC allocates ISIN within 48 hours for CSRC.
4. CSRC/CSISC updates ISIN database.
5. CSRC/CSISC publishes to market participants.
6. CSRC/CSISC reports new ISIN to ANNA (in a few weeks).

CN =People's Republic of China, ISIN = International Securities Identification Number,
MOF = Ministry of Finance.

CN: (Corporate Bond) Typical Flow of Numbering

within 48 hours

2. Registration of New Issuer's Information and Numbering Domestic Code for ISIN

3. Requesting for issuance of new ISIN

4. Allocate New ISIN

6. Announcement of New ISIN

7. Reporting New ISIN
in about a few weeks

National Numbering Agency (NNA)

5. Updating ISIN Database

CCDC – China Central Depository & Clearing Co., Ltd
SHCH – Shanghai Clearing House
CSDC – China Securities Depository and Clearing Corporation
CSRC – China Securities Regulatory Commission
CSISC – China Securities International Standards Committee
ANNA – Association of National Numbering Agencies

CN: (Corporate Bond) Typical Flow of Numbering

1. Lead manager (underwriter) which is issuance agent sends issuance information to one of CSDS (SHCH, CCDC, or CSDC) depending on the type of the bond.
2. Each CSD registers new issuer's information and numbering domestic code for ISIN.
3. Each CSD requests to issue new ISIN to CSRC/CSISC as the National Numbering Agency (NNA) in China. Each CSD also forwards the information of the bond to China Securities Information Technology Services (CSITS) to allocate new ISIN on behalf of CSRC (NNA).
4. CSRC/CSISC allocates ISIN within 48 hours for CSRC.
5. CSRC/CSISC updates ISIN database.
6. CSRC/CSISC announces new ISIN on its website.
7. CSRC/CSISC reports new ISIN to ANNA (in a few weeks).

CN = People's Republic of China, CSD = central securities depository, NNA = national numbering authority.

HK: (Government Bond) Typical Flow of Bonds Numbering

National Numbering Agency (NNA)

Treasury Department

within 1-2 days

1. Issuance Information

2. Tentative Allocation of New ISIN

HKMA

3. Requirement for New ISIN

4. Approval of New ISIN

5. Publication of New ISIN

Market Participants

HKEx

6. Reporting New ISIN

ANNA

7. Updating ISIN Database

ISIN Database

HKMA - Hong Kong Monetary Authority
HKEx - Hong Kong Exchanges and Clearing Ltd
ANNA - Association of National Numbering Agencies

HK: (Government Bond) Typical Flow of Bonds Numbering

1. Treasury Department sends issuance information to HKMA.
2. HKMA tentatively allocates new ISIN.
3. HKMA requests an approval of new ISIN to HKEx.
4. HKEx approves ISIN within 1-2 days.
5. HKEx posts new ISIN on HKEx website on the third preceding evening of listing day.
6. HKEx reports new ISIN to ANNA.
7. HKEx updates ISIN database.

Note
- Market participants in other economies can identify the relevant ISIN from the ISIN database published in the HKEx and ANNA Service Bureau websites. Then, the market participants can obtain the exact information from the prospectus and terms sheet of the corresponding ISIN from the HKEx website.

HK = Hong Kong, China; ISIN = International Securities Identification Number.

HK: (Corporate Bond) Typical Flow of Bonds Numbering

Issuers

National Numbering Agency (NNA)

Issuing Agents   within 1-2 days

1. Issuance Information

2. Tentative Allocation of New ISIN

HKMA

3. Requirement for New ISIN

4. Approval of New ISIN

Market Participants

5. Publication of New ISIN

HKEx

6. Reporting New ISIN

ANNA

7. Updating ISIN Database

ISIN Database

HKMA – Hong Kong Monetary Authority
HKEx - Hong Kong Exchanges and Clearing Ltd
ANNA - Association of National Numbering Agencies

HK: (Corporate Bond) Typical Flow of Bonds Numbering

1. Issuing agent sends issuance information to HKMA.
2. HKMA tentatively allocates new ISIN.
3. HKMA requests an approval of new ISIN to HKEx.
4. HKEx approves ISIN within 1-2 days.
5. HKEx posts new ISIN on HKEx website on the third preceding evening of listing day.
6. HKEx reports new ISIN to ANNA.
7. HKEx updates ISIN database.

Note

- Market participants in other economies can identify the relevant ISIN from the ISIN database published in the HKEx and ANNA Service Bureau websites. Then the market participants can obtain the exact information from the prospectus and terms sheet of the corresponding ISIN from the HKEx website.

HK = Hong Kong, China; ISIN = International Securities Identification Number.

ID: (Government Bond) Typical Flow of Bonds Numbering

□ National Numbering Agency (NNA)

within 24 hours

MOF DGDM

1. Issuance Information

BI

KSEI

4. Publication of New ISIN → Market Participants

2. Allocate New ISIN

3. Updating ISIN Database → ISIN Database

5. Reporting New ISIN → ANNA

BI - Bank Indonesia
DGDM - Directorate General of Debt Management
KSEI - Indonesian Central Securities Depository
        Kustodian Sentral Efek Indonesia
ANNA - Association of National Numbering Agencies

ID: (Government Bond) Typical Flow of Bonds Numbering

1. MOF sends issuance information to BI and KSEI.
2. KSEI allocates and releases new ISIN within 24 hours.
3. KSEI automatically updates ISIN database.
4. KSEI announces new ISIN to KSEI's members (securities companies and custodian banks) by e-mail and posts on KSEI website.
5. KSEI reports new ISIN to ANNA every day.

Note

• KSEI provides ISIN information on KSEI's website. Nonresident investors can get ISIN information from this website.

ID = Indonesia, ISIN = International Securities Identification Number, MOF = Ministry of Finance.
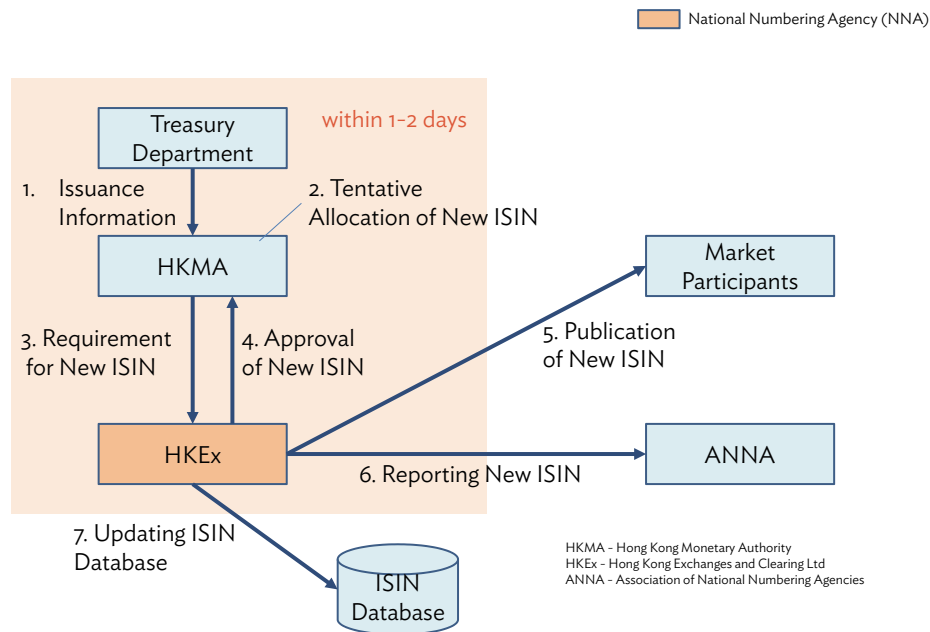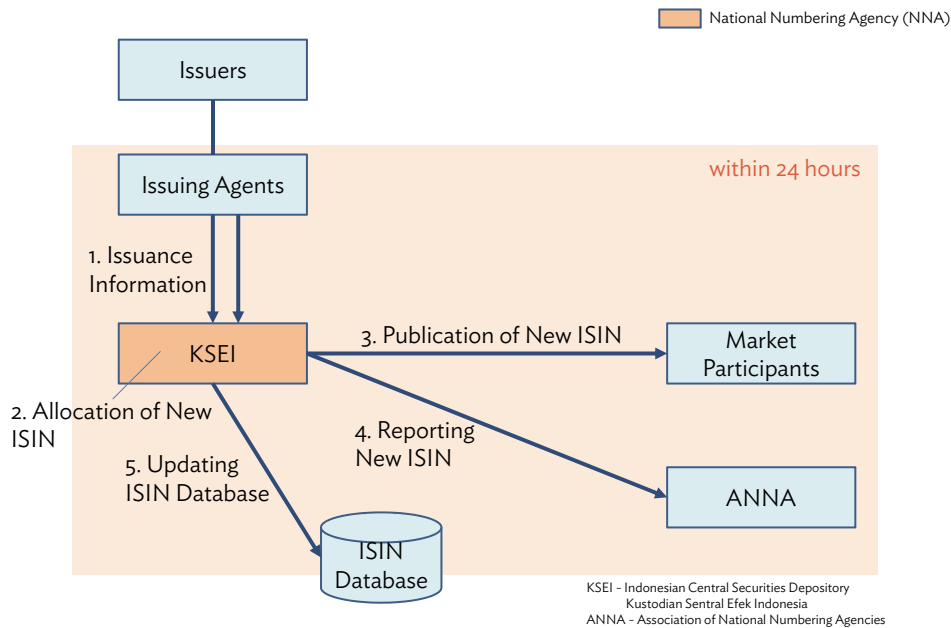
ID: (Corporate Bond) Typical Flow of Bonds Numbering

National Numbering Agency (NNA)

Issuers

within 24 hours

Issuing Agents

1. Issuance Information

KSEI

3. Publication of New ISIN

Market Participants

2. Allocation of New ISIN

4. Reporting New ISIN

5. Updating ISIN Database

ISIN Database

ANNA

KSEI - Indonesian Central Securities Depository
Kustodian Sentral Efek Indonesia
ANNA - Association of National Numbering Agencies

ID: (Corporate Bond) Typical Flow of Bonds Numbering

1. Issuing agent sends issuance information to KSEI.
2. KSEI allocates ISIN within 24 hours.
3. KSEI announces new ISIN to KSEI's members (securities companies and custodian banks) by e-mail and posts on KSEI website.
4. KSEI reports new ISIN to ANNA every day.
5. KSEI automatically updates ISIN database.

Note
- KSEI provides ISIN information on KSEI's website. Nonresident investors can get ISIN information from this website.
- KSEI publishes new ISIN in English and local language.
- KSEI will automatically update in ISIN Database for New ISIN Code.

ID = Indonesia, ISIN = International Securities Identification Number, MOF = Ministry of Finance.

JP: (Government Bond) Typical Flow of Bonds Numbering

National Numbering Agency (NNA)

within 24 hours

MOF

4. Issuance Information

1. Issuance Information

2. Tentative Allocation of New ISIN

JASDEC → Market Participants

3. Publication of New ISIN

6. Updating ISIN Database

5. Allocation of New ISIN

7. Reporting New ISIN

ISIN Database ← TSE/SICC → ANNA

BOJ – Bank of Japan
SICC – Securities Identification Code Committee
ANNA – Association of National Numbering Agencies

JP: (Government Bond) Typical Flow of Bonds Numbering

1. JASDEC obtains issuance information from MOF.
2. JASDEC tentatively allocates new ISIN.
3. JASDEC announces new ISIN to market participants.
4. TSE/SICC obtains issuance information from MOF.
5. TSE/SICC allocates new ISIN.
6. TSE/SICC updates ISIN database.
7. TSE/SICC reports new ISIN to ANNA.

- Note
  Government bonds will adopt ISIN in October 2015. Business flow of numbering may change.

SIN = International Securities Identification Number, JASDEC = Japan Securities Depository Center, JP = Japan, MOF = Ministry of Finance, TSE = Tokyo Stock Exchange.

JP: (Corporate Bond) Typical Flow of Bonds Numbering
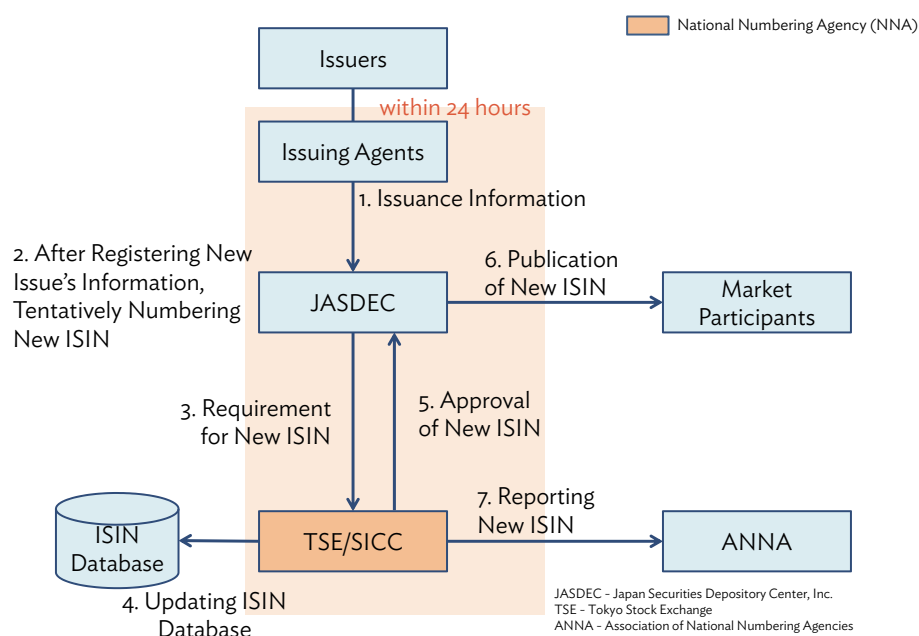
National Numbering Agency (NNA)

Issuers

within 24 hours

Issuing Agents

1. Issuance Information

2. After Registering New Issue's Information, Tentatively Numbering New ISIN

JASDEC

6. Publication of New ISIN

Market Participants

3. Requirement for New ISIN

5. Approval of New ISIN

7. Reporting New ISIN

ISIN Database

TSE/SICC

ANNA

4. Updating ISIN Database

JASDEC - Japan Securities Depository Center, Inc.
TSE - Tokyo Stock Exchange
ANNA - Association of National Numbering Agencies

JP: (Corporate Bond) Typical Flow of Bonds Numbering

1. Issuing agent sends issuance information to JASDEC.
2. After registering new issue's information, JASDEC tentatively numbers New ISIN
3. JASDEC requests new ISIN to TSE/SICC.
4. TSE/SICC updates ISIN database.
5. TSE/SICC approves new ISIN within 24 hours.
6. JASDEC announces new ISIN to market participants 4 times a day and posts new ISIN on the JASDEC website once a day.
7. TSE/SICC reports new ISIN to ANNA.

Note
• Corporate bonds have already adopted ISIN.

ISIN = International Securities Identification Number, JP = Japan, SICC = Securities Identification Code Committee.

KH: (Government Bond) Possible Example of Bonds Numbering

National Numbering Agency (NNA)

MEF

within 24 hours

1. Issuance Information

2. Tentative Allocation of New ISIN

It is not intended to force this flow as a typical flow of bonds numbering in the market. It is an example of the possible flows.

NBC

3. Requirement for New ISIN

4. Approval of New ISIN

CSX

5. Publication of New ISIN

Market Participants

6. Reporting New ISIN

7. Updating ISIN Database

ISIN Database

ANNA

MEF – Ministry of Economy and Finance
NBC – National Bank of Cambodia
CSX - Cambodia Securities Exchange
ANNA – Association of National Numbering Agencies

KH: (Government Bond) Possible Example of Bonds Numbering

1. MEF sends issuance information to NBC.
2. NBC tentatively allocates new ISIN.
3. NBC requests to assign new ISIN to CSX.
4. CSX assigns ISIN within 24 hours.
5. CSX announces new ISIN to market participants.
6. CSX reports new ISIN to ANNA.
7. CSX updates ISIN database.

ISIN = International Securities Identification Number, KH = Cambodia.

KH: (Corporate Bond) Possible Example of Bonds Numbering
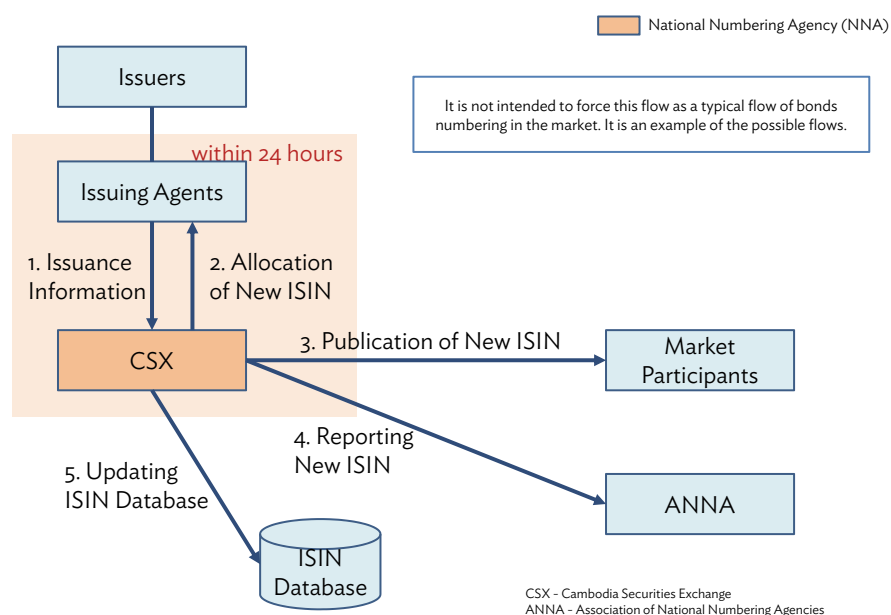
National Numbering Agency (NNA)

It is not intended to force this flow as a typical flow of bonds numbering in the market. It is an example of the possible flows.

Issuers

within 24 hours

Issuing Agents

1. Issuance Information

2. Allocation of New ISIN

CSX

3. Publication of New ISIN → Market Participants

4. Reporting New ISIN → ANNA

5. Updating ISIN Database → ISIN Database

CSX – Cambodia Securities Exchange
ANNA – Association of National Numbering Agencies

KH: (Corporate Bond) Possible Example of Bonds Numbering

1. Issuing agent sends issuance information to CSX.
2. CSX allocates ISIN within 24 hours.
3. CSX announces new ISIN to market participants.
4. CSX reports new ISIN to ANNA.
5. CSX updates ISIN database.

ISIN = International Securities Identification Number, KH = Cambodia

KR: (Government Bond) Typical Flow of Bonds Numbering

National Numbering Agency (NNA)

within 24 hours

MOSF

1. Issuance Information

BOK

2. Apply   3. Assign

KOSCOM → Market Participants

4. Inform

KRX → ANNA

6. Report

5. Update → ISIN Database

MOSF –Ministry of Strategy and Finance
BOK –Bank of Korea
KRX – Korean Exchange
KOSCOM - Financial IT & information vendor
ANNA - Association of National Numbering Agencies

KR: (Government Bond) Typical Flow of Bonds Numbering

1. MOSF notifies issuance information to BOK
2. BOK applies for a new ISIN code.
3. KRX assigns ISIN.
4. KRX posts the ISIN code on its website and informs KOSCOM every 30 seconds.
5. KRX updates its ISIN database.
6. KRX reports to ANNA.

Notes
- Provided that all submitted data and document are correct, ISIN is allocated within the day of application.

ISIN = International Securities Identification Number, KOSCOM = Korea Securities Computing Corporation, KR = Republic of Korea.

KR: (Corporate Bond) Typical Flow of Bonds Numbering

National Numbering Agency (NNA)

Issuers

Issuing Agents

within 24 hours

2.Assign

1.Apply

KOSCOM

Market Participants

3. Inform

KRX

ANNA

5. Report

4. Update

ISIN Database

KRX – Korean Exchange
KOSCOM - Financial IT & information vendor
ANNA – Association of National Numbering Agencies
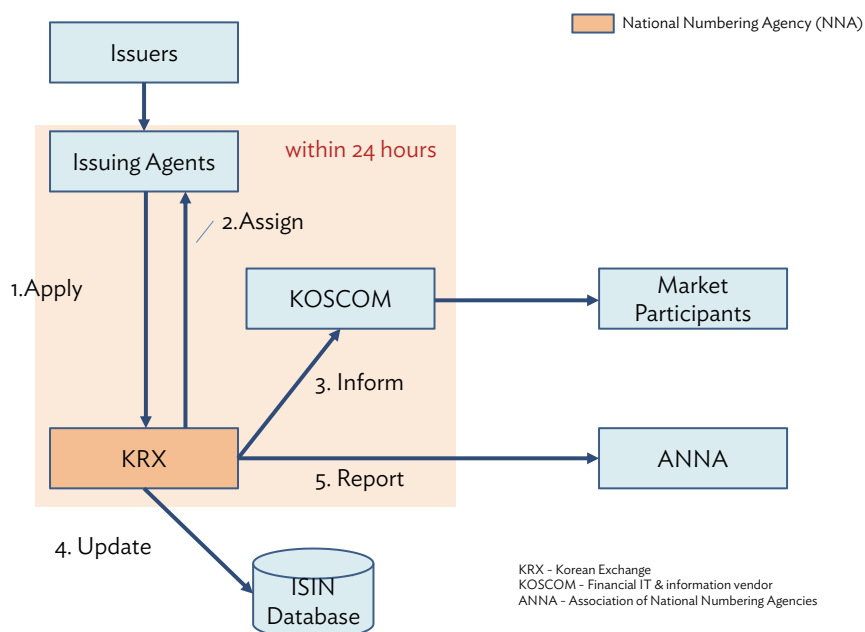
KR: (Corporate Bond) Typical Flow of Bonds Numbering

1. Issuer or issuing agent applies for a new ISIN code.
2. KRX assigns ISIN.
3. KRX posts the ISIN code on its website and informs KOSCOM every 30 seconds.
4. KRX updates its ISIN database.
5. KRX reports to ANNA.

Notes

- Provided that all submitted data and documents are correct, ISIN is allocated within the day of application.

ISIN = International Securities Identification Number, KOSCOM = Korea Securities Computing Corporation, KR = Republic of Korea.

LA: (Government Bond) Possible Example of Bonds Numbering

National Numbering Agency (NNA)

within 24 hours

MOF

1. Issuance Information

2. Tentative Allocation of New ISIN

BOL

It is not intended to force this flow as a typical flow of bonds numbering in the market. It is an example of the possible flows.

3. Requirement for New ISIN

4. Approval of New ISIN

LSX

5. Publication of New ISIN → Market Participants

6. Reporting New ISIN

7. Updating ISIN Database

ISIN Database

ANNA

BOL – Bank of the Lao PDR
LSX – Lao Securities Exchange
ANNA – Association of National Numbering Agencies

LA: (Government Bond) Possible Example of Bonds Numbering

1. MOF sends issuance information to BOL.
2. BOL tentatively allocates new ISIN.
3. BOL requests to assign new ISIN to LSX.
4. LSX assigns ISIN within 24 hours.
5. LSX announces new ISIN to market participants.
6. LSX reports new ISIN to ANNA.
7. LSX updates ISIN database.

ISIN = International Securities Identification Number, LA =Lao People's Democratic Republic,
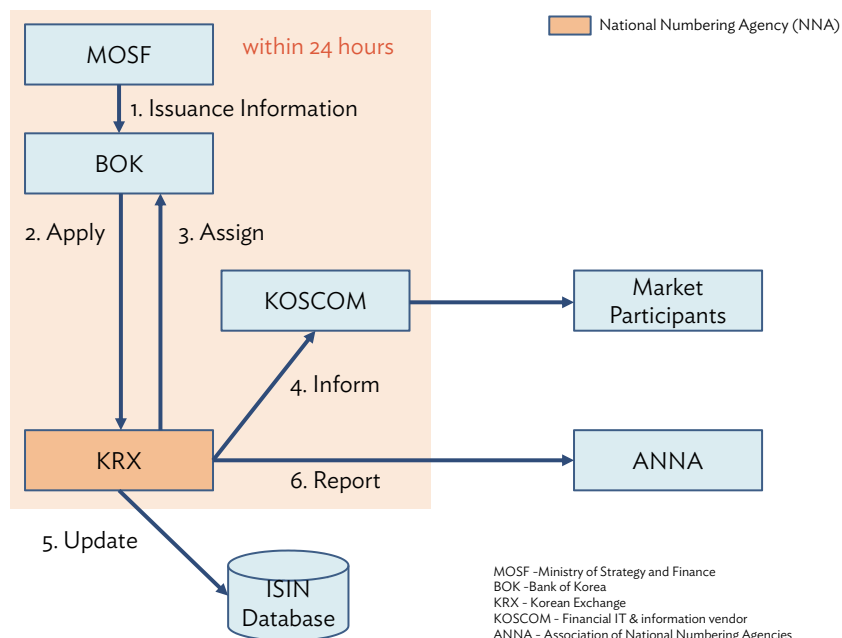MOF = Ministry of Finance.

LA: (Corporate Bond) Possible Example of Bonds Numbering

[Diagram]

National Numbering Agency (NNA)

Issuers

within 24 hours

Issuing Agents

It is not intended to force this flow as a typical flow of bonds numbering in the market. It is an example of the possible flows.

1. Issuance Information

2. Allocation of New ISIN

LSX

3. Publication of New ISIN → Market Participants

4. Reporting New ISIN → ANNA

5. Updating ISIN Database → ISIN Database

LSX – Lao Securities Exchange
ANNA – Association of National Numbering Agencies

LA: (Corporate Bond) Possible Example of Bonds Numbering

1. Issuance agent sends issuance information to LSX.
2. LSX allocates ISIN within 24 hours.
3. LSX announces new ISIN to market participants.
4. LSX reports new ISIN to ANNA.
5. LSX updates ISIN database.

ISIN = International Securities Identification Number, LA= Lao People's Democratic Republic.

MM: (Government Bond) Possible Example of Bonds Numbering

within 24 hours

National Numbering Agency (NNA)

MOF

1. Issuance Information

2. Tentative Allocation of New ISIN

It is not intended to force this flow as a typical flow of bonds numbering in your market. It is one example of the possible flows.

CBM

3. Requirement for New ISIN

4. Approval of New ISIN

MSEC

5. Publication of New ISIN

Market Participants

6. Reporting New ISIN

7. Updating ISIN Database

ISIN Database

ANNA

CBM – Central Bank of Myanmar
MSEC – Myanmar Securities Exchange Centre
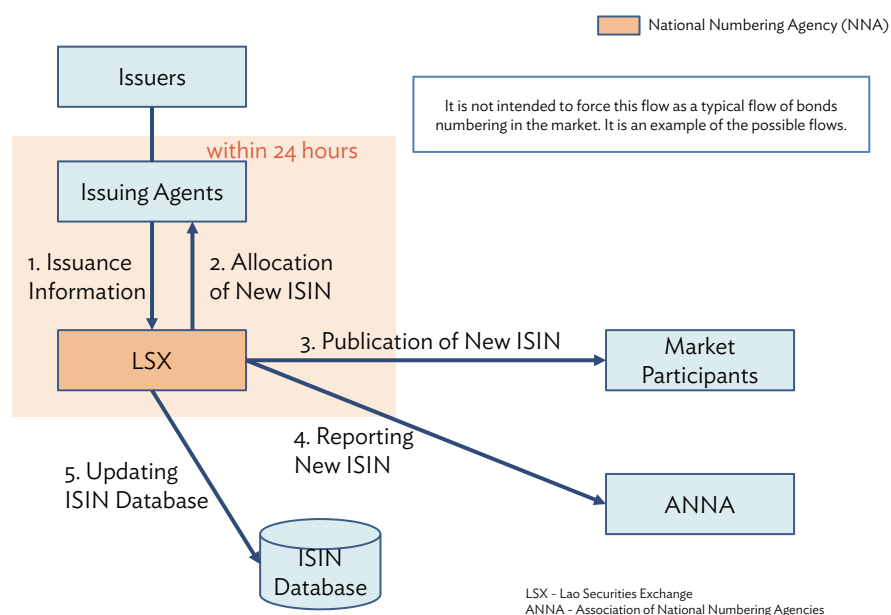ANNA – Association of National Numbering Agencies

MM: (Government Bond) Possible Example of Bonds Numbering

1. MOF sends issuance information to CBM.
2. CBM tentatively allocates new ISIN.
3. CBM requests to assign new ISIN to MSEC.
4. MSEC assigns ISIN within 24 hours.
5. MSEC announces new ISIN to market participants.
6. MSEC reports new ISIN to ANNA.
7. MSEC updates ISIN database.

ISIN = International Securities Identification Number, MM = Myanmar.

MM: (Corporate Bond) Possible Example of Bonds Numbering

National Numbering Agency (NNA)

It is not intended to force this flow as a typical flow of bonds numbering in your market. It is one example of the possible flows.

Issuers

within 24 hours

Issuing Agents

1. Issuance Information

2. Allocation of New ISIN

MSEC

3. Publication of New ISIN → Market Participants

4. Reporting New ISIN

5. Updating ISIN Database

ISIN Database

ANNA

MSEC – Myanmar Securities Exchange Centre
ANNA – Association of National Numbering Agencies

MM: (Corporate Bond) Possible Example of Bonds Numbering

1. Issuance agent sends issuance information to MSEC.
2. MSEC allocates ISIN within 24 hours.
3. MSEC announces new ISIN to market participants.
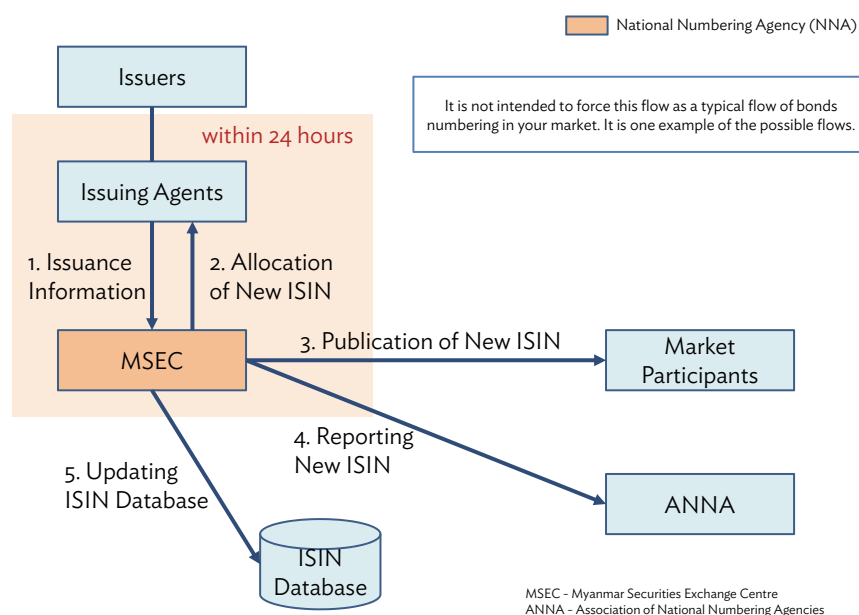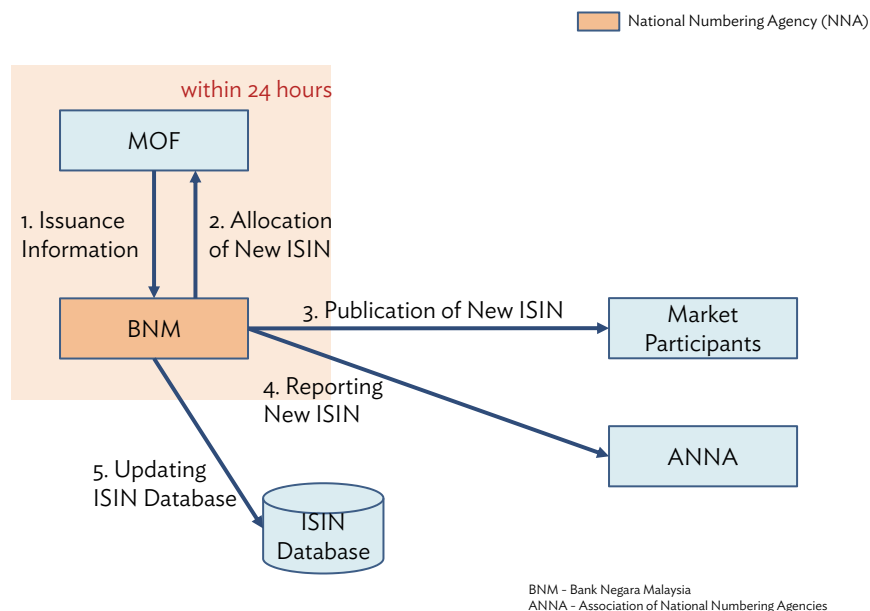4. MSEC reports new ISIN to ANNA.
5. MSEC updates ISIN database.

ISIN = International Securities Identification Number, MM = Myanmar.

MY: (Government Bond) Typical Flow of Bonds Numbering

National Numbering Agency (NNA)

within 24 hours

MOF

1. Issuance Information

2. Allocation of New ISIN

BNM

3. Publication of New ISIN → Market Participants

4. Reporting New ISIN → ANNA

5. Updating ISIN Database → ISIN Database

BNM – Bank Negara Malaysia
ANNA – Association of National Numbering Agencies

MY: (Government Bond) Typical Flow of Bonds Numbering

1. MOF sends issuance information to BNM.
2. BNM allocates ISIN within 24 hours.
3. BNM announces new ISIN to market participants.
4. BNM reports new ISIN to ANNA.
5. BNM updates ISIN database.

ISIN = International Securities Identification Number, MOF = Ministry of Finance, MY = Malaysia.

MY: (Corporate Bond) Typical Flow of Bonds Numbering

MY: (Corporate Bond) Typical Flow of Bonds Numbering

1. Issuing agent sends issuance information to BNM.
2. BNM allocates ISIN within 24 hours.
3. BNM announces new ISIN to market participants.
4. BNM reports new ISIN to ANNA.
5. BNM updates ISIN database.

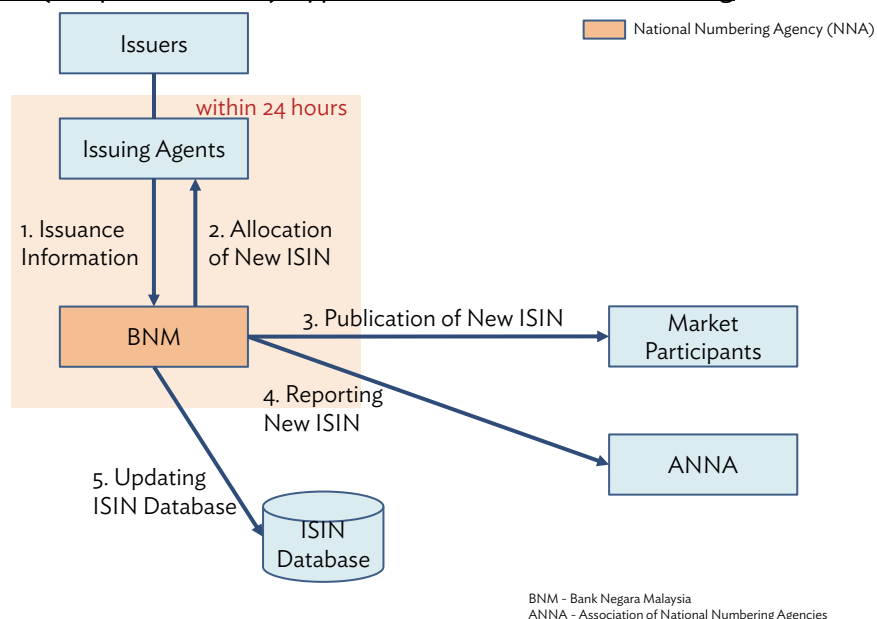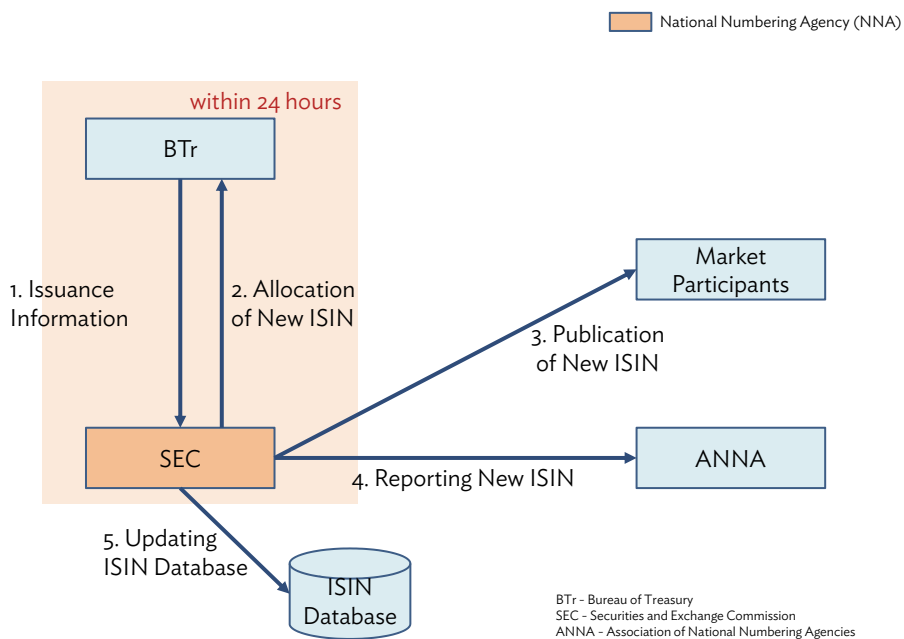ISIN = International Securities Identification Number, MY = Malaysia.

PH: (Government Bond) Typical Flow of Bonds Numbering

☐ National Numbering Agency (NNA)

within 24 hours

BTr

Market
Participants

1. Issuance
Information

2. Allocation
of New ISIN

3. Publication
of New ISIN

SEC

ANNA

4. Reporting New ISIN

5. Updating
ISIN Database

ISIN
Database

BTr – Bureau of Treasury
SEC - Securities and Exchange Commission
ANNA – Association of National Numbering Agencies

PH: (Government Bond) Typical Flow of Bonds Numbering

1. BTr sends issuance information to SEC.
2. SEC as NNA allocates ISIN within 24 hours.
3. SEC announces new ISIN to market participants through exchange and SEC website.
4. SEC reports new ISIN to ANNA.
5. SEC updates ISIN database.

Note
- For registered securities, ISIN shall be allocated once registration is approved.
- For exempt securities/ transactions, prior ISIN allocation shall be a requirement for listing in an exchange.

ISIN = International Securities Identification Number, PH = Philippines.

PH: (Corporate Bond) Typical Flow of Bonds Numbering

Issuers

within 24 hours

Issuing Agents

National Numbering Agency (NNA)

1. Issuance Information

2. Allocation of New ISIN

SEC

Market Participants

3. Publication of New ISIN

ANNA

4. Reporting New ISIN

5. Updating ISIN Database

ISIN Database

SEC - Securities and Exchange Commission
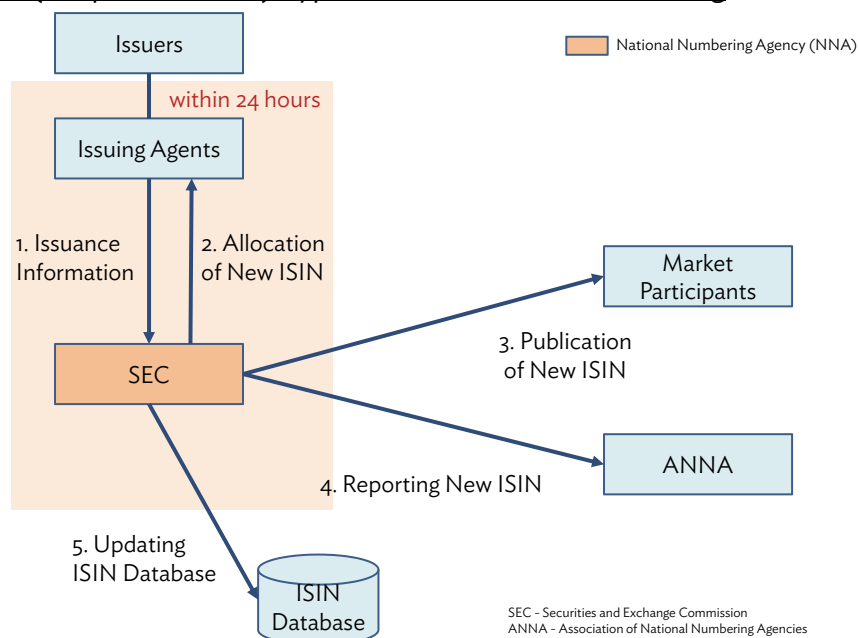ANNA - Association of National Numbering Agencies

PH: (Corporate Bond) Typical Flow of Bonds Numbering

1. Issuing agent sends issuance information to SEC.
2. SEC as NNA allocates ISIN within 24 hours.
3. SEC announces new ISIN to market participants through exchange and SEC website.
4. SEC reports new ISIN to ANNA.
5. SEC updates ISIN database.

Note
- For registered securities, ISIN shall be allocated once registration is approved.
- For exempt securities/ transactions, prior ISIN allocation shall be a requirement for listing in an exchange.

ISIN = International Securities Identification Number, PH = Philippines.

SG: (Government Bond) Typical Flow of Bonds Numbering

National Numbering Agency (NNA)

within 24 hours

MOF

4. Updating
ISIN Database

1. Issuance Information

5. Publication
of New ISIN

ISIN
Database

MAS

Market
Participants

2. Allocation of New
ISIN and Reporting

3. Confirmation of
New ISIN

6. Reporting
New ISIN

SGX

ANNA

MAS - Monetary Authority of Singapore
SGX - Singapore Exchange Ltd.,
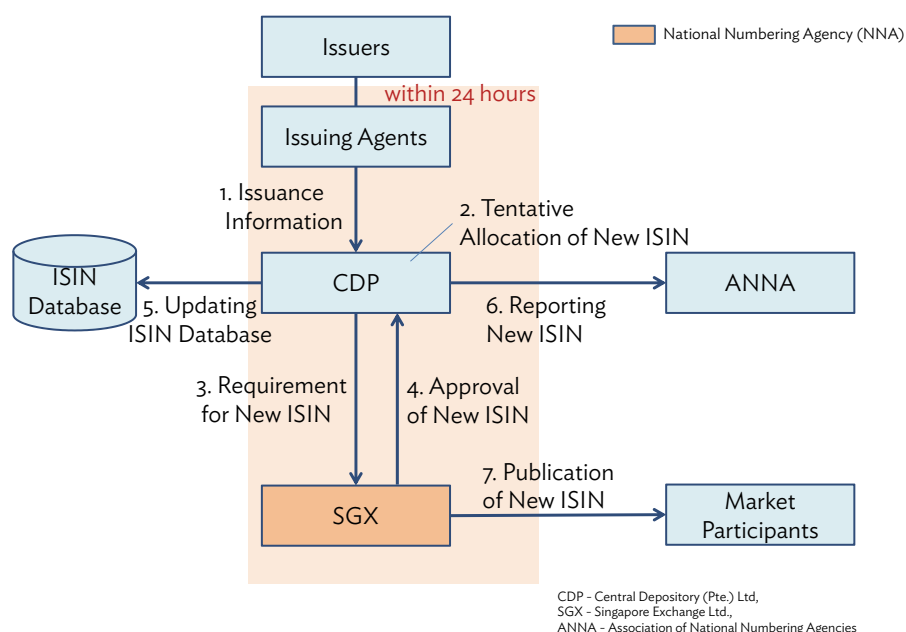ANNA - Association of National Numbering Agencies

SG: (Government Bond) Typical Flow of Bonds Numbering

1. MOF sends issuance information to MAS.
2. MAS allocates new ISIN and report to SGX within 24 hours.
3. SGX confirms ISIN.
4. MAS updates ISIN database.
5. MAS posts a daily ISIN file on the MAS website.
6. SGX submits to ANNA a monthly report about ISIN.

Note
- ISIN (ISO 6166) is used in conjunction with place of trade and country to uniquely identify an instrument. BIC (ISO 9362) will be made compulsory. SGX plans to improve this further to add CFI (Classification of Financial Instruments: ISO 10962) to supplement ISIN.

ISIN = International Securities Identification Number, MOF = Ministry of Finance, SG = Singapore.

SG: (Corporate Bond) Typical Flow of Bonds Numbering

Issuers

National Numbering Agency (NNA)

within 24 hours

Issuing Agents

1. Issuance Information

2. Tentative Allocation of New ISIN

ISIN Database

CDP

ANNA

5. Updating ISIN Database

6. Reporting New ISIN

3. Requirement for New ISIN

4. Approval of New ISIN

7. Publication of New ISIN

SGX

Market Participants

CDP - Central Depository (Pte.) Ltd,
SGX - Singapore Exchange Ltd.,
ANNA - Association of National Numbering Agencies

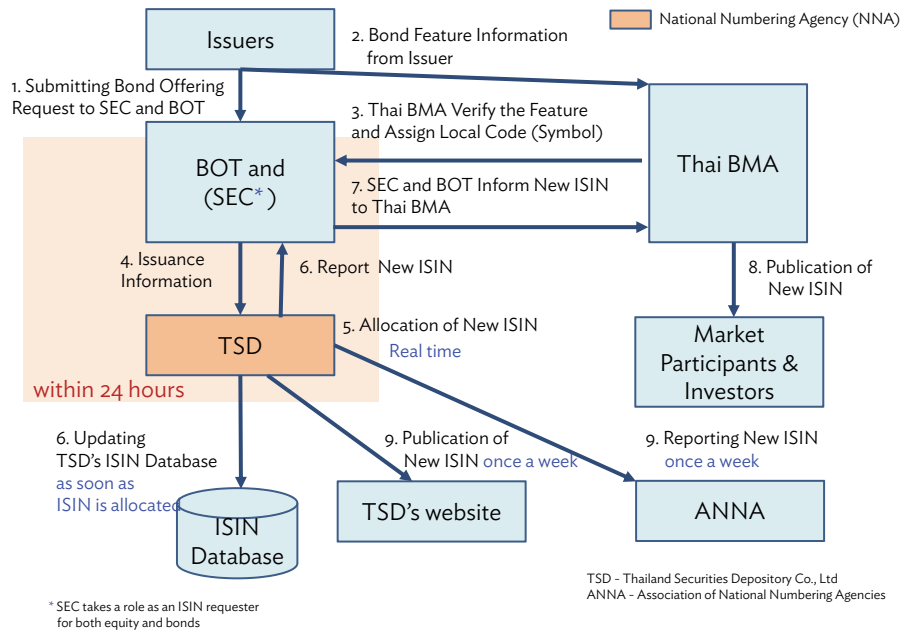## SG: (Corporate Bond) Typical Flow of Bonds Numbering

1. Issuing agent sends issuance information to CDP.
2. CDP tentatively allocates new ISIN.
3. CDP requests new ISIN to SGX.
4. SGX approves ISIN within 24 hours.
5. CDP updates ISIN database.
6. CDP submits to ANNA a monthly report about ISIN.
7. SGX posts a daily ISIN file on the SGX website.

Note
- ISIN (ISO 6166) is used in conjunction with place of trade and country to uniquely identify an instrument. BIC (ISO 9362) will be made compulsory. SGX plans to improve this further to add CFI (Classification of Financial Instruments: ISO 10962) to supplement ISIN.

ISIN = International Securities Identification Number, SG = Singapore.

TH: (Government Bond) Typical Flow of Allocation of ISIN

Issuers

2. Bond Feature Information from Issuer

National Numbering Agency (NNA)

1. Submitting Bond Offering Request to SEC and BOT

BOT and (SEC*)

3. Thai BMA Verify the Feature and Assign Local Code (Symbol)

7. SEC and BOT Inform New ISIN to Thai BMA

Thai BMA

4. Issuance Information

6. Report New ISIN

8. Publication of New ISIN

TSD

5. Allocation of New ISIN
Real time

within 24 hours

Market Participants & Investors

6. Updating TSD's ISIN Database
as soon as ISIN is allocated

9. Publication of New ISIN once a week

9. Reporting New ISIN
once a week

ISIN Database

TSD's website

ANNA

TSD - Thailand Securities Depository Co., Ltd
ANNA - Association of National Numbering Agencies

* SEC takes a role as an ISIN requester for both equity and bonds
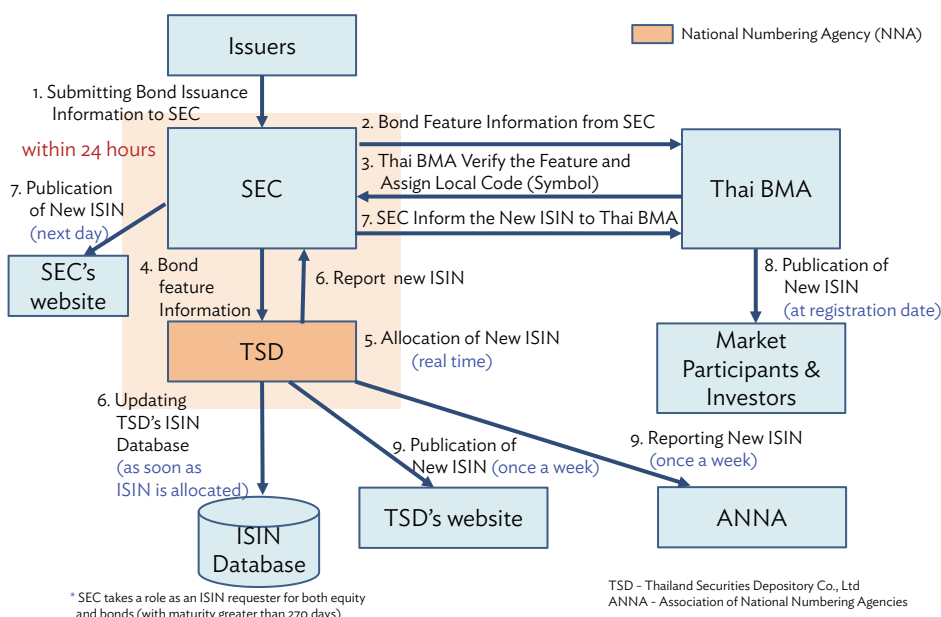
TH: (Government Bond) Typical Flow of Bonds Numbering

1. Issuer submits bond offering request form to SEC and BOT.
2. Issuer submits bond feature information to Thai BMA.
3. After verifying the information, Thai BMA assigns local bond code (symbol) and informs it to SEC and BOT.
4. SEC and BOT forward bond issuance information to TSD.
5. TSD allocates ISIN as soon as it receives bond feature information from SEC or BOT.
6. TSD reports new ISIN to SEC and BOT and updates TSD's ISIN database.
7. SEC and BOT inform new ISIN to Thai BMA.
8. Thai BMA publishes new ISIN including bond feature information to its website as well as informs it to market participants and investors.
9. TSD reports new ISIN to ANNA and publishes on its website once a week.

BMA = Bond Market Association, BOT = Ban of Thailand, SEC = Security and Exchange Commission, ISIN = International Securities Identification Number, TH = Thailand.

TH: (Corporate Bond) Typical Flow of Allocation of ISIN

* SEC takes a role as an ISIN requester for both equity and bonds (with maturity greater than 270 days)

TSD – Thailand Securities Depository Co., Ltd
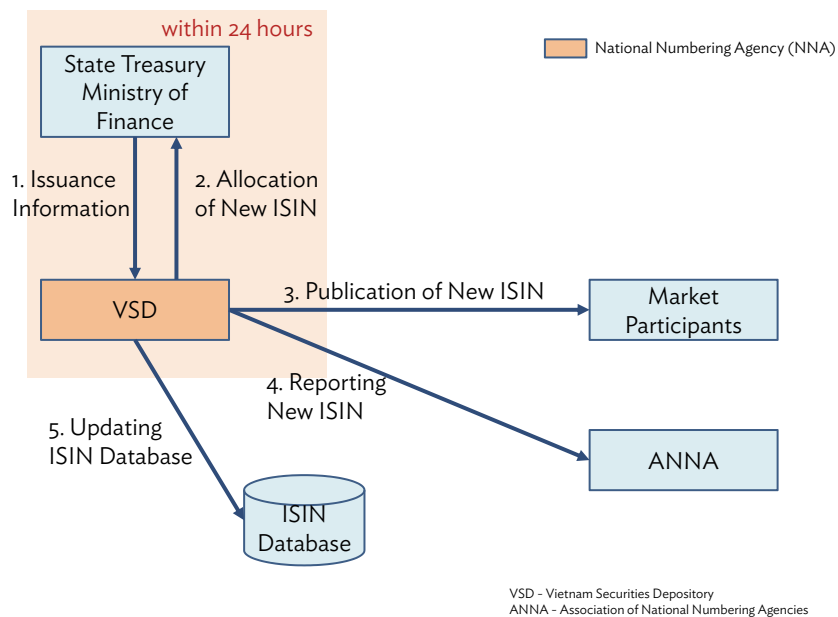ANNA – Association of National Numbering Agencies

TH: (Corporate Bond) Typical Flow of Bonds Numbering

1. Issuer submits bond issuance information to SEC.
2. SEC sends bond feature information to Thai BMA.
3. After verifying the information, Thai BMA assigns local bond code (symbol) and informs it to SEC.
4. SEC forwards bond feature to TSD.
5. TSD allocates ISIN as soon as receiving bond feature information from SEC.
6. TSD reports new ISIN to SEC and updates TSD's ISIN database as soon as new ISIN is allocated.
7. SEC informs new ISIN to Thai BMA and publishes it on SEC's website (next day after receiving new ISIN).
8. Thai BMA publishes new ISIN (at registration date) including bond feature information to its website as well as informs it to market participants and investors.
9. TSD reports new ISIN to ANNA and publishes it on its website once a week.

BMA = Bond Market Association, BOT = Ban of Thailand, SEC = Security and Exchange Commission, ISIN = International Securities Identification Number, TH = Thailand.

VN: (Government Bond) Typical Flow of Bonds Numbering

within 24 hours

State Treasury
Ministry of
Finance

☐ National Numbering Agency (NNA)

1. Issuance
Information

2. Allocation
of New ISIN

VSD

3. Publication of New ISIN

Market
Participants

4. Reporting
New ISIN

5. Updating
ISIN Database

ISIN
Database

ANNA

VSD – Vietnam Securities Depository
ANNA – Association of National Numbering Agencies

VN: (Government Bond) Typical Flow of Bonds Numbering
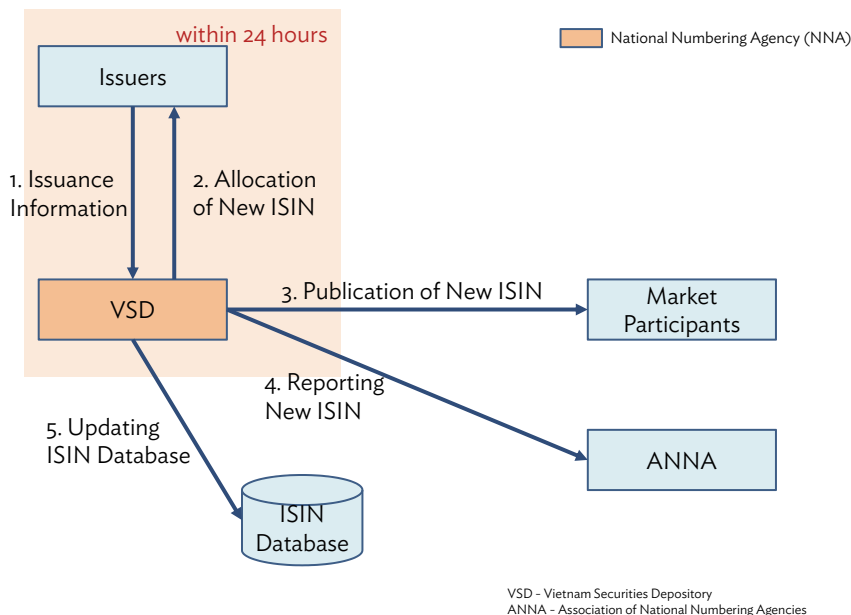
1. State Treasury Ministry of Finance sends issuance information to VSD.
2. VSD allocates ISIN within 24 hours.
3. VSD sends a written notice to the two exchanges and VSD's members and posts ISIN on VSD website.
4. VSD reports new ISIN to ANNA.
5. VSD updates ISIN database.

Notes
- It takes 1 day for issuing new bond code from issuance information to updating code database. Detailed information:
  T day: day of bond offering
  T+1: VSD registers, allocates bond codes (local code and ISIN) and updates into the database
  T+2: day of bond issuance
- Information of ISIN is uploaded onto VSD website for investors and market participants' reference. For specific information on ISIN allocation, investors could refer to the guideline on securities code allocation issued with Decision 149/QD-VSD dated 21 August 2012 by VSD.

ISIN = International Securities Identification Number, VN = Viet Nam.

VN: (Corporate Bond) Typical Flow of Bonds Numbering

within 24 hours

Issuers

1. Issuance Information

2. Allocation of New ISIN

VSD

3. Publication of New ISIN → Market Participants

4. Reporting New ISIN → ANNA

5. Updating ISIN Database → ISIN Database

National Numbering Agency (NNA)

VSD – Vietnam Securities Depository
ANNA – Association of National Numbering Agencies

VN: (Corporate Bond) Typical Flow of Bonds Numbering

1. Issuer sends issuance information to VSD.
2. VSD allocates ISIN within 24 hours.
3. VSD sends a written notice to the two exchanges and VSD's members and posts ISIN on VSD website.
4. VSD reports new ISIN to ANNA.
5. VSD updates ISIN database.

Notes

- It takes 1 day for issuing new bond code from issuance information to updating code database. Detailed information:
  T day: day of bond offering
  T+1: VSD registers, allocates bond codes (local code and ISIN) and updates into the database
  T+2: day of bond issuance
- Information of ISIN is uploaded onto VSD website for investors and market participants' reference. For specific information on ISIN allocation, investors could refer to the guideline on securities code allocation issued with Decision 149/QD-VSD dated 21 August 2012 by VSD.

ISIN = International Securities Identification Number, VN = Viet Nam.

Harmonization and Standardization of Bond Market Infrastructures in ASEAN+3
ASEAN+3 Bond Market Forum Sub-Forum 2 Phase 3 Report

This report is an outcome of Phase 3 discussions under the ASEAN+3 Bond Market Forum Sub-Forum 2, which have focused on making bond market infrastructures in the region more inter-operable through the harmonization of transaction flows, standardization of messaging items, and implementation of international standards. Most markets in the region will have commenced these harmonization and standardization efforts by 2020, thus taking a significant step toward the integration of ASEAN+3 bond markets.

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 the majority of the world's poor. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

ADB

ASIAN DEVELOPMENT BANK
6 ADB Avenue, Mandaluyong City
1550 Metro Manila, Philippines
www.adb.org