

Introduction

Overview of Previous Activities

This report is an outcome of the Phase 3 discussion of the ASEAN+3 Bond Market Forum Sub-Forum 2 (ABMF SF2).¹ ABMF SF2 was launched in 2010 with the goal of implementing cross-border straight-through-processing (STP). ABMF SF2 is under the framework of the ASEAN+3 Finance Ministers and Central Bank Governors' Meeting. ABMF SF2 members and experts are listed in the Appendix 1. An outline of ABMF SF2, including its purpose and governance structure, is also included in the Appendix 2.

During Phases 1 and 2, ABMF SF2 conducted surveys of bond market infrastructures and practices in ASEAN+3 (Figure 1).² The results revealed that robust and sound bond market infrastructures, such as central securities depository (CSD) and real-time gross settlement (RTGS) systems, are already in place in the 10 surveyed economies. Figures 2 and 3 present the market infrastructure for the government bond market and corporate bond market, respectively, in each ASEAN+3 economy.

Figures 4 and 5 present interest-payment-related entities in the government bond market and corporate bond market, respectively, in each ASEAN+3 economy.

Follow-Up on Phase 2 Policy Recommendations

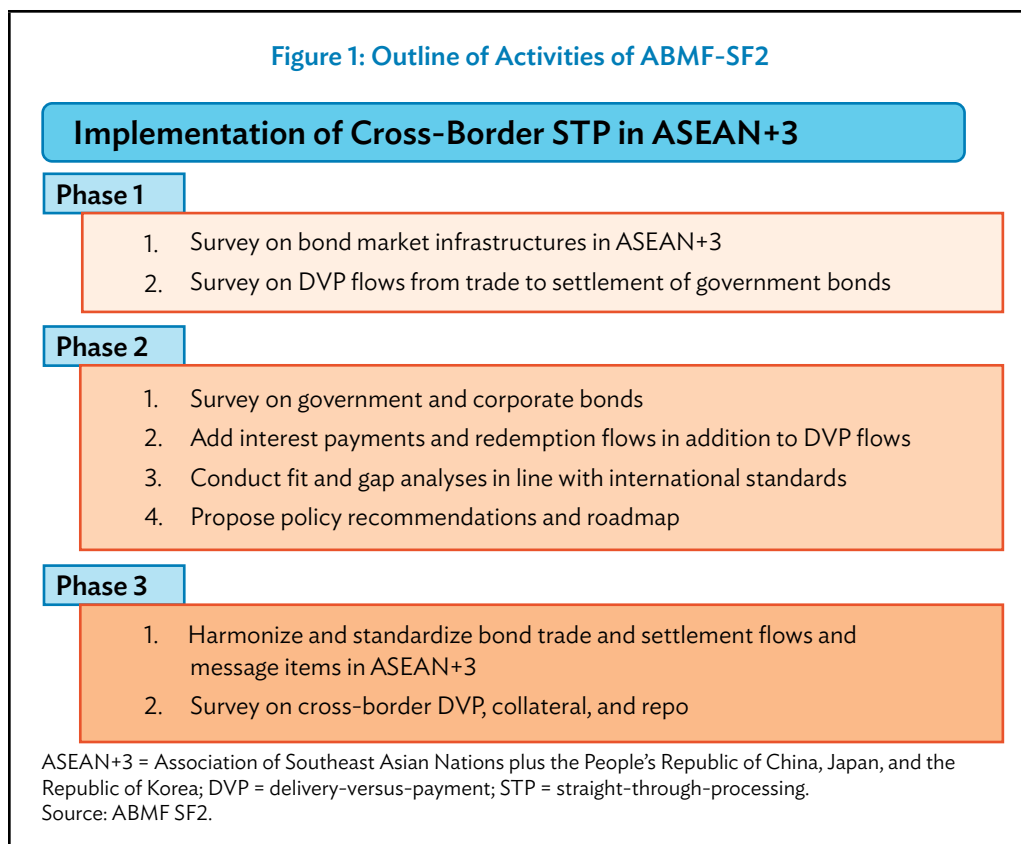
Based on the survey results, the Phase 2 Report identified a total of 19 policy recommendations in six categories. These six categories include (i) bond market infrastructures; (ii) delivery-versus-payment (DVP) flows; (iii) interest payment flows; (iv) message standards, including numbering and coding; (v) market practices and other issues; and (vi) cross-border STP and local currency liquidity.

Bond Market Infrastructures

1. **Pre-settlement matching system (PSMS).** In accordance with the policy recommendation of the Phase 2 Report, PSMS is included as a part of the reference DVP flow.

¹ ASEAN+3 comprises the 10 members of the Association of Southeast Asian Nations (ASEAN) plus the People's Republic of China, Japan, and the Republic of Korea.

² The following documents cover in more detail the activities of ABMF SF2 during Phases 1 and 2: *ASEAN+3 Bond Market Guide (ABMF Phase 1 Report)*. <http://www.adb.org/publications/asean3-bond-market-guide>; *ASEAN+3: Information on Transaction Flows and Settlement Infrastructures (ABMF SF2 Phase 2 Report)*. http://asianbondsonline.adb.org/features/abmf_phase_2_report/subforum2_asean+3_information_transaction_flows_settlement_infrastructures.pdf#search='ASEAN3%3A+Information+on+Transaction+Flows+and+Settlement+Infrastructures

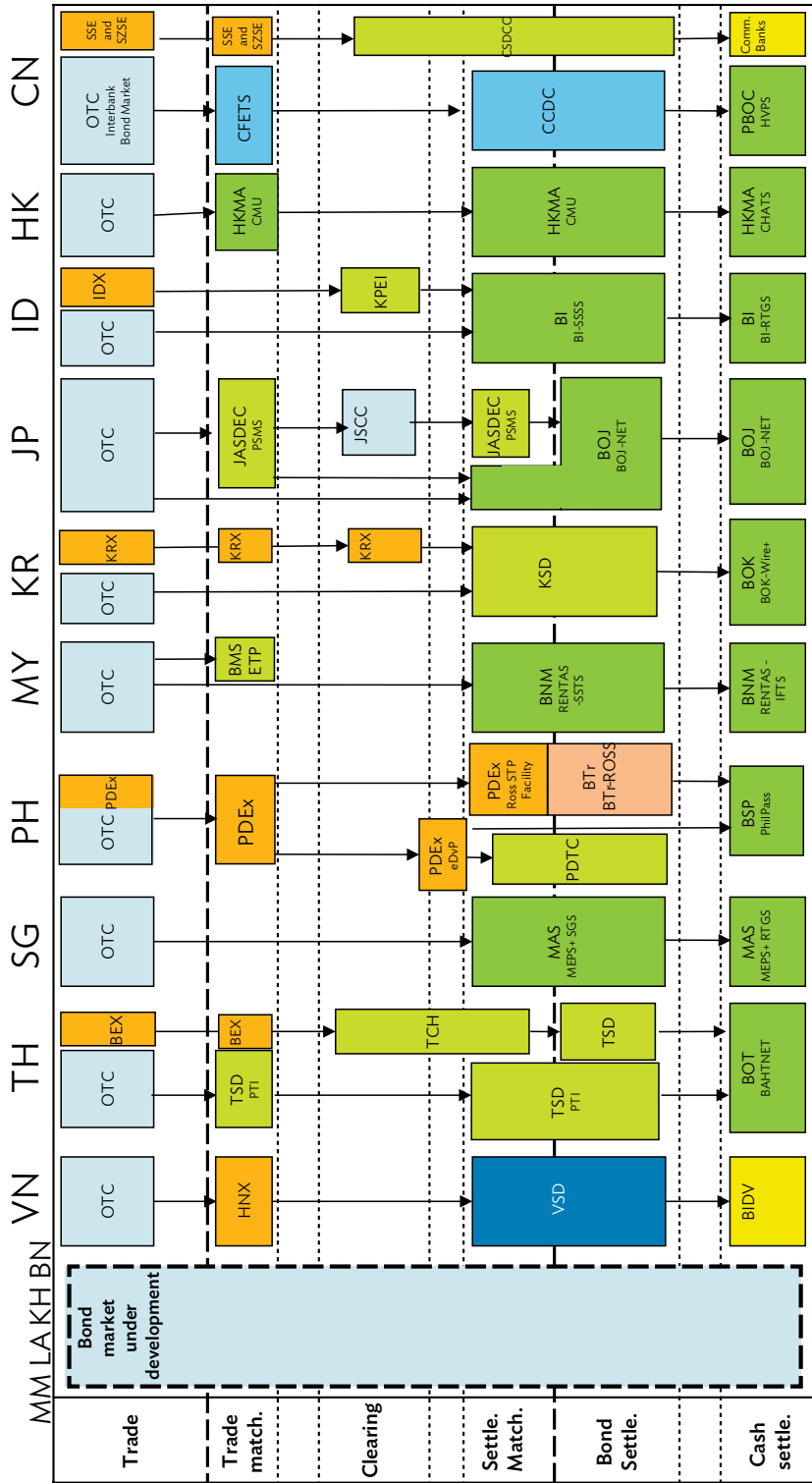


2. **Central counterparty (CCP).** Since the Phase 2 Report pointed out that developing CCP is currently not an urgent priority for straight bond trade and settlement, CCP remains out of the scope of ABMF SF2.
3. **Central and local matching.** Though both central and local matching models are regarded as standards for ASEAN+3, central matching seems to be the de facto standard in ASEAN+3.
4. **Bond settlement using central bank money.** In accordance with the policy recommendation of Phase 2 Report, government bonds are to be settled with central bank money in ASEAN+3.
5. **Price discovery and transparency.** Strengthening price discovery and transparency was one of the recommendations of the Phase 2 Report, but continues to be a challenge—survey methodology appropriate for ASEAN+3 markets has not yet been developed—and may be further discussed with regard to the Information Platform.

DVP Flows

1. **Enhancing STP in CSD-related data flows.** Enhancing STP was recommended in the Phase 2 Report. The reference DVP flow will contribute to implementing STP in the region.
2. **Developing a reference model for DVP flows.** Developing a reference DVP flow was one of the most important recommendations of the Phase 2 Report. A reference DVP flow was proposed and accepted by members and experts as a result

Figure 2: ASEAN+3 Government Bond Market Diagram



NOTE:

- Exchange (Orange box)
- Central Bank (Green box)
- Government (Blue box)
- Exchange related (Light Green box)
- Central Bank related (Light Blue box)
- Government related (Light Orange box)
- Commercial Bank (Yellow box)

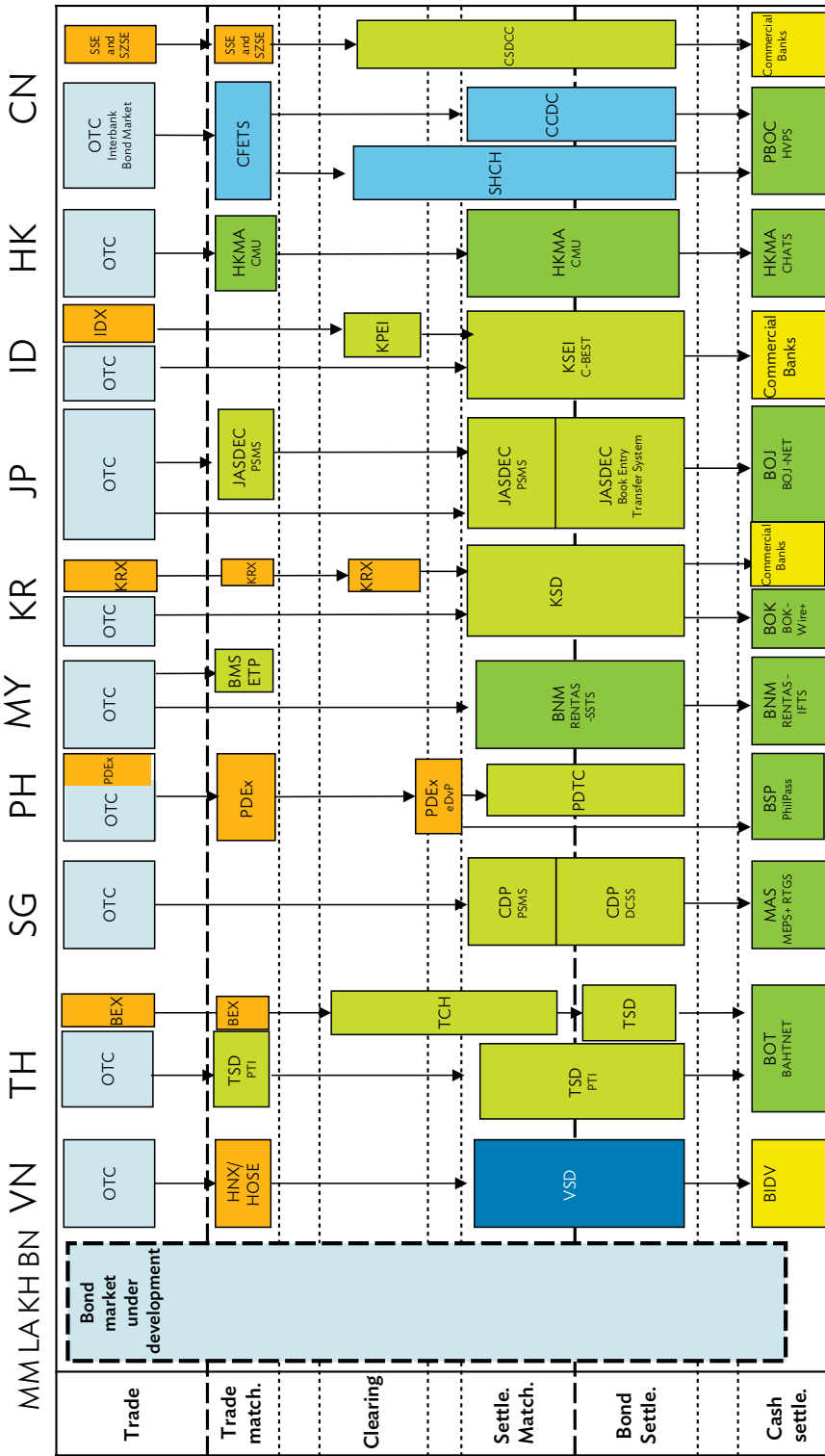
NOTE: Direct inter-system connection (solid arrow), Indirect connection; trade data (bond settlement instructions) are entered into CSD by agent custodians (dashed arrow). This diagram shows entities involved in major types of transactions. Retail bond markets are not included in this diagram.

ASEAN+3 = Association of Southeast Asian Nations plus the People's Republic of China, Japan, and the Republic of Korea; BAHTNET = Bank of Thailand Automated High-value Transfer Network; BI = Bank Indonesia; BIDV = Bank for Investment and Development of Vietnam; BMS = Bursa Malaysia; BN = Brunei Darussalam; BNM = Bank Negara Malaysia; BOJ = Bank of Japan; BOJ-NET = Bank of Japan Financial Network System; BOK = The Bank of Korea; BOK Wire+ = The Bank of Korea Financial Wire Network; BOT = Bank of Thailand; BSP = Bangko Sentral ng Pilipinas; BT = Bureau of the Treasury; CCDC = China Central Depository & Clearing; CFETS = China Foreign Exchange Trade System; CHATS = Clearing House Automated Transfer System; CMU = Central Moneymarkets Unit; CN = People's Republic of China; CSDCC = China Securities Depository and Clearing Corporation; eDVP = electronic delivery-versus-payment; HK = Hong Kong; China; HKMA = Hong Kong Monetary Authority; HNX = Hanoi Stock Exchange; HVP5 = High-Value Payment System; ID = Indonesia; IDX = Indonesia Stock Exchange; IFTS = Interbank Funds Transfer System; JASDEC = Japan Securities Depository Center; JP = Japan; JSCC = Japan Securities Clearing Corporation; KH = Cambodia; KPEI = Kiriing Penjaminan Efek Indonesia (Securities Clearing Underwriting Indonesia); KR = Republic of Korea; KRX = Korea Exchange; KSD = Korea Securities Depository; LA = Lao People's Democratic Republic; MAS = Monetary Authority of Singapore; MEPS+ = MAS Electronic Payment System; MM = Myanmar; MY = Malaysia; OTC = over-the-counter; PBOC = People's Bank of China; PDEX = Philippine Dealing & Exchange Corp.; PDTC = Philippine Depository & Trust Corp.; PH = Philippines; PhilPass = Philippine Payments and Settlements System; PSMS = pre-settlement matching system; PTI = Post Trade Integration; RENTAS = Real-time Electronic Transfer of Funds and Securities System; RoSS = Registry of Scripless Securities; RTGS = real-time gross settlement; SG = Singapore; SGS = Singapore Government Securities; SSE = Shanghai Stock Exchange; SSSS = Scripless Securities Settlement System; SSTS = Scripless Securities Trading System; STP = straight-through-processing; SZSE = Shenzhen Stock Exchange; TH = Thailand; TSD = Thailand Securities Depository; VN = Viet Nam; and VSD = Vietnam Securities Depository.

Notes: This diagram shows entities involved in major types of transactions. Retail bond markets are not included in this diagram.

Source: ABMF SF2.

Figure 3: ASEAN+3 Corporate Bond Market Diagram



NOTE:

- Exchange Market
- Central Bank
- Government
- Exchange related
- Central Bank related
- Government related
- Commercial Bank

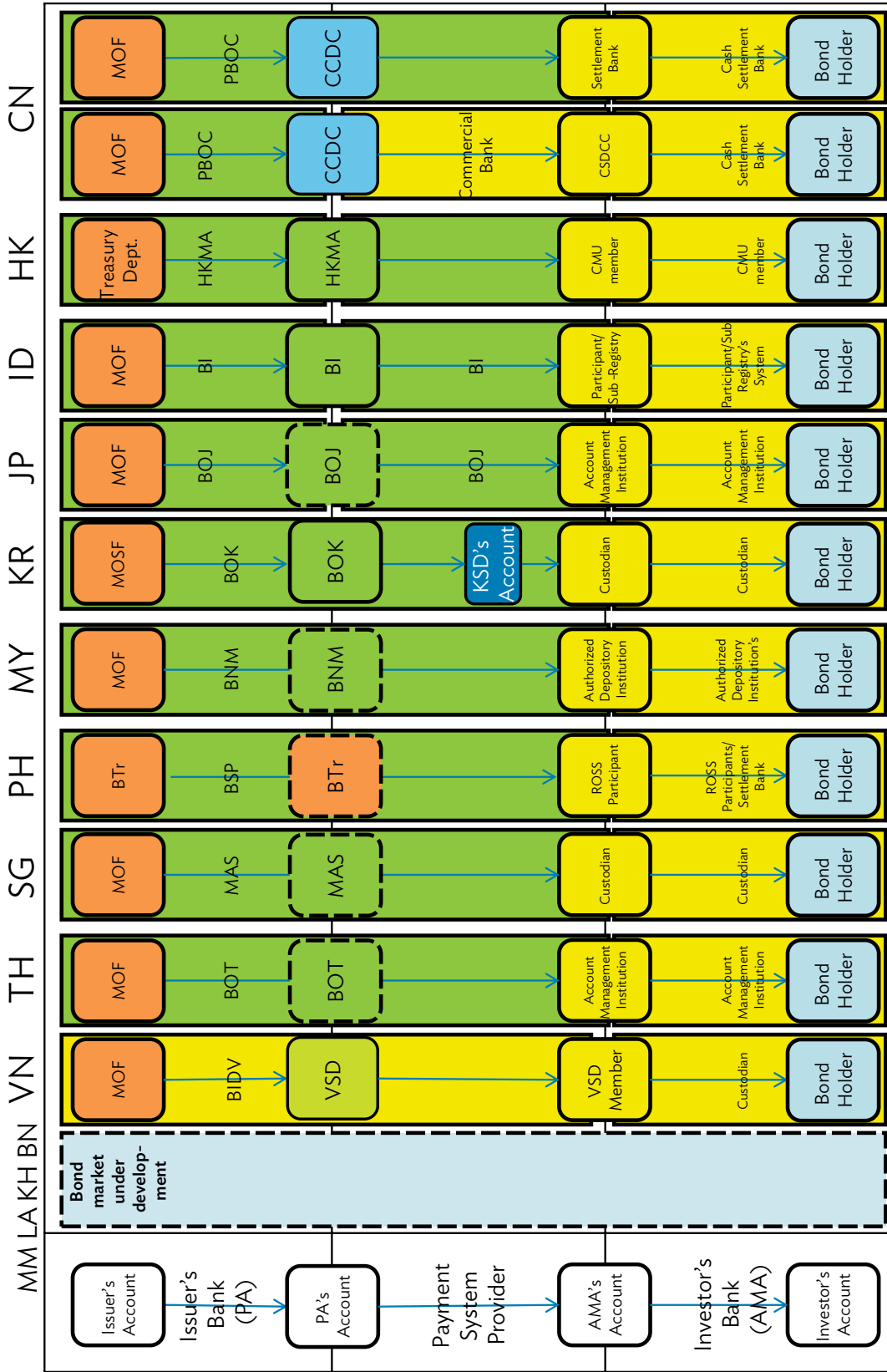
— Direct intersystem connection
 - - - Indirect connection; trade data (bond settlement instructions) are entered to CSD by agent custodians.
 This diagram shows entities that are involved in major types of transactions.
 Retail bond markets are not included in this diagram.

AMA = Account Management Agent; ASEAN+3 = Association of Southeast Asian Nations plus the People's Republic of China, Japan, and the Republic of Korea; BAHTNET = Bank of Thailand Automated High-value Transfer Network; BI = Bank Indonesia; BIDV = Bank for Investment and Development of Vietnam; BMS = Bursa Malaysia; BN = Brunei Darussalam; BNM = Bank Negara Malaysia; BOJ = Bank of Japan; BOJ-NET = Bank of Japan Financial Network System; BOK = The Bank of Korea; BOK Wire+ = The Bank of Korea Financial Wire Network; BOT = Bank of Thailand; BSP = Bangko Sentral ng Pilipinas; BTR = Bureau of the Treasury; CCDC = China Central Depository & Clearing; CDP = Central Depository Private Limited; CFETS = China Foreign Exchange Trade System; CHATS = Clearing House Automated Transfer System; CMU = Central Money Markets Unit; CN = People's Republic of China; CSDCC = China Securities Depository and Clearing Corporation; eDVP = electronic delivery-versus-payment; HK = Hong Kong; HKMA = Hong Kong Monetary Authority; HNX = Hanoi Stock Exchange; HOSE = Ho Chi Minh City Stock Exchange; HVPS = High-Value Payment System; ID = Indonesia; IDX = Indonesia Stock Exchange; IFTS = Interbank Funds Transfer System; JASDEC = Japan Securities Clearing Corporation; JP = Japan; JSCC = Japan Securities Clearing Corporation; KH = Cambodia; KPEI = Kiling Penjaminan Efek Indonesia (Securities Clearing Underwriting Indonesia); KR = Republic of Korea; KRX = Korea Exchange; KSD = Korea Securities Depository; LA = Lao People's Democratic Republic; MAS = Monetary Authority of Singapore; MAS = MAS Electronic Payment System; MM = Myanmar; MY = Malaysia; OTC = over-the-counter; PA = Paying Agent; PBOC = People's Bank of China; PDEX = Philippine Dealing & Exchange Corp.; PDTC = Philippine Depository & Trust Corp.; PH = Philippines; PhilPass = Philippine Payments and Settlements System; PSMS = pre-settlement matching system; PTI = Post-Trade Integration; RENTAS = Real-time Electronic Transfer of Funds and Securities System; RoSS = Registry of Scripps Securities; RTGS = real-time gross settlement; SG = Singapore; SGS = Singapore Government Securities; SHCH = Shanghai Clearing House; SSE = Shanghai Clearing House; SSSS = Shanghai Stock Exchange; SSTS = Scripps Securities Settlement System; SSTS = Scripps Securities Trading System; STP = straight-through-processing; SZSE = Shenzhen Stock Exchange; TH = Thailand; TSD = Thailand Securities Depository; VN = Viet Nam; and VSD = Vietnam Securities Depository.

Notes: This diagram shows entities that are involved in major types of transactions. Retail bond markets are not included in this diagram.

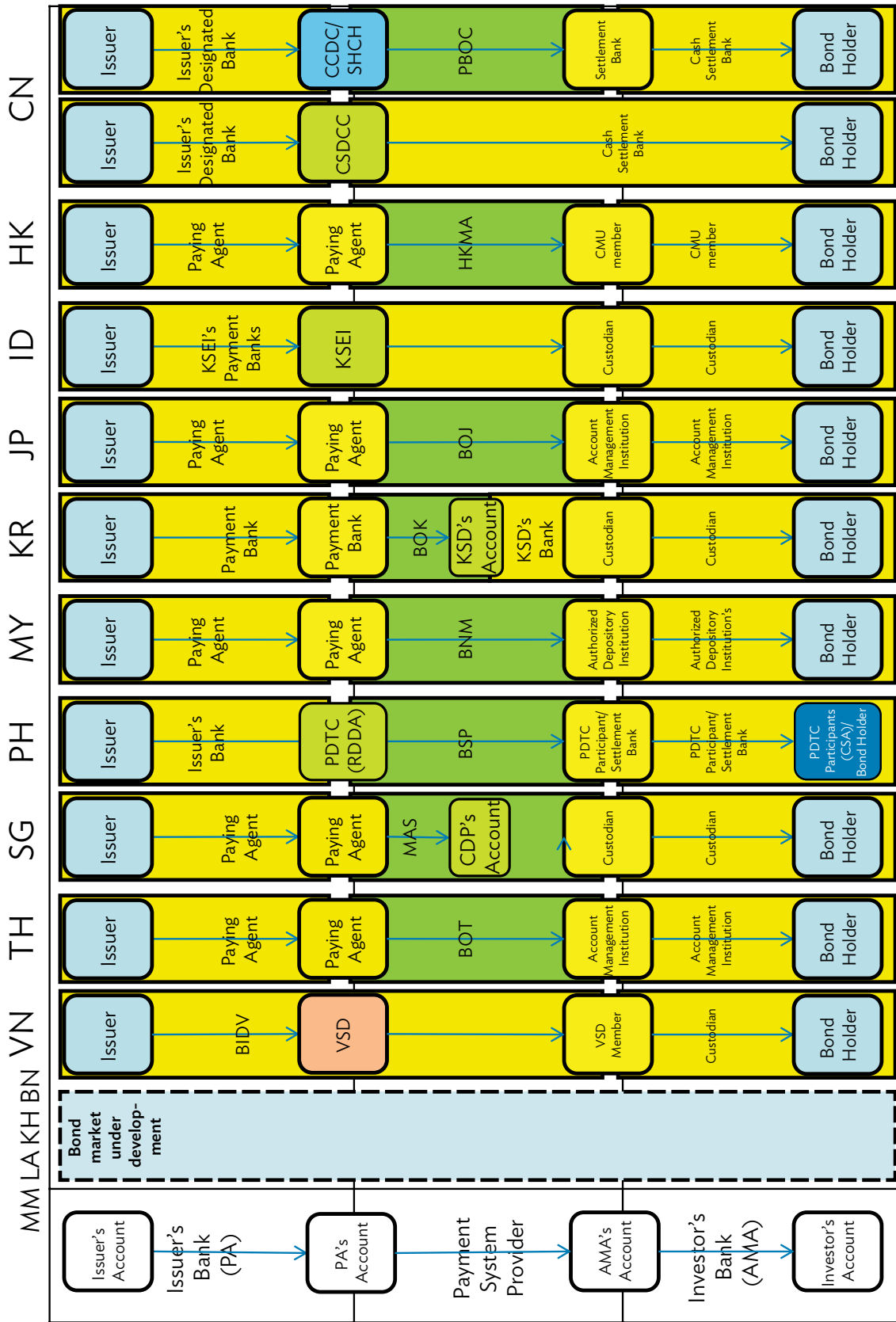
Source: ABMF SF2.

Figure 4: Government Bond Interest Payment Related Entities



AMA = Account Management Agent (generally a custodian); BI = Bank of Korea; BOK = Bank of Japan; BMS = Bursa Malaysia; BN = Brunei Darussalam; BOJ = Bank of Korea; BOT = Bank of Thailand; BSP = Bangko Sentral ng Pilipinas; BTr = Bureau of the Treasury; CCDC = China Central Depository & Clearing; CMU = Central Money Markets Unit; CN = People's Republic of China; HK = Hong Kong; HKMA = Hong Kong Monetary Authority; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Republic of Korea; KSD = Korea Securities Depository; LA = Lao People's Democratic Republic; MAS = Monetary Authority of Singapore; MM = Myanmar; MY = Malaysia; PA = Paying Agent; PBOC = People's Bank of China; PH = Philippines; ROSS = Registry of Scripless Securities; SG = Singapore; TH = Thailand; VN = Viet Nam; and VSD = Vietnam Securities Depository.
 Source: ABMF SF2.

Figure 5: Corporate Bond Interest Payment Related Entities



AMA = Account Management Agent (generally a custodian); BIDV = Bank for Investment and Development of Vietnam; BMS = Bursa Malaysia; BN = Brunei Darussalam; BOJ = Bank of Japan; BOK = The Bank of Korea; BOT = Bank of Thailand; BSP = Bangko Sentral ng Pilipinas; CCDC = China Central Depository & Clearing; CDP = Central Depository Private Limited; CMU = Central Money Markets Unit; CN = People's Republic of China; CSDCC = China Securities Depository and Clearing Corporation; HK = Hong Kong; China; HKMA = Hong Kong Monetary Authority; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Republic of Korea; KSD = Korea Securities Depository; KSEI = Kustodian Sentral Efek Indonesia (Indonesian Central Securities); LA = Lao People's Democratic Republic; MAS = Monetary Authority of Singapore; MIM = Myanmar; MY = Malaysia; PA = Paying Agent; PBOC = People's Bank of China; PDTC = Philippine Depository & Trust Corp.; PH = Philippines; RoSS = Registry of Scrips Securities; SG = Singapore; TH = Viet Nam; and VSD = Vietnam Securities Depository. Source: ABMF SF2.

of Phase 3 activities. The reference DVP flow is supposed to be implemented when each market infrastructure is in the process of being reconstructed. Harmonization of the DVP flow in the region will be accomplished gradually.

Interest Payment Flows

1. **Survey on the roles of the paying agent, account management agent, and tax withholding agent across economies.** According to the recommendation of the Phase 2 Report, the roles and functions of the paying agent, account management agent, and tax withholding agent were supposed to be clarified during Phase 3, but instead will be proposed as a part of next steps in relation to repo transactions.
2. **Harmonization of interest payment flows.** The harmonization of interest payment flows was identified as an important issue by the Phase 2 Report, but it remains a challenge due to differences in tax regimes across the region; for example, the rules for a tax withholding agent differ from economy to economy. It will be one of the most important issues for cross-currency repo and cross-border STP.

Message Standard Including Numbering and Coding

1. **Migration to ISO 20022.** Migration to ISO 20022 was proposed as one of the most important recommendations for Phase 3 activities and has been progressing significantly. All CSD and RTGS systems in ASEAN+3 are to adopt international standards (ISO 20022) by 2020.
2. **Standardization of message items.** Message items to effect DVP settlement were supposed to be standardized. Essential and minimum message items to be standardized have been proposed as a result of Phase 3 discussions.
3. **International Securities Identification Number (ISIN).** Based on the recommendations of the Phase 2 Report, allocation of ISIN as a unique identification number in accordance with the Association of National Numbering Agencies' (ANNA) recommendation (within 24 hours) is expected to be followed by CSDs in the region by 2020. Brunei Darussalam, Cambodia, the Lao People's Democratic Republic, and Myanmar do not yet have a national numbering agency (NNA); they will be supported by Asian Development Bank and ANNA efforts to establish one in each ASEAN+3 economy.
4. **Business Identifier Code (BIC).** The Phase 2 Report recommended using BIC as the financial institution identification code. This recommendation was accepted and will be followed by all CSD and RTGS systems in the region by 2020.

Market Practices and Other Issues

1. **Harmonization of market practices.** The harmonization of market practices, which was recommended by the Phase 2 Report, will be a subject of discussion during the next phase, with a particular focus on cross-border collateral and cross-currency repo.
2. **Investor identification.** The harmonization of investor identification was recommended by the Phase 2 Report. This is also a subject for discussion during the next phase along with further development of the Global Legal Entity Identifier.
3. **Account structure.** The harmonization of account structures was recommended in the Phase 2 Report. This remains a challenge due to differences in taxation and regulations that may reflect different policy stances among authorities in the region and different circumstances in each economy. Also, there is an emerging trend in the region to adopt a segregated account rather than an omnibus account.

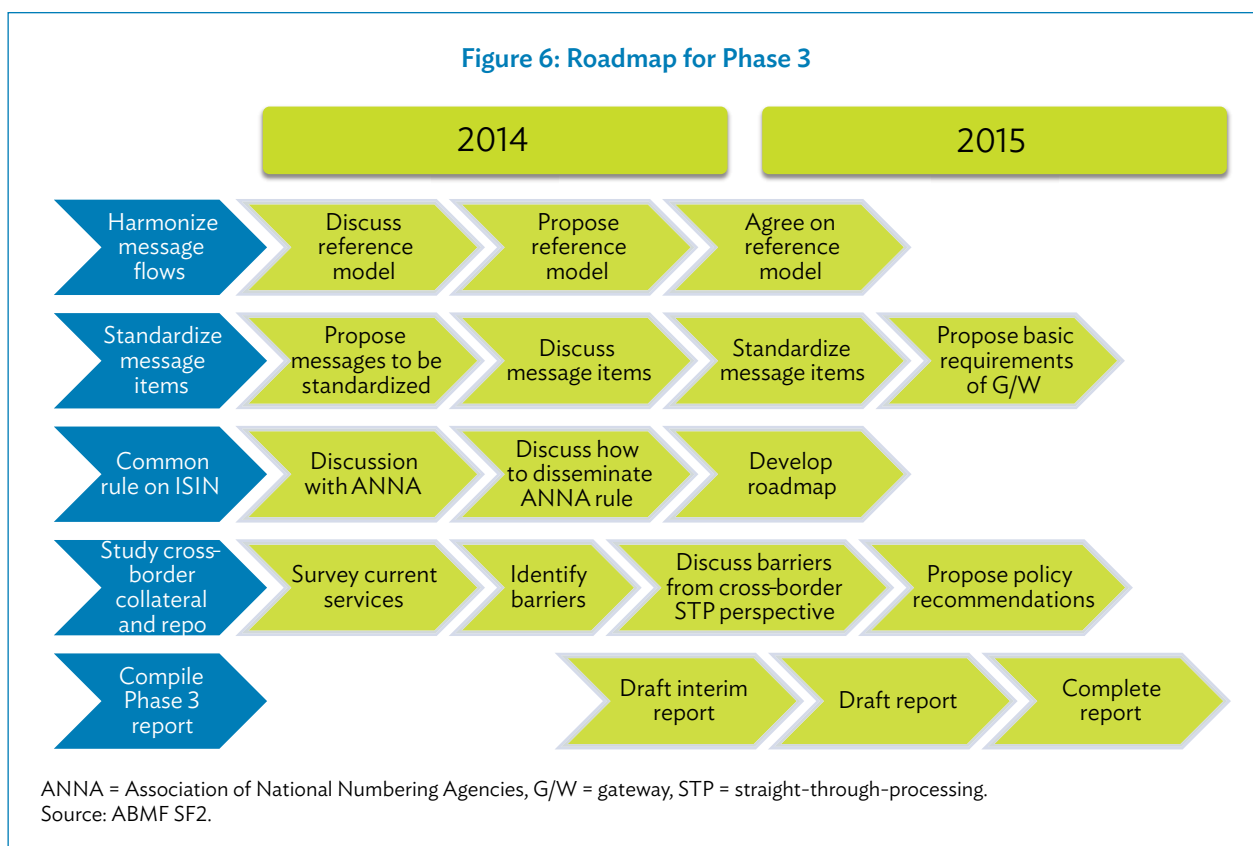
4. **Language for bond settlement instruction.** The standardization of language was also recommended in the Phase 2 Report. This remains a very difficult issue because there are many local languages and scripts in the region. English is becoming a de facto standard; for example, ISIN is to be published in English and payment system communication is conducted in English in many economies in the region. Hopefully, the advancement of technology will overcome language barriers.

Cross-Border STP and Local Currency Liquidity

1. **Cross-border collateral and repo services.** The promotion of cross-border collateral and repo services was recommended in the Phase 2 Report. This remains an issue for the next phase and also will be discussed by ABMF Sub-Forum 1 and the Cross-Border Settlement Infrastructure Forum.
2. **Capital and cash controls.** Capital and cash controls were recommended to be removed gradually while keeping in step with developments in the markets.

Expected Work Items of Phase 3

Among the policy recommendations, work items chosen for Phase 3 were (i) harmonizing message flows, (ii) standardizing message items for ISO 20022 migrations, (iii) adopting common rules on ISIN, and (iv) studying cross-border collateral and repo services. The Phase 3 roadmap to implement the aforementioned working items is shown in Figure 6.



The schedule and meetings of ABMF SF2 from the start of Phase 3 through August 2015 is shown in Table 1.

Table 1: Schedule of ABMF SF2

		Meeting Schedule	Tasks
2014	Jan		Preparation of questionnaire items
	Feb		
	Mar	15th ABMF SF2 in Manila, Philippines	Reply to questionnaire from each economy
	Apr		
	May		
	Jun	Economy Visits (Philippines, Malaysia, Indonesia)	Survey on message items
	Jul		
	Aug		Drafting the report and supplemental surveys
	Sep	16th ABMF SF2 in Hong Kong, China Economy Visits (Hong Kong, China)	
	Oct		
	Nov		
	Dec		Interim report
2015	Jan	17th ABMF SF2 in Manila, Philippines	
	Feb		
	Mar		Phase 3 report
	Apr	18th ABMF SF2 in Manila, Philippines	
	May		
	Jun		
	Jul		
	Aug	19th ABMF SF2 in Manila, Philippines	

ABMF SF2 = ASEAN+3 Bond Market Forum Sub-Forum 2.
Source: ABMF SF2.