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Plan on Establishing a New Bond Settlement System

April 30, 2011



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I . Backgrounds

- Domestic Bond Market has seen a sharp rise in transaction and settlement volumes thanks to heightened market activity since '06

<Reference> Transaction Volume and Settlement Volume of Domestic Bond Market

(Unit : KRW tril. \$1=₩1,130)

Category		'06	'07	'08	'09	'10
Exchange Market (Bond)	Transaction Volume	364	382	413	548	589
	Settlement Volume	118	101	99	166	168
OTC Market (Bond)	Transaction Volume	2,529	2,511	3,079	4,224	5,647
	Settlement Volume	1,707	1,765	2,150	2,813	3,555

- However, Bond Settlement System lacks sufficient improvement in response to increased transaction and settlement volumes
 - Especially, chronic settlement delays occurs due to lack of compatibility between settlement means of the exchange market and OTC market (Completion of settlement around 11:18 p.m.)

I . Background

- **Major countries advanced their Securities Settlement Systems, sharpening the competitive edge of their securities markets.**
 - US : DTCC (Clearing · settlement holding company,'99), Consolidated Settlement System('03)
 - Japan : Stock exchange CNS('01), institutional settlement DVP2('04), government bond DVP1('05)
 - England : Exchange/OTC DVP1('01), Single Settlement Engine ('06)
- **In Korea, enforcement of Capital Market Act in Feb.'09 provided an opportunity to enhance the Securities Settlement System.**

Amid quantitative growth of the Korean securities market, enhancement of the Securities Settlement System is being pursued in a bid to enhance stability and sharpen its competitive edge.

II. Progress

- In Feb.'09, the parties concerned (KSD, KRX, BOK) formed the 「Working Group for Securities Settlement System Improvement」
 - KRX : Korea Exchange, BOK : Bank of Korea
- In Nov.'09, the parties concerned concluded the 「Agreement on the Securities Settlement System Improvement」






<※Reference> Main Contents of Agreement on the Securities Settlement System

Category	AS-IS	TO-BE	Organizations
Stock Exchange Settlement	DVP3(DNS)	DVP3(<u>CNS</u>)	KSD, KRX
Stock Institutional Settlement	DVP3	<u>DVP2</u>	KSD
Government Bond Settlement (Exchange, OTC)	Exchange : DVP3 OTC : DVP1	Exchange : <u>DVP1</u> OTC : DVP1	KSD, KRX, BOK
Liquidity Provision	-	<u>Intraday RP system</u>	KSD, BOK
Stock Exchange Payment Settlement Bank	Shinhan, Woori	<u>BOK</u>	KSD, BOK

II . Progress

- **Consultation on detailed plans from Dec.'09~Aug.'10**
- **Report on detailed plans by areas to the Financial Services Commission(FSC) in Aug.'10**
- **Establishment of detailed plans by areas in Aug.'10**
- **Kick-off of IT system development in Sep.'10**
 - Target for opening in Nov.'11

III. Detailed Plans - Bond Market Infrastructure

Category		Government Bond		Corporate Bond	CD/CP
		Exchange	OTC		
Trade					
Clearing	Matching				
	Netting	n/a			
Settlement	Securities				
	DVP	Model 3* (Net-Net)	Model 1 (Gross-Gross)		
	Cash				

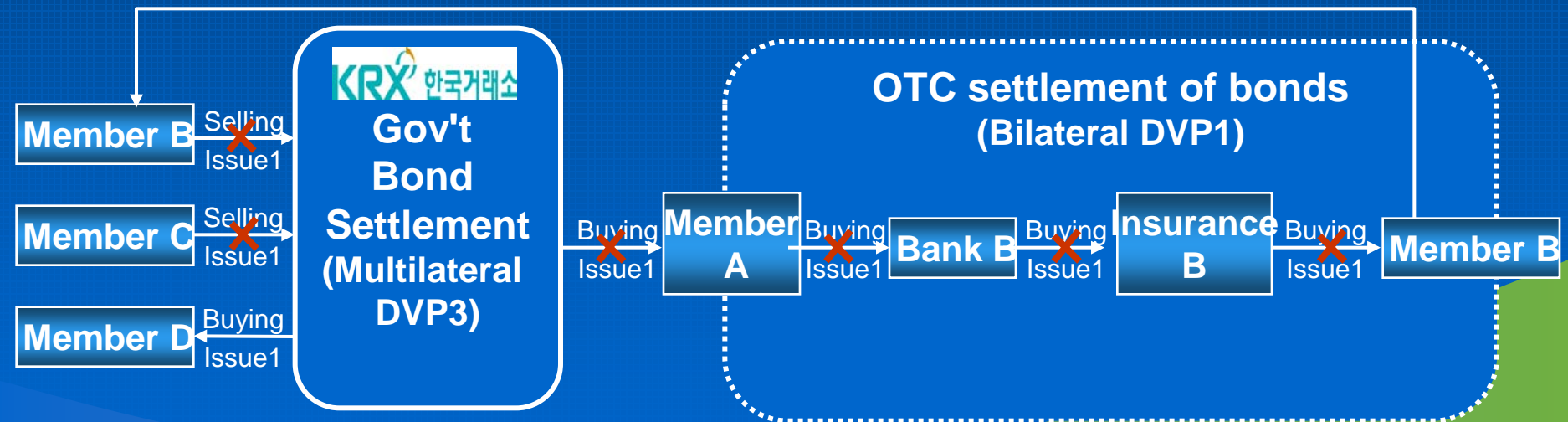
* DVP Model 1 will be adopted for onshore government bond trade from Nov. 2011

III. Detailed Plans - Gov't Bond

Settlement

Status

- Chronic delay in settlement is attributable to deficiency in the settlement system such as the late settlement process(3 p.m.) and strict settlement requirement (Avg. completion time of settlement in the 1st half of '10 is 16:55)
- Frequent settlement gridlock occurs due to lack of compatibility between exchange and OTC settlement of bonds



III. Detailed Plans - Gov't Bond

Settlement

Improvement Measures

- **Changing settlement beginning time and DVP model**
 - Change settlement beginning time from 15:00 to 09:00
 - Abolish full payment conditions on securities or payment on the basis of DVP3
- **Introduction of DVP1 after netting**
 - Outline
 - After netting securities and payment by member and issue, conduct simultaneous settlement on a case-by-case manner(DVP1)
 - ❖ (AS-IS) As to securities, netted by member and issue, as to payment, netted by member
 - ❖ (TO-BE) As to securities, netted by member and issue, as to payment also, netted by member· issue
 - By adopting DVP1 method after netting, Gov't Bond Settlement transactions and cash increases, and BOK provides liquidity for settlement with government bonds as collateral (Intraday RP system)
 - ❖ (Target) Settlement members of stock exchange and securities companies
 - ❖ (Target Securities) Treasury bond, monetary stabilization securities, government guaranteed bond

III. Detailed Plans - Gov't Bond

Settlement

- ❖ (Support Method) Indirect support via agent bank
- ❖ (Intraday provision) Buying member (including CCP) should apply for Intraday RP when the following conditions are met.
 - ✓ Selling member's securities (Securities held +Intraday RP collateralized securities) \geq settlement securities
 - ✓ Buying member (CCP) should have enough reserves for settlement
- ❖ (Intraday RP repayment) Buying members should make repayment on the very day of receiving liquidity

<※Reference> Basic Structure of Exchange Settlement of Gov't Bonds

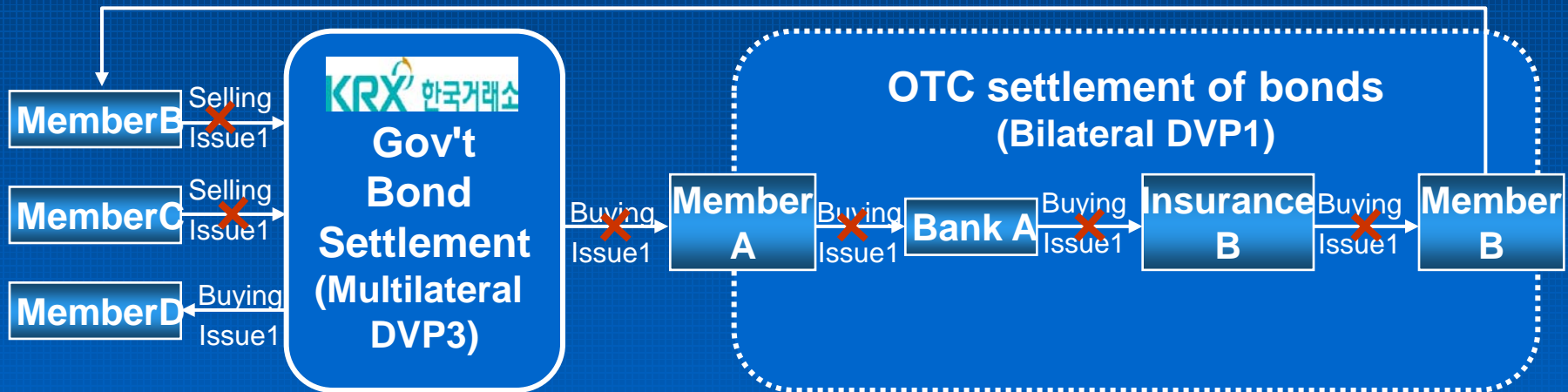


III. Detailed Plans – Intraday RP System

Status

- Due to lack of compatibility between the settlement system of the exchange and OTC bond market, there is chronic gridlock

<※Reference> Gridlock of stock exchange and OTC bond market



- Arising from lack of liquidity of non-bank organizations such as securities companies, insurance companies, etc., settlement concentration at closing hours (16:00~17:30) is serious.
- Payment rate at closing hours: Bond on exchange 48.7%, OTC settlement of bonds 68.2%

III. Detailed Plans – Intraday RP System

Improvement Measures

Basic structure

- (Outline) With purchased government bonds under settlement of BOK as collateral, establish the Intraday RP system to provide liquidity
 - (Target transaction) Trading at exchange market and OTC market
 - (Support target) KRX and Securities companies
 - (Target securities) Treasury bond, monetary stabilization securities, government guaranteed bond
 - (Support measures) Indirect support measures through agent bank(2nd stage RP)
- <Reference> Basic structure of Intraday RP system



IV. Expected Effect

- **Enhancement of efficiency in securities settlement**
 - (Gov't bond) Increase speed of settlement by advancing the settlement beginning timing,
 - (Intraday RP) Facilitate settlement by providing liquidity required for government bond settlement
- **Enhancement of safety of securities settlement**
 - (Gov't bond) Settlement in line with DVP1 after netting will result in removal of risks
 - (Intraday RP) Solve settlement concentration by providing liquidity required for government bond settlement

IV. Expected Effect

- **Enhancement of convenience of market participants**
 - (Gov't bond) Extend participants' opportunities to use securities by changing settlement beginning time to earlier hours, and enabling earlier securities delivery.
 - (Intraday RP) Cash management opportunities can be extended in accordance with reduced burden in money procurement.
- **Securing global compatibility**
 - (Gov't bond) Introduce DVP1 after netting like the US, Japan, England, France, and Germany.
 - (Intraday RP) Introduce Intraday RP like Japan, England, France, and Germany.

V. Future Plans

- **IT system development : Sep.'10~Nov.'11(15 months)**
 - Analysis · design(Sep.~Dec.'10, 4 months)
 - System development(Jan.~Jun.'11, 6 months)
 - Test(Jul~Nov.'11, 4 months)
- **Enactment and amendment to relevant regulations :
Apr.~Sep.'11**
- **Training for participants : Jul.~Oct.'11**
- **Business launching : Nov.'11**

Thank You !