ACG Cross Training Seminar 21

ISO 20022 adoption in Japanese market
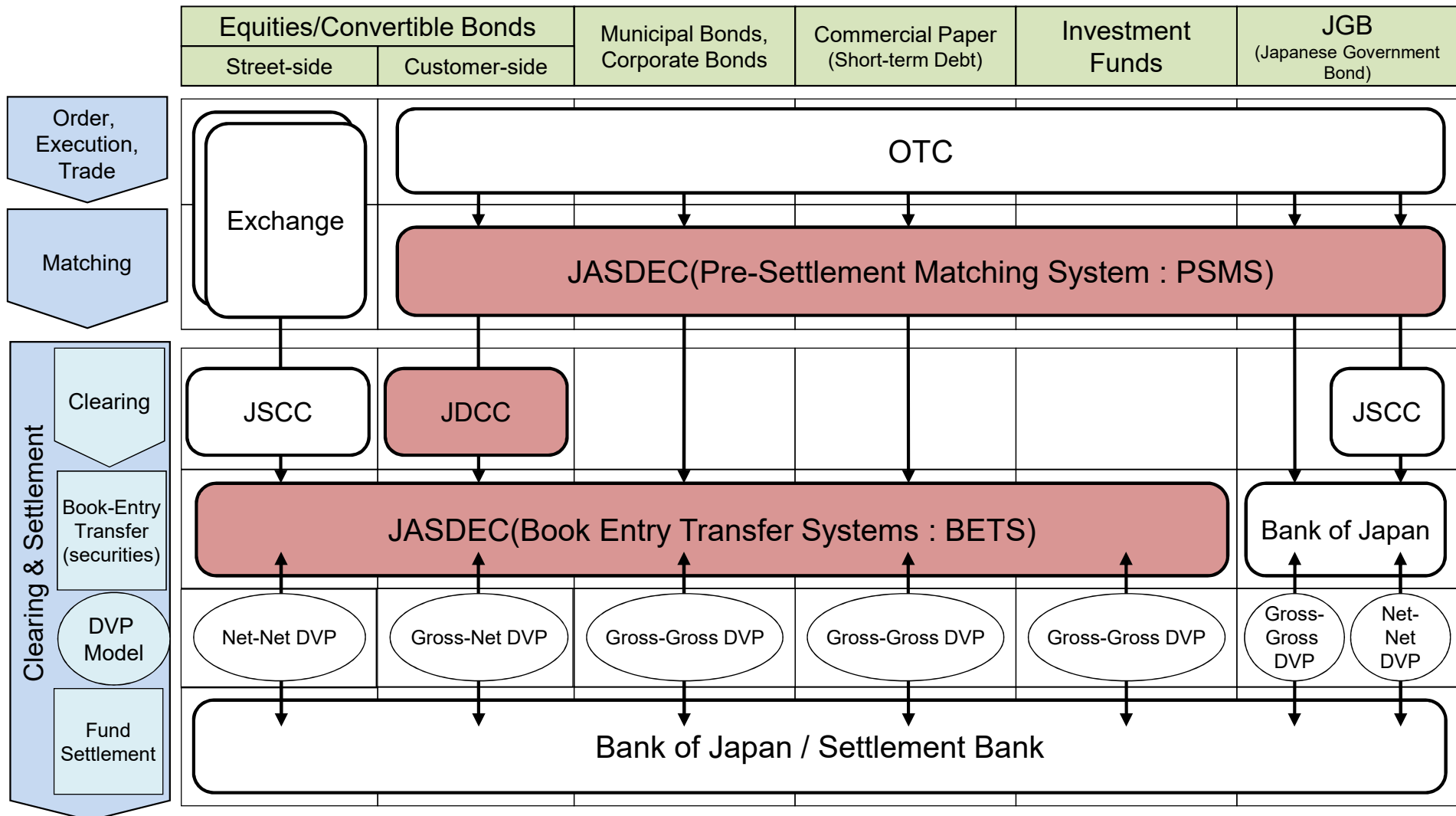
Japan Securities Depository Center, Inc.

March 2019

Share Holding Ratio by Investor Category

JASDEC

In 2012, Overseas Investors came out on top

(%)

Overseas Investors 30.1%

Financial Institutions 28.4%

Business Corporations 22.1%

Individuals 17.1%

Other 2.3%

1970 1980 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016

Reference : JPX

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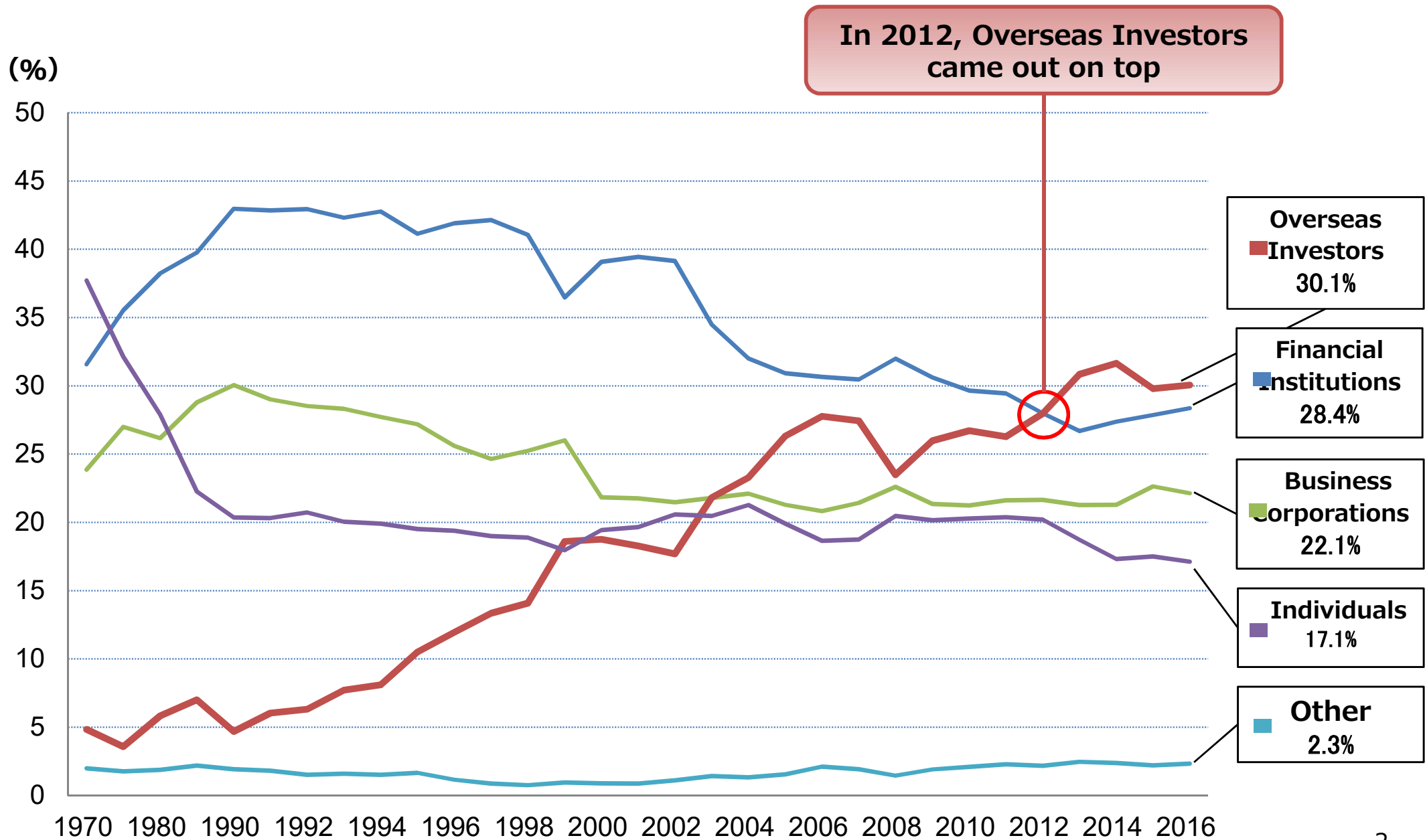
TSE Trading Volume (Daily Average)

JASDEC

In 2008
Lehman
Shock

In 2010
arrowhead

In 2013 ~
Abenomics

(trillion/yen)

During 10 years,
Domestic : Overseas
Investors Investors
6 : 4 **4 : 6**

Nikkei225
Overseas Investors
Domestic Investors

Year	Domestic Investors	Overseas Investors
2007	54%	46%
2008	53%	47%
2009	61%	39%
2010	52%	48%
2011	45%	55%
2012	45%	55%
2013	46%	54%
2014	41%	59%
2015	39%	61%
2016	38%	62%
2017	39%	61%
2018	38%	62%

Reference : JPX

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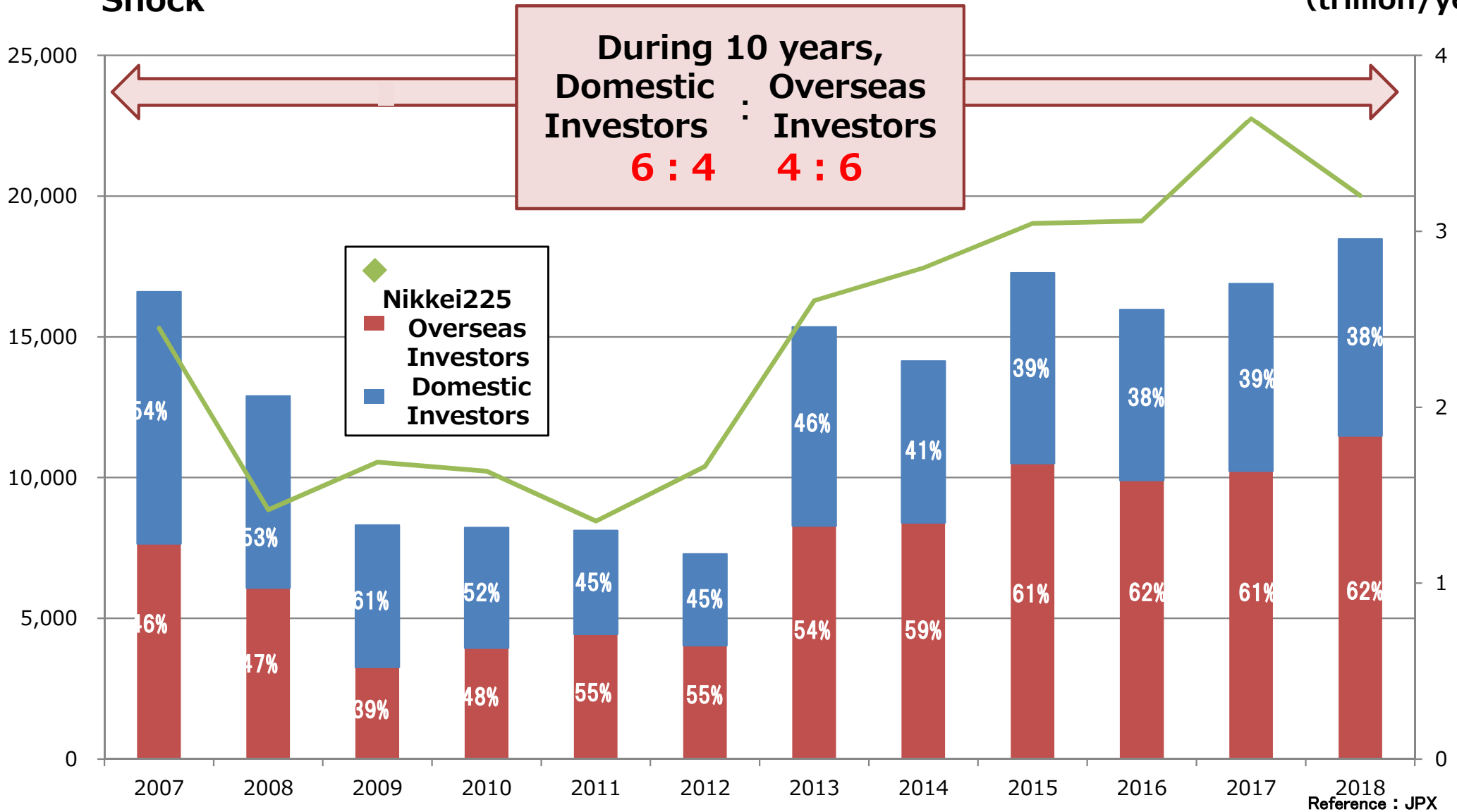
◆ Background

➢ Before the introduction of ISO20022, JASDEC depended on proprietary formats and local codes

	BETS	PSMS
Message format	**Proprietary**	**ISO15022 (customized)**
Securities code	Local code or ISIN	Local code and ISIN
Financial institution Identification code	Local Code	Local code or BIC

➢ Global trend in securities market

✓ Tough competition among market infrastructures
✓ Growing presence of foreign based investors and intermediaries

JASDEC decided to enhance the efficiency/accessibility and mitigate the costs of cross-border trades by introducing ISO 20022

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Timeline of ISO 20022 adoption in Japan

JASDEC

1989: Initiatives to reduce settlement risk and enforce STP triggered by G30 rec.
2000: FSA reported to "Establish a consistent collation system and standardize message formats is also important for facilitation of settlement of cross-border transactions"
2001:CPSS/IOSCO "Recommendations for Securities Settlement Systems"
2012: FMI Principle 22 "An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording. "

		～2000	2001～2010	2011～2017	2018～
ISO/SWIFT		● **1999** : ISO 15022 est.	● **2004** : ISO 20022 est.	● **2011** : ISO 20022 Securities domain est.	● **2018.4** : ISO 20022 migration study(SWIFT)
JP	**Payments**			● **2011.11** : **JBA adopts 20022 to Zengin Net** [Like to Like]	● 2018.12 : Further XML enhancement in new Zengin system (ZEDI)
				● **2015.10** : BOJ adopts 20022 to new BOJNet [Big Bang]	
	Securites			● **2018.5** : JSCC adopts 20022 *JGB OTC settlement [Big Bang]	
				● **2014.1** : JASDEC adopts 20022 [Set migration period till end of 2018]	
				● **2018.12** : JASDEC end of migration period	

JASDEC, JSCC in Securities domain, BOJ, JBA in Payments domain have adopted ISO 20022

Comparison of ISO 20022 adoption method

	MIs	Adoption method
Big Bang	**BOJ JSCC**	Adopted ISO 20022 at once with system replacement Prop/15022 → 20022
Co-existence (1)	**JASDEC**	Set migration deadline and encourage ISO 20022 adoption Prop/15022 → 20022 / Prop/15022 → 20022
Co-existence (1)	**JBA**	Adopted ISO 20022 as an optional use (migration deadline not set) Prop/15022 / 20022 → 20022

Co-existence period:4-5years considering system maintenance period

ISO 20022 adoption in JASDEC (1)

- ◆ **Align with international standardization and enhance efficiency/accessibility using XML**
- ◆ **By adopting and migrating to ISO 20022, we aimed to mitigate the costs of cross-border trades**

2007～2010
- ◆ **Technical study**
- ◆ **Join SEG ET to engage initial development**

2011～2014
- ◆ **With support of ISITC JP, submitted 12 CRs to align with JP market practice**
- ◆ **Test phase**

2015～2018
- ◆ **Migration phase**
- ◆ **Set internal SR policy to minimize maintenance cost**

- ◆ **Number of ISO 20022 messages : Payments[3], S&R[24], Post Trade Matching[4]**

ISO 20022 adoption in JASDEC (2)

◆ **Together with SWIFT, conducted gap analysis and mapping between ISO 15022/20022**

◆ **Participated in Evaluation Team (ET) for the following four fields related to the JASDEC operation and participate in new message development work**

Business Domains	Other Evaluation Team	
Settlement & Reconciliation (S&R)	ISITC、ECSDA、CSDs、T2S、SMWG、SWIFT	・For JASDEC's BET and PSMS ・Reverse Engineering from ISO 15022 ・Draft message released in Dec 2009
Modification and Counterparty Response	DTCC、Euroclear、Clearstream、SWIFT	・For PSMS modification operation ・Registered to ISO in April 2012
Post-trade Matching	Omgeo、Euroclear、SWIFT、Anbima、FPL	・For PSMS Trade Matching operation ・Registered to ISO in Oct 2011 (5 msgs used in JASDEC)
Total Portfolio Valuation (TPV)	ISITC	・Messages for Total Portfolio Valuation, which in JASDEC used as NAV data and Foreign Investment Account Data ・Registered to ISO in Oct 2011

ISO 20022 adoption in JASDEC (3)

- ◆ **While conducting ISO study, consider application of ISO 20022 to JASDEC system**
- ◆ **In the early stages of examination, 20022 was targeted for Pre Settlement Matching System (PSMS), but later extended to Book-Entry Transfer System(BETS) as well**

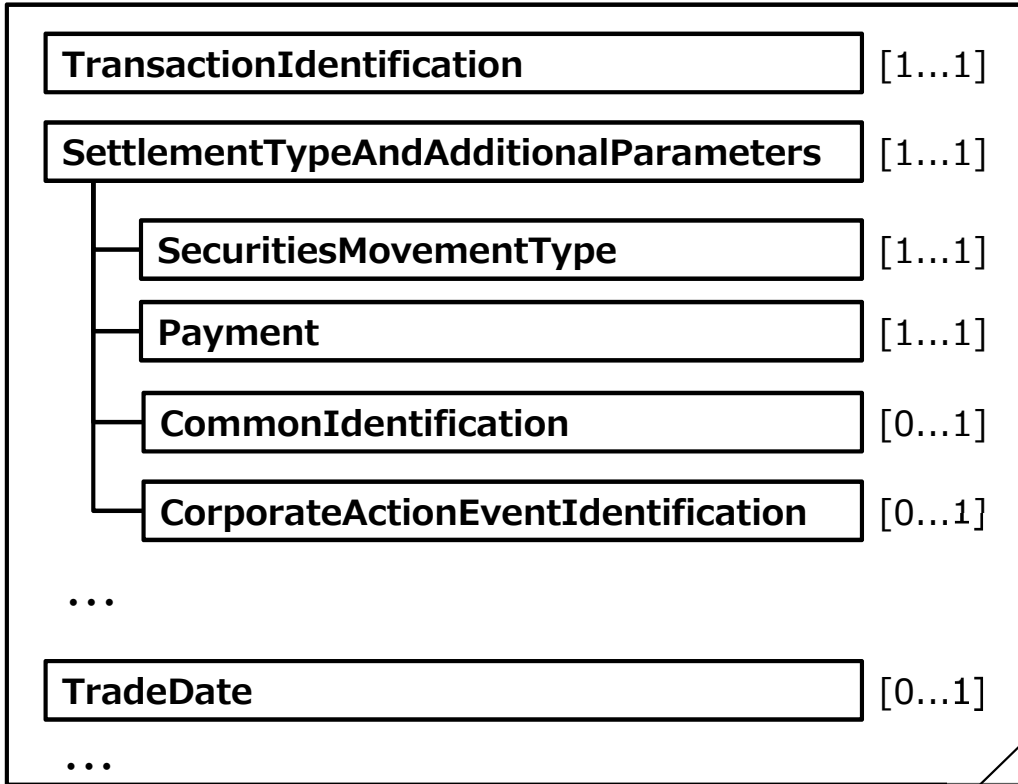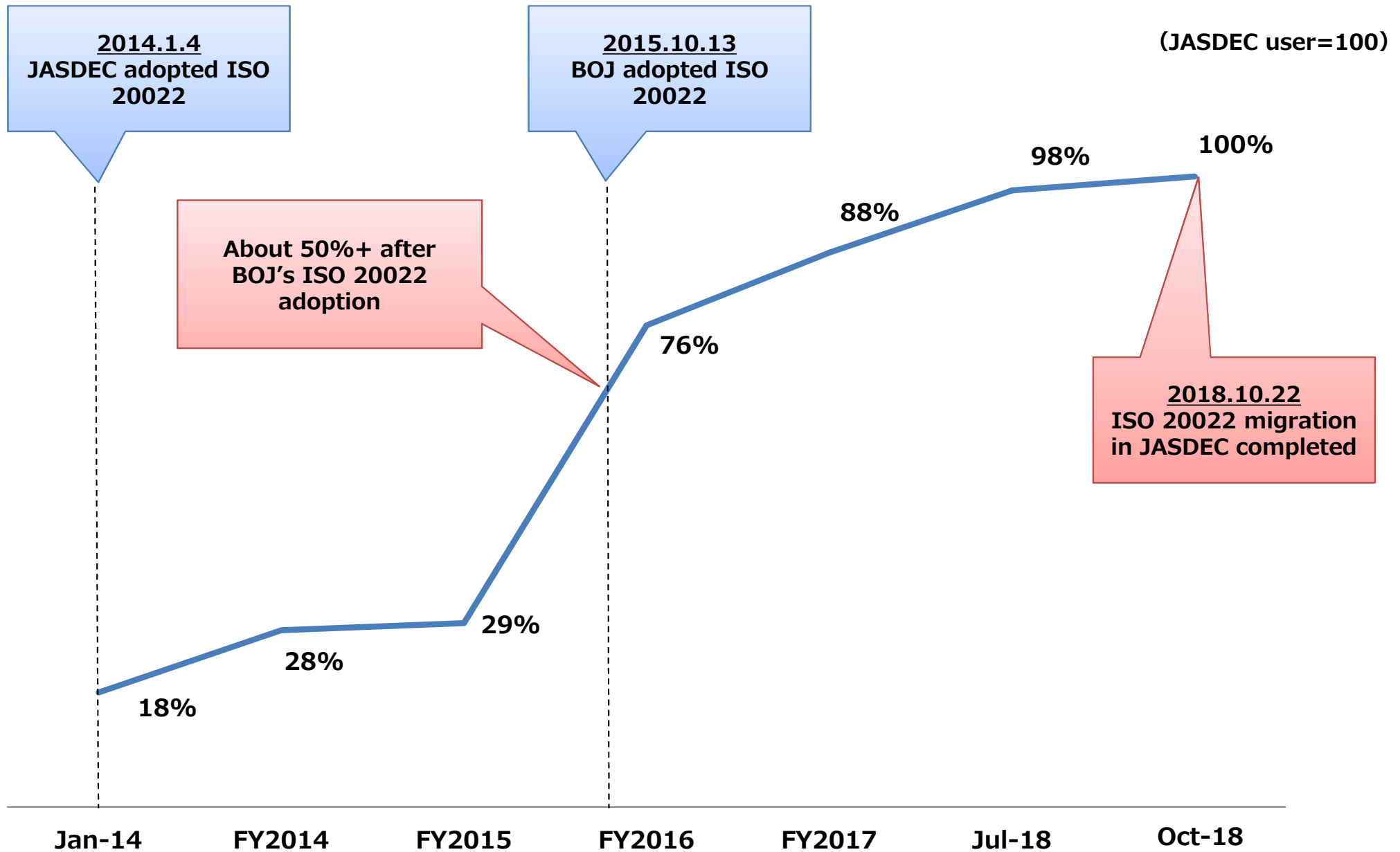| Schedule	Outline	
2009.11～ 2010.12	In order to examine cross-divisional transactions including the settlement matching system and each transfer system, JASDEC established "ISO 20022 Subcommittee" and carry out cross-sectional item mapping	Mapping for Post Trade Matching was done in PSMS subcommittee
2012.3	System Specification Documents for Users v.1 released	
～2013.6	System development phase	
2013.7～10	Testing with user phase	Concurrent with JASDEC's system replacement
2013.11～ 12	System migration rehearsal	
2014.1	System c/o	

CRs regarding ISO 20022 adoption

◆ **In case of S&R where ISO15022 and ISO20022 coexist, CRs need to be submitted to ISO15022 or ISO20022**

#	Year of Submission	Overview	Justification
1	2008 (SR2010)	Addition of QFI info field	Needed for the affirmation of cancellation/modification for already matched instruction
2	2008 (SR2010)	Addition of Related Parties Field in Receiving Agent	Allowed to use ISIN and local code
3	2008 (SR2010)	Addition of Market Type Code "VARI"	Allowed to use ISIN and local code (Accepted as single ISO 20022 CR)
4	2009 (SR2010)	Modification of Consumption Tax Definition	For JASDEC's DVP Settlement Services for NETDs
5	2009 (SR2010)	Able to set two Settlement date	For JASDEC's DVP Settlement Services for NETDs
6	2009 (SR2010)	Addition of "INVE" (fund code) and "DEAG/REAG" (delivering/receiving settlement agent) to MT530/sese.03	Reason code in case of unmatched in accrued interest amount

NETD: Non-exchange transaction deliveries

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JASDEC's ISO 20022 migration progress

JASDEC

2014.1.4
JASDEC adopted ISO 20022

2015.10.13
BOJ adopted ISO 20022

（JASDEC user=100）

About 50%+ after BOJ's ISO 20022 adoption

2018.10.22
ISO 20022 migration in JASDEC completed

18%

28%

29%

76%

88%

98%

100%

| Jan-14 | FY2014 | FY2015 | FY2016 | FY2017 | Jul-18 | Oct-18 |

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ISO 20022 Assessment in JASDEC

- ◆ **System and its operation complies with the international standards**
- ◆ **Further focus point will be to resolve the coexistence of 15022 and 20022**

Element	JASDEC	Domestic Player	Global Player	Assessment
International Standardization	○	-	-	Archived alignment with ISO standards
Maintainability using XML	○	○	○	-System development and test efficiency has improved -JASDEC will adopt SR changes only if it has impacts to JASDEC's defined messages/components
Migration/Termination of legacy system	○	○	○	Making steady progress (will complete migration as sheduled)
STP for the entire settlement chain	△	-	×	-Unify 20022 for the entire settlement chain 【Global ×】 -Coexistence w/ 15022 is not cost effective 【Global ×】

Domestic Player : PSMS participant who aim to operate domestic transaction (Domestic brokers, banks, etc.)

Global Player : PSMS participant who aim to operate cross-border transaction (Global custodians, broker/dealers, etc.)

○ : Achieved the initial goal / Obtain the expected benefit

△ : Neither Agree Nor Disagree

× : Did not achieved the initial goal / Problem observed

- : Not subject to evaluate

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Key success in JGB market

◆ **From May 2018, domestic JGB settlement has moved to T+1 cycle**

◆ **The effect of ISO 20022/XML adoption was demonstrated where the comprehensive operational tests have progressed smoothly and without any delay**
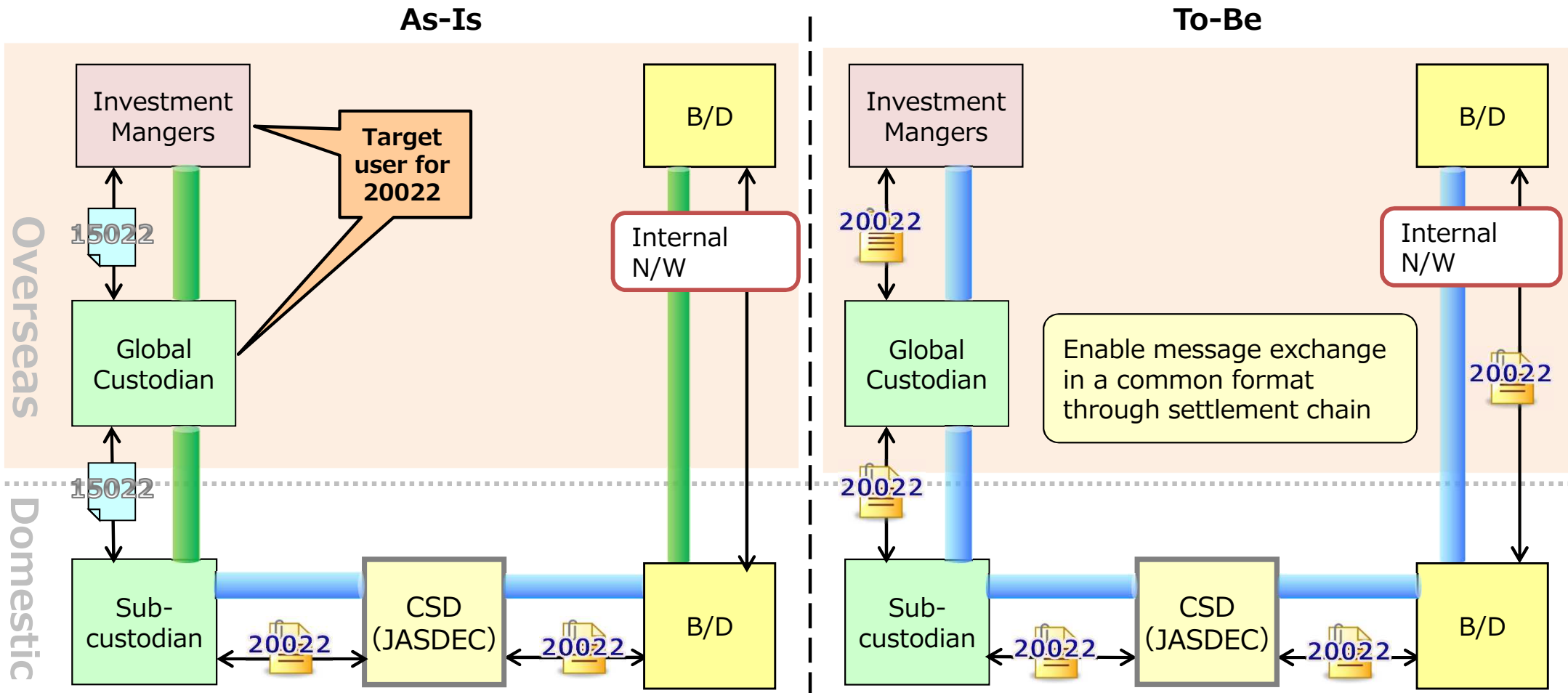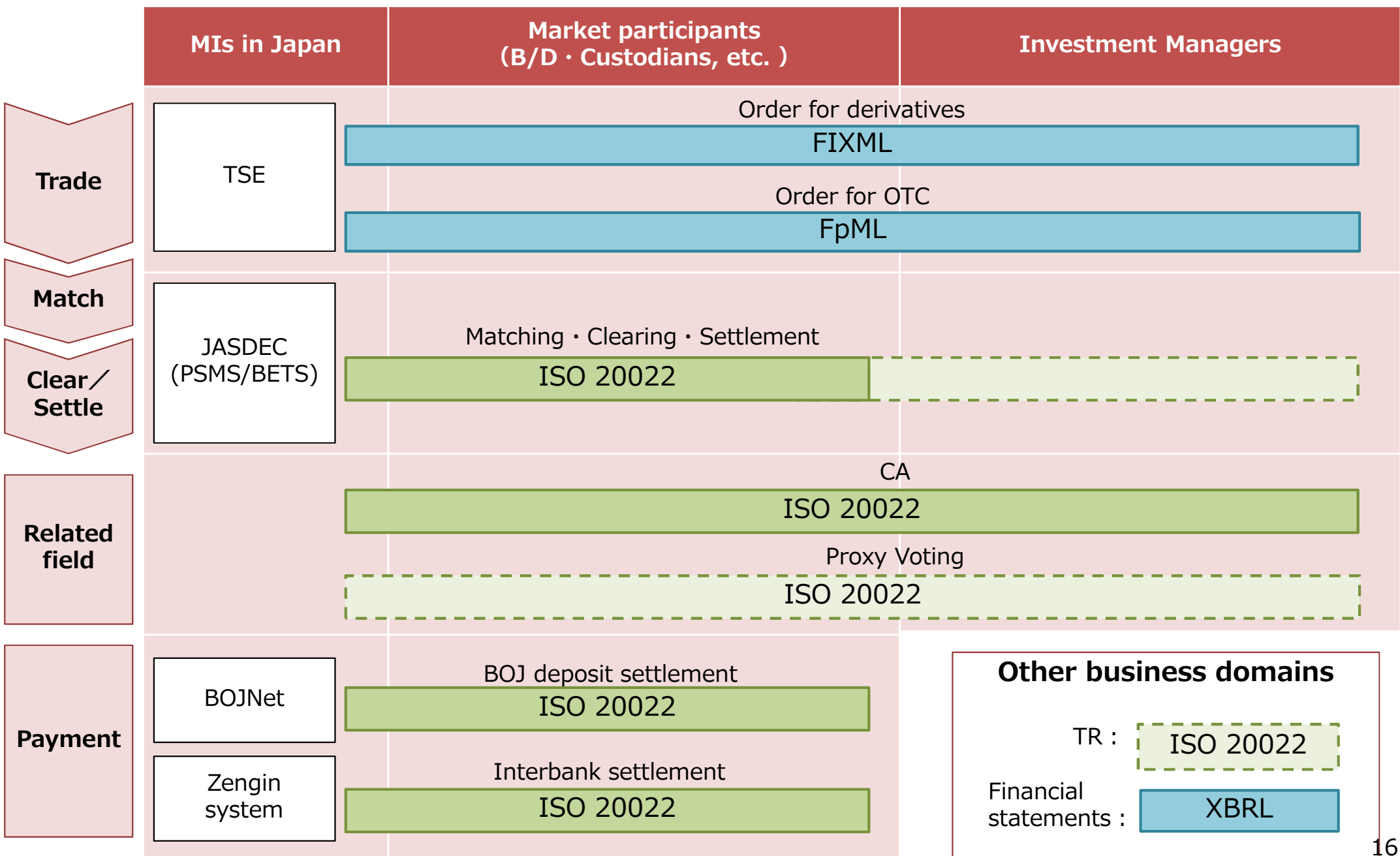

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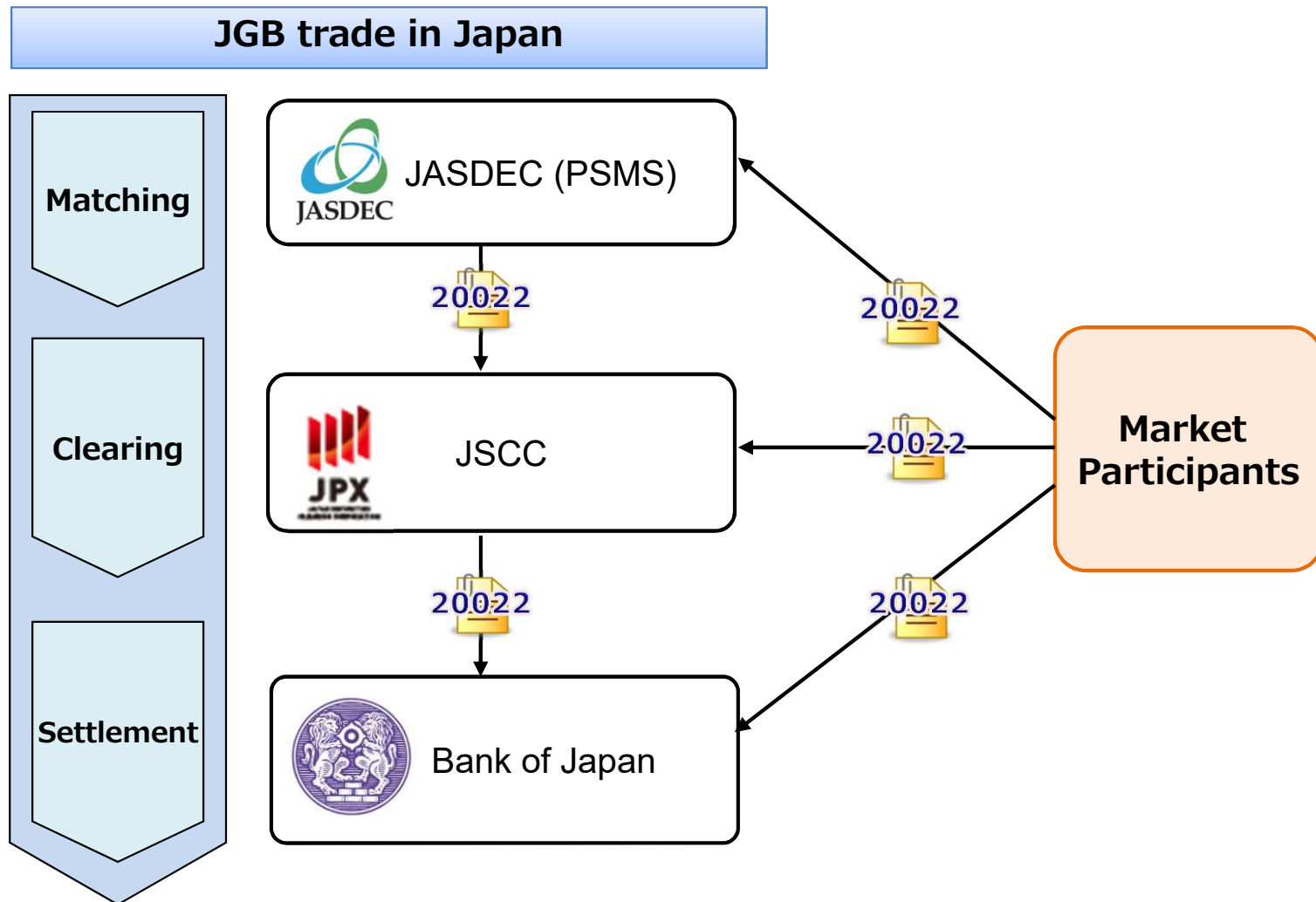
To-Be in ISO 20022 Securities domain

- ◆ **All entities engaging in ISO 20022 will contribute further STP**
- ◆ **Although ISO 15022 is still dominant among overseas institutional investors and global custodians∗, we hope for early 20022 migration in the settlement chain**

As-Is

To-Be

Overseas

Domestic

Investment Mangers

Target user for 20022

B/D

Internal N/W

15022

Global Custodian

15022

Sub-custodian

CSD (JASDEC)

B/D

20022

20022

Investment Mangers

20022

Global Custodian

Enable message exchange in a common format through settlement chain

20022

Sub-custodian

CSD (JASDEC)

B/D

20022

20022

B/D

Internal N/W

20022

∗ In recent years, transactions of HFs/PBs are growing, which results that corresponds to the problem is about 1/4 of the total of non-resident transactions

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How could we extend ISO 20022／XML?

Discussion purpose only

JASDEC

MIs in Japan	Market participants (B/D・Custodians, etc.)	Investment Managers

Trade

TSE

Order for derivatives
FIXML

Order for OTC
FpML

Match

Clear／Settle

JASDEC (PSMS/BETS)

Matching・Clearing・Settlement
ISO 20022

Related field

CA
ISO 20022

Proxy Voting
ISO 20022

Payment

BOJNet

BOJ deposit settlement
ISO 20022

Zengin system

Interbank settlement
ISO 20022

Other business domains

TR： ISO 20022

Financial statements： XBRL

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