

**Towards Japan Securities Settlement Systems
and Infrastructure Reform**
(Summary)

[English Translation]

November 2002

**The Committee for Reform of Securities Clearing and Settlement System
The Securities Settlement System Reform Promotion Working Group**

1 Introduction

Maintaining Japan's position as a leading international capital market requires the development of a more efficient, more accessible, and lower risk securities settlement system. To achieve this goal, Japan will need to continuously promote reform of securities settlement practices and the underlying infrastructure.

Proper implementation of such a large-scale, industry-wide reform program requires strong commitment and agreement among all market participants.

The goal of this report is:

- (1) to share the strategic importance and goals of the Reform among industry participants (Chapter 3),
- (2) to recognize and understand the issues/challenges currently faced (Chapter 4),
- (3) to provide an overview of future securities settlement systems (Chapter 5), and
- (4) to define the master schedule and the Reform project organization structure to achieve the Reform (Chapter 6).

2 Background and Premises of this Report

This report was created by the Securities Settlement System Reform Promotion Working Group established by the Committee for Reform of Securities Clearing and Settlement System¹.

This report is based on interviews with industry participants conducted from late-June through October, 2002 as well as weekly discussion meetings and continuous discussions with core member firms and organizations of the Working Group throughout the project.

This report describes topics and issues in discussion from multiple industry working groups and/or committees that will require final resolution in the near future.

¹ Accenture and Tradewin collaborated in the research, discussion facilitation, and interviewing of industry participants, to create this report, as requested by the Working Group. The contractual format was that the Securities Settlement System Reform Center that was established in the Japan Securities Dealers Association as the Project Management Office for the Working Group requested the research, interviews, and reporting to Accenture as a primary contractor with collaboration from Tradewin as a subcontractor.

3 Significance and Goals of Securities Settlement Systems Reform

A clear understanding and agreement of the Securities Settlement Systems Reform's significance and goals is critical to the Reform's future success. We have outlined the importance of the Reform to the Japan capital markets and describe the Reform's major goals.

3.1 Significance of Securities Settlement Systems Reform

We believe the Reform is essential for two basic reasons: it creates an infrastructure that enables future market growth and it advances Japan's position in global capital markets.

(1) Contributes to the Japanese capital markets growth through the development of a more convenient, streamlined settlement system with reduced settlement risk.

- The Reform aims to provide a low risk, efficient and standardized securities settlement infrastructure that reduces settlement risks, improves industry participants' convenience, and streamlines business processes.
- The Reform aims to encourage industry participants to proactively begin enhancing their settlement infrastructures to achieve these goals.
- The Reform aims to develop an advanced securities settlement infrastructure that enables cost-efficient settlement services and provides new strategic opportunities for industry participants.

(2) Reinforces Japan's competitive position in the global capital markets.

- The Reform aims to create a "burning platform" for Japan to catch up with the U.S. and European countries in the international capital markets.
- The Reform aims to exceed global standards for low risk and efficient securities settlement systems taking into consideration future market growth and evolution.

Preparation of required legislation and laws for the Reform has proceeded quickly including the passing of "The Law regarding Book-entry Transfer of Corporate Bonds, etc." and development of legislation for the dematerialization of stocks. As the enactment of the legislation and laws are imminent, the securities industry needs to swiftly drive the Reform forward.

The Reform requires cooperation and strong initiative from all securities industry segments and participants.

3.2 Goals of Securities Settlement Systems Reform

The Securities Settlement Systems Reform goals are as follows.

Goals and Major Milestones of Securities Settlement Systems Reform

- (1) To achieve globally competitive and advanced **Paperless DVP Settlement**
 - By end of FY 2002: DVP Book-entry Settlement of short-term bonds
 - By end of FY 2003: DVP Book-entry Settlement of Customer-side Transactions of Stocks
 - By end of CY 2004¹: DVP Book-entry Settlement of Corporate Bonds
 - By end of CY 2004¹: DVP Book-entry Settlement of Investment Trusts
 - By end of FY 2004: JGB Clearing
- (2) To achieve **Straight Through Processing** that improves efficiency of the overall systems and improves Japan's competitive position
 - By end of CY 2004: Matching infrastructure for multiple products including JGB, Corporate Bonds, and Short-term Bonds
- (3) To achieve **Shortening of Settlement Cycles**
 - To make shortening of settlement cycles a key goal of the Securities Settlement Systems Reform in Japan and achieve this as soon as possible

Rapid development of “(1) **Paperless DVP Settlement**” for all instruments is of highest priority in order to reduce principal risks and align to global standards. In preparing new legislation and laws for dematerialization, we target a globally competitive and advanced securities settlement infrastructure that exceeds the level of the U.S. and major European countries in terms of safety and efficiency.

“(2) **Straight Through Processing**” is an important goal to improve efficiency and reduce settlement costs. It is necessary for all industry participants to work together on implementing STP business processes as part of the settlement infrastructure.

“(3) **Shortening of Settlement Cycles**” depends significantly on the successful implementation of DVP/STP settlement infrastructures and market practices. So while this is an important goal, we need to give priority to “(1) Paperless DVP Settlement” and “(2) Straight Through Processing” before proceeding to “(3) Shortening of Settlement Cycles”.

¹ Although the JASDEC has set a tentative milestone for the new book-entry settlement system and the matching utilities, etc. for corporate bonds and investment trusts to go live in December of 2004, the systems outline is now under consideration in the Corporate Bonds Sub-committee and the Investment Funds Sub-committee in the JASDEC, and the schedule is to be adjusted and finalized hereafter based on the conclusions of the sub-committees.

The following two points can be raised as critical for Japan to achieve “(3) Shortening of Settlement Cycles”:

- It is necessary to implement a securities settlement infrastructure that enables shortening of settlement cycles to maintain competitive position and keep playing an important part of the global capital markets.
- The shortening of settlement cycles for financing such as JGB repo transactions and issuance of short-term bonds will contribute to revitalization of short-term fund transactions.

Although T+1 settlement decision has been deferred in U.S. markets, “Shortening of Settlement Cycles” remains an important goal for the Securities Settlement Systems Reform in Japan.

In fact, for instruments such as JGB repo transactions and issuance of short-term bond, T+0 should be considered, so we set “Shortening of Settlement Cycles” as the Japan target rather than “T+1”.

The table below describes guiding principles by instrument for the shortening of settlement cycles.

JGB	<ul style="list-style-type: none"> • A new settlement infrastructure should be implemented targeting T+1 for outright trades and T+0 for short-term fund transactions. • Business process issues and market practices issues will need to be resolved to achieve STP settlement with this new infrastructure.
Short-term Bond	<ul style="list-style-type: none"> • A new settlement infrastructure should be implemented aiming at T+1, then T+0 settlement as soon as possible. • Business process issues and market practices issues will need to be resolved to achieve STP settlement with this new infrastructure.
Stock	<ul style="list-style-type: none"> • A new DVP/STP infrastructure should be implemented as soon as possible, during which the approach for shortening of the settlement cycle should be considered.
Corporate Bond	<ul style="list-style-type: none"> • A new settlement infrastructure should be implemented aiming at shortening of settlement cycles for priority instruments. • Target timing for settlement cycle shortening should be defined depending on requirements by instrument. Business process issues and market practices issues will need to be resolved to achieve STP settlement with this new infrastructure.

4 State of the Japanese Securities Settlement Systems & Overseas Trends

4.1 Industry Discussions to Date and Current Status in Japan

Development of a DVP/STP securities settlement infrastructure for Japan has yet to be realized (see Figure 4-1). DVP settlements are available for JGB settlement, trades of stocks at exchanges (Tokyo Stock Exchange and Osaka Securities Exchange), and for a portion registered bonds in Japan. JASDEC is now implementing systems for DVP book-entry settlements for customer-side transactions of stocks and short-term bonds. A systems outline is also under consideration for corporate bonds and investment trusts based on the Law regarding Book Entry Transfer of Corporate Bonds, etc.

4.2 Major Issues

A number of issues will need to be addressed to achieve the Reform objectives, changes to existing legislation, upgrading of system infrastructures, and new rules definitions. A summary of major issues is shown in Figure 4.2 and described in detail in Section 4.2 of the report. Issues that have been noted as “To be discussed” should be assigned to be appropriate working groups (see Chapter 6 for the Reform Project Organization).

4.3 Overseas Trends

When implementing the Securities Settlement Systems Reform in Japan, it is crucial to pay attention to trends of global market practice and systems and continuously monitor overseas trends.

Other leading capital markets have already embarked on comprehensive programs to achieve improve their securities settlement systems. In the U.S., an industry-wide master schedule was developed to aggressively pursue STP.

European countries have targeted improving efficiency of cross-border trades and securities settlement infrastructures. Market participants have developed larger and more sophisticated IT infrastructures has been emerging through mergers and alliances across borders.

Asian countries are also aggressively implementing/enhancing securities settlement infrastructures. In particular, Hong Kong and Singapore have been executing their reform plans aiming at establishing positions as global trade hub in Asia.

Figure 4-1 Current Japan Securities Settlement Infrastructure

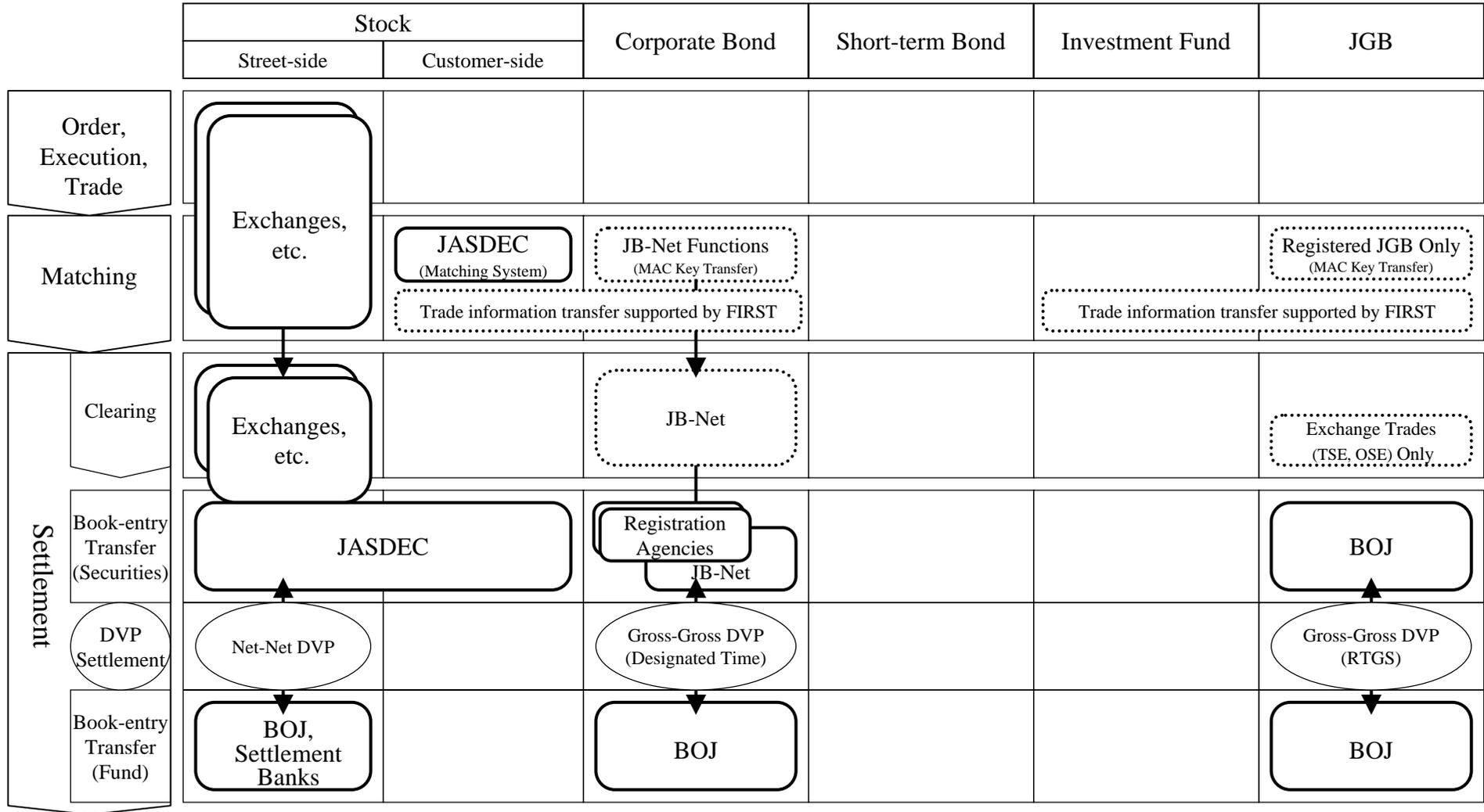
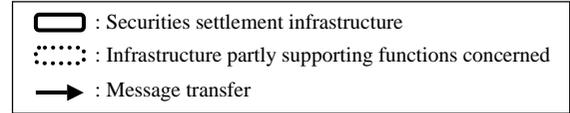
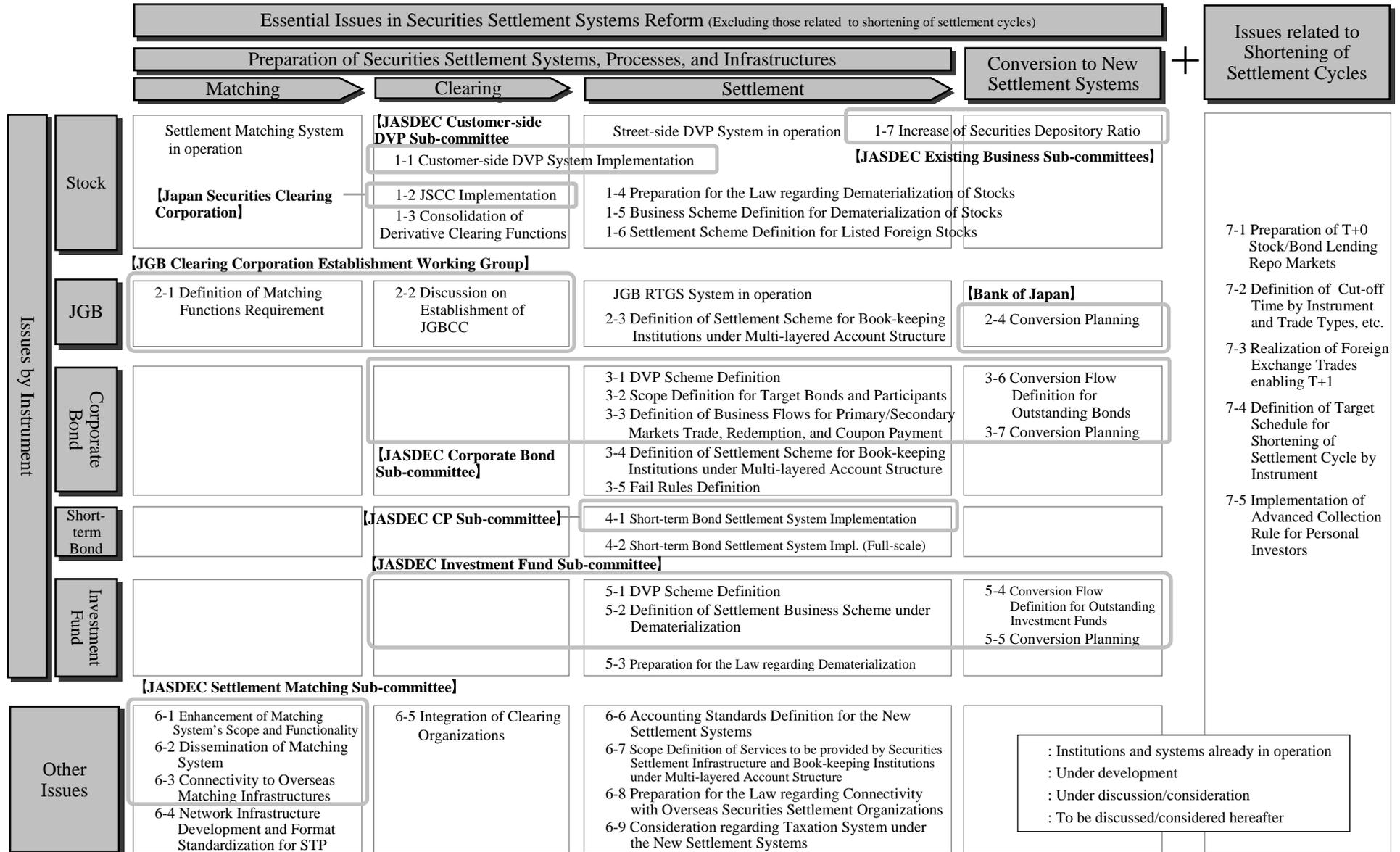


Figure 4-2 Major Issues Overview



5 Overview of Future Securities Settlement Scheme

5.1 Overall Picture of Securities Settlement Infrastructure / 5.2 Future Industry Models by Instrument

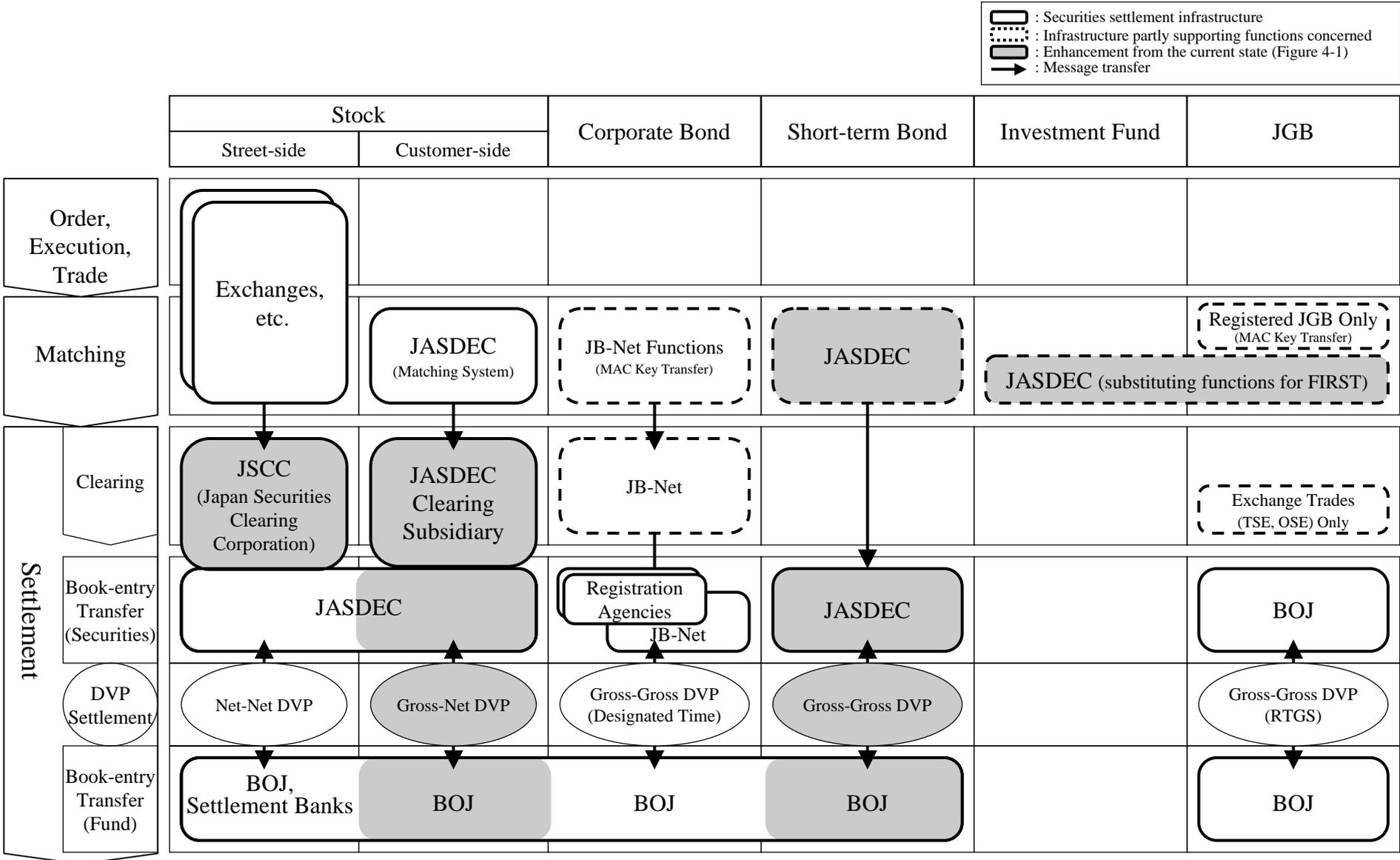
This section provides an overview of the target securities settlement approaches. Figure 5-1 and Figure 5-2 respectively show “(1) Securities Settlement Systems Overview at Completion of Current Infrastructure Initiatives” and “(2) Securities Settlement Systems Overview at Completion of Current and Likely Initiatives” that includes initiatives currently discussed in the working groups and committees.

Securities settlement systems initiatives currently ongoing/consideration by instrument

Stock	<ul style="list-style-type: none"> • JSCC (the unified clearing organization) implementation • Customer-side DVP System implementation • JASDEC-PSMS Second Stage (Connection with the Customer-side DVP System) 	Ongoing Ongoing Ongoing
Corporate Bond	<ul style="list-style-type: none"> • Implementation of a book-entry settlement infrastructure and a matching infrastructure based on the Law regarding Book Entry Transfer of Corporate Bonds, etc. 	Under consideration
Short-term Bond	<ul style="list-style-type: none"> • Short-term bond book-entry system implementation • Short-term bond book-entry system implementation (Full-scale enhancement of DVP, etc.) 	Ongoing To be considered
Investment Fund	<ul style="list-style-type: none"> • JASDEC-PSMS First Stage/Third Phase implementation (investment fund setting/cancellation, etc.) • Implementation of a book-entry settlement infrastructure and a matching infrastructure based on the Law regarding Book Entry Transfer of Corporate Bonds, etc. 	Ongoing Under consideration
JGB	<ul style="list-style-type: none"> • JASDEC-PSMS First Stage/Third Phase implementation (JGB trading) • Establishment of a clearing organization and matching infrastructure for JGB 	Ongoing Under consideration

* The “Ongoing” initiatives shown above are reflected in both Figures 5-1 and 5-2, and the initiatives either “Under consideration” or “To be considered” are reflected on Figure 5-2 only.

Figure 5-1 (1) Securities Settlement Systems Overview at Completion of Current Infrastructure Initiatives



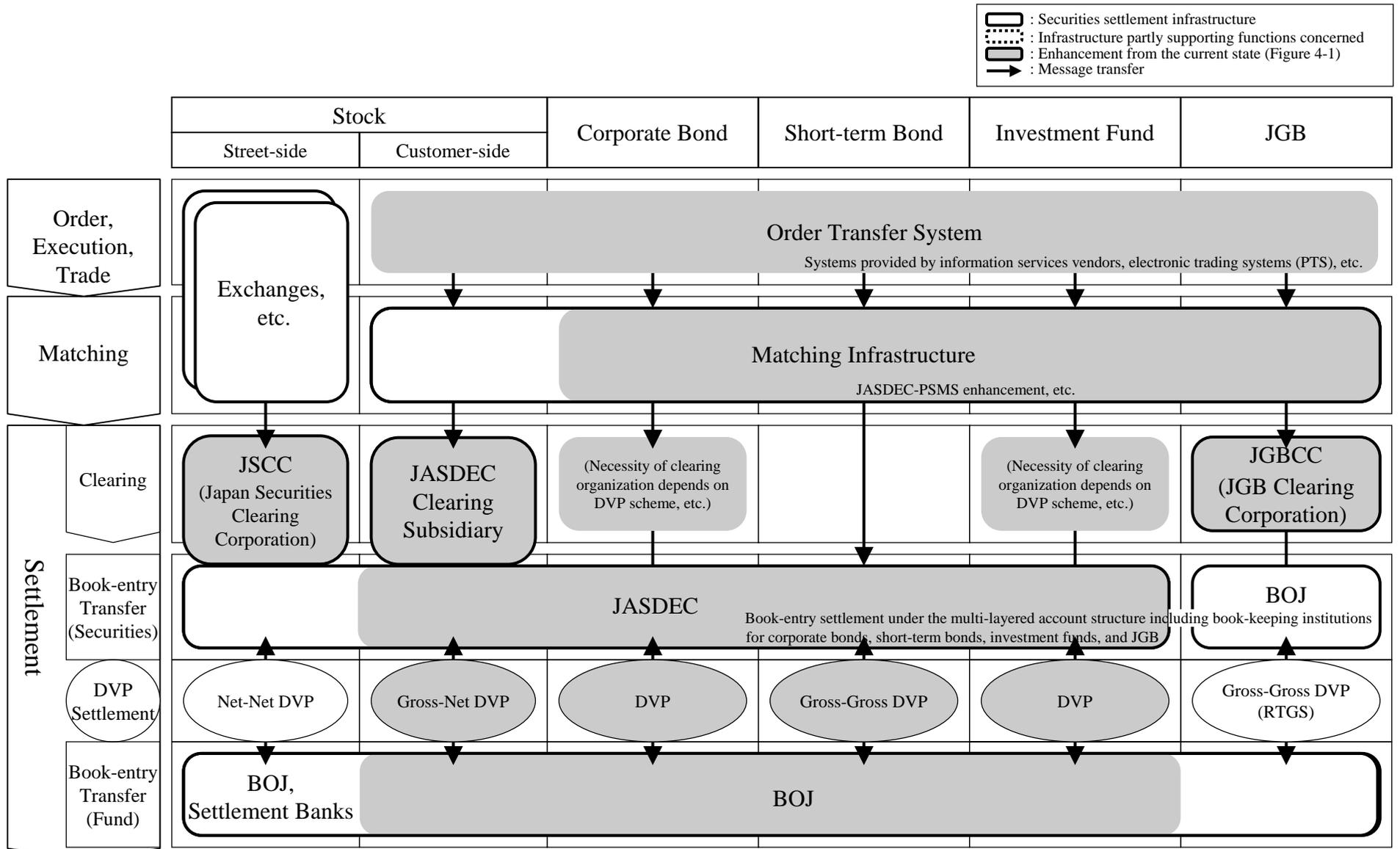
• Unified Clearing Organization (JSCC) will start operation (in January, 2003 (plan))

• JASDEC will start Customer-side DVP, JASDEC Clearing Subsidiary will start operation (by end of FY2003 (plan))

• JASDEC will start DVP book-entry settlement for short-term bond (by end of FY2002 (plan))

• JASDEC-PSMS First Stage/Third Phase will start operation (in May, 2003 (plan))

Figure 5-2 (2) Securities Settlement Systems Overview at Completion of Current and Likely Infrastructure Initiatives



- Book-entry DVP settlement based on the Law regarding Book Entry Transfer of Corporate Bonds, etc. will be implemented
- Matching infrastructure will be implemented

- Full-scale book-entry system will be implemented. (Enhancement of matching and DVP, etc.)

- Dematerialization and DVP settlement for issuance/redemption based on the Law regarding Book Entry Transfer of Corporate Bonds, etc. will be implemented
- Matching infrastructure will be implemented

- JGB clearing organization will start operation
- Matching infrastructure will be implemented

5.3 Issues to be resolved

In moving forward with the proposed securities settlement systems, several cross-product issues exist, and are explained in the following table.

Major Cross-product Issues

Matching Process	<p>An STP architecture requires: (i) implementation/enhancement of trade- and settlement-matching processes and (ii) agreement among institutional investors and asset management firms to convert to the new matching infrastructure. Users' benefits need to be emphasized by implementing an accessible, efficient, and low-cost cross-product matching infrastructure.</p> <p>Order transfer system vendors are expected to provide systems solutions for asset managers and institutional investors that connect with the matching infrastructure. It is also necessary to promote standardization of network infrastructures and formats.</p>
Clearing Process	<p>Stakeholders who will manage clearing organizations must discuss future clearing systems coordination and clearing organization integration. Key points to be considered include account efficiency, accounts accessibility by users, maintenance cost-reduction, and risk management.</p> <p>A new clearing model will need to be developed taking into consideration the current clearing methods and discussions in the industry. Integration of clearing functions and integration of clearing organizations would be two major issues for discussion to define an optimal clearing model in Japan.</p>
Book-entry Settlement Process	<p>An efficient book-entry settlement process, considering smooth conversion from book-keeping and book-entry settlement mechanisms, will need to be developed based on the proposed law on dematerialization of stocks (targeted for April, 2004), which is further based on the Law Concerning Depository and Book-entry for Share Certificates.</p> <p>Book-entry rules will need to be defined for multi-layered account structures for corporate bonds and other instruments under the new STP infrastructure.</p> <p>New book-keeping entities supporting multi-layered accounts will be introduced and details as to the specific services and each financial institution's usage of those services will need to be defined.</p>
Conversion to New Systems	<p>Conversion of outstanding bonds/investment funds to the new securities settlement systems will need to be considered based on the Law Regarding Book Entry Transfer of Corporate Bonds, etc. The conversion method should incorporate conversion costs and extra workloads during the transition period when the old and new systems coexist.</p> <p>An inexpensive conversion approach will be required for non-traded instruments such as private subscription bonds and private placement bonds.</p>

6 Master Schedule for Securities Settlement Systems Reform

6.1 Schedule toward Securities Settlement Systems Reform

This section describes the schedule for the Securities Settlement Systems reform. Figure 6-1 shows major milestones for the new securities settlement infrastructure implementation.

Figure 6-2 indicates the overall master schedule assuming that the Securities Settlement Systems Reform is progressed at earliest opportunity, taking the major milestones into account.

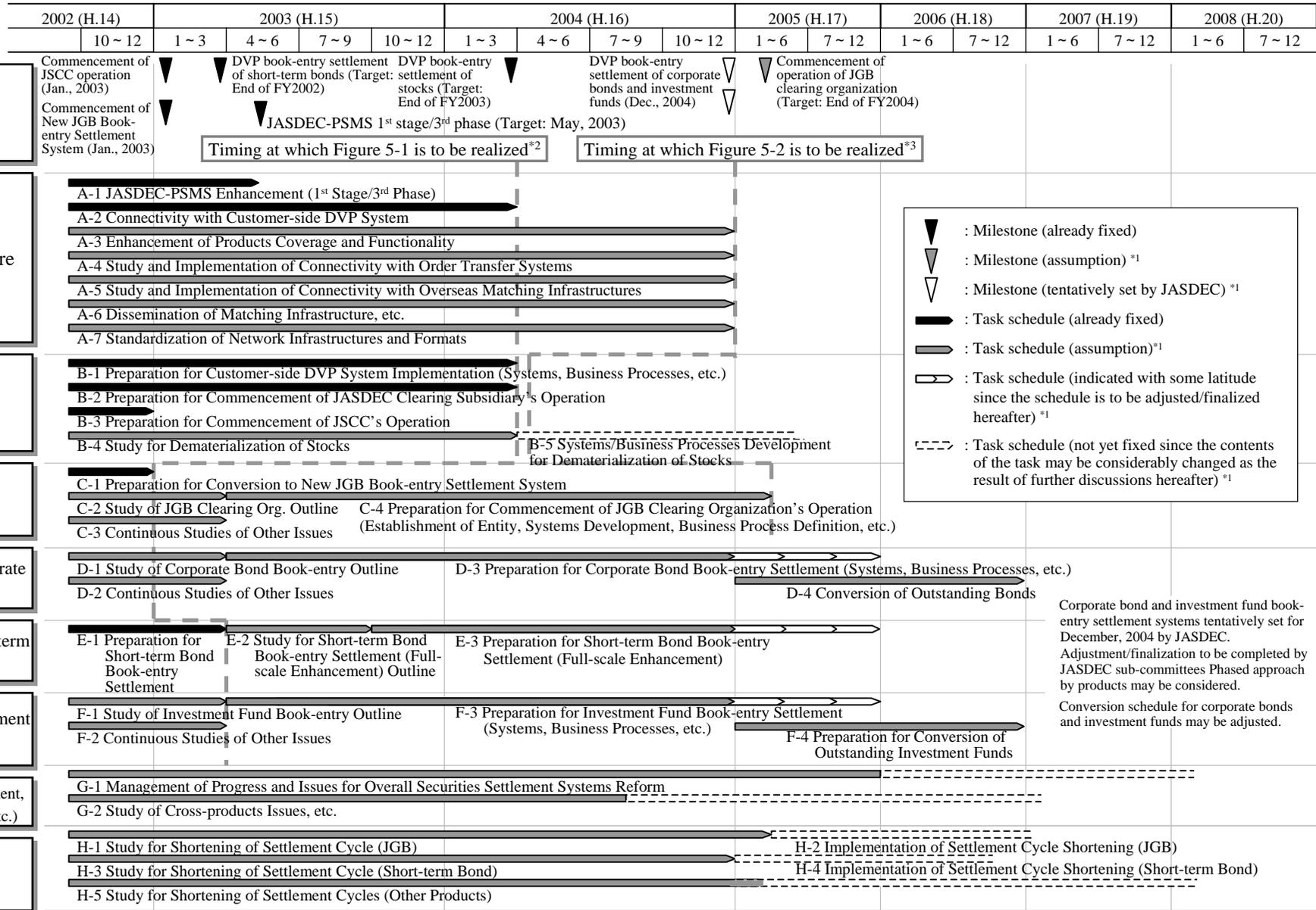
Figure 6-1 Securities Settlement Systems Reform Milestones (fixed or planned)

: Major milestone already set
 : Major milestone currently planned
 : Major milestone tentatively set by JASDEC

		2002 (H.14)				2003 (H.15)				2004 (H.16)				2005 (H.17)		2006 (H.18)		2007 (H.19)		2008 (H.20)	
		1~3	4~6	7~9	10~12	1~3	4~6	7~9	10~12	1~3	4~6	7~9	10~12	1~6	7~12	1~6	7~12	1~6	7~12	1~6	7~12
		This Report is created. (Oct., 2002)																			
Legislation		Law regarding Transfer Settlement of Short-term Bonds into effect (Apr., 2002)				Law regarding Book Entry Transfer of Corporate Bonds, etc. into effect (Jan., 2003)				Bill regarding dematerialization of stocks to be submitted to the Diet (Fall of 2003)				Law regarding dematerialization of Stocks in effect (Apr., 2004)				Abolishment of the Bond Registration Law (By Jan., 2008)			
		Law revising the Law of Securities Transactions into effect (Legislation regarding clearing organizations) (Jan., 2003)																			
Common across All Products		Launch of Securities Settlement System Reform Center (Apr., 2002)																			
		Commencement of operations of JASDEC, Inc. (June, 2002)																			
By Product	Stock													DVP book-entry settlement for customer-side transactions of stocks (Target: End of FY2003)							
	JGB					Reporting of the JGB Clearing Organization Establishment Working Group (Oct., 2002)								Commencement of operations of JGB clearing organization (Target: End of FY2004)				Commencement of New JGB Book-entry Settlement System (Jan., 2003) (Target set by the JGB Clearing Organization Establishment Working Group)			
	Corporate Bond													DVP book-entry settlement of corporate bonds (Dec., 2004) (Target tentatively set by JASDEC)				Completion of conversion to book-entry system (Target: Jan., 2008) *1			
	Short-term Bond					DVP book-entry settlement of short-term bonds (Target: End of FY2002)															
	Investment Fund													DVP book-entry settlement of investment funds (Dec., 2004) (Target tentatively set by JASDEC)							
	Others													SIA (U.S.) will make a decision about T+1 (2004)							

*1 The target for completion is January, 2008 due to taxation of outstanding corporate bonds at abolishment of the Bond Registration Law.

Figure 6-2 Master Schedule for Securities Settlement Systems Reform (under current assumptions)



▼ : Milestone (already fixed)
 ▽ : Milestone (assumption)*1
 ▾ : Milestone (tentatively set by JASDEC)*1
 [Solid bar] : Task schedule (already fixed)
 [Hatched bar] : Task schedule (assumption)*1
 [Bar with double arrow] : Task schedule (indicated with some latitude since the schedule is to be adjusted/finalized hereafter)*1
 [Dashed bar] : Task schedule (not yet fixed since the contents of the task may be considerably changed as the result of further discussions hereafter)*1

Corporate bond and investment fund book-entry settlement systems tentatively set for December, 2004 by JASDEC. Adjustment/finalization to be completed by JASDEC sub-committees Phased approach by products may be considered.

Conversion schedule for corporate bonds and investment funds may be adjusted.

*1 Infrastructure detailed task schedules should be led by organization(s) that would provide eventual infrastructure, based on users requirements, legislation, and system approaches.

*2 "(1) Securities Settlement Systems Overview at Completion of Current Infrastructure Initiatives" (shown in Section 5-1).

*3 "(2) Securities Settlement Systems Overview at Completion of Current and Likely Industry Initiatives" (shown in Section 5-1).

We believe that further development of the Master Schedule should take into the following points:

- Development of Phased Schedule

The securities settlement infrastructure implementation schedule has primarily been discussed and determined by instrument. However, a phased schedule taking into consideration system and personnel resource constraints and risks involved in multiple product implementations should be developed.

- Update of the Master Schedule

Working groups and/or committees led by respective infrastructure provider(s) will consider legislative, systems, and other issues in more detail. Durations to implement the new infrastructure will need to be estimated and the Master Schedule will need to be adjusted accordingly by the Project Management Organization proposed in Section 6.2.

In particular, target dates for the new settlement mechanisms should be clarified as soon as possible as these will greatly determine the start timing of industry participants preparation.

6.2 Project Organization for the Securities Settlement Systems Reform

To manage the complexities of the Reform and to balance the needs of multiple industry participants, two project management entities have been defined based on the following principles:

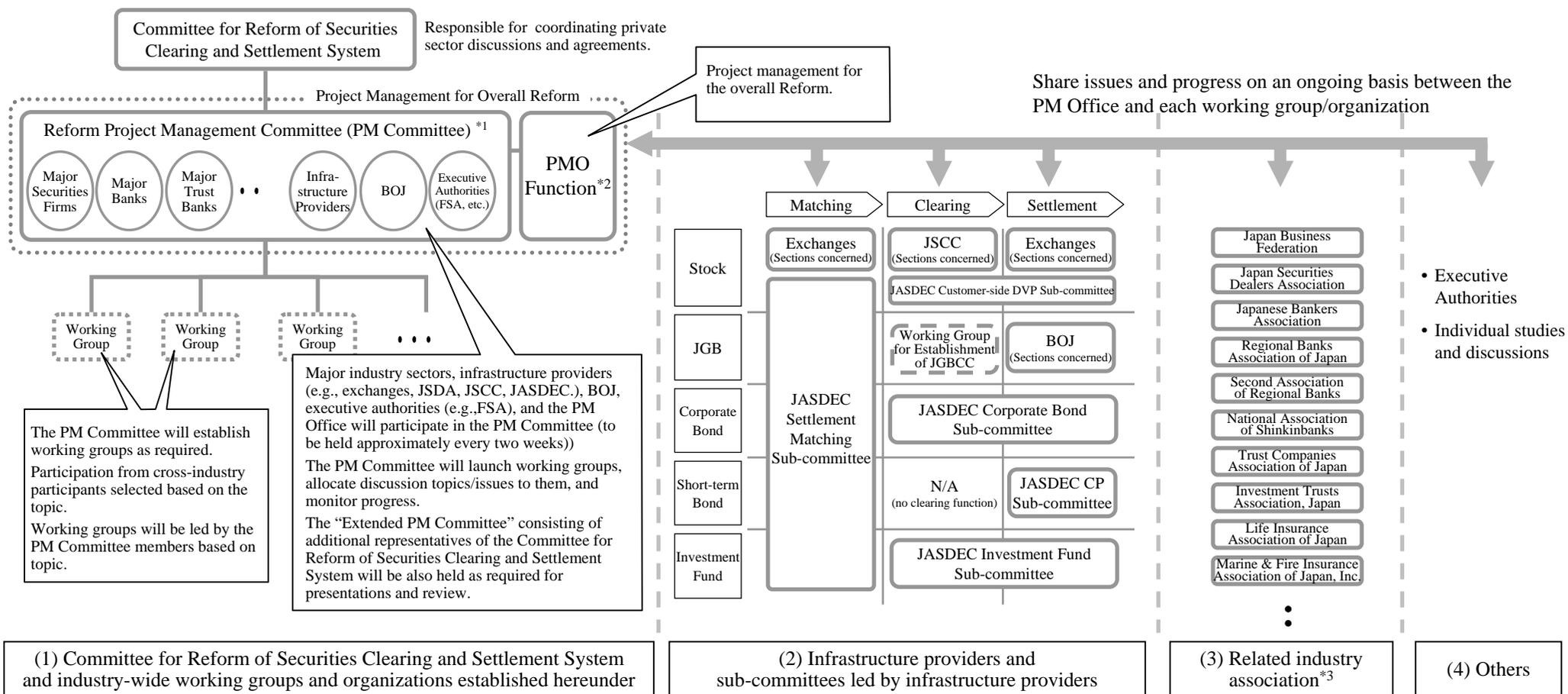
- An industry-wide project organization with representation from each industry segment is required
- Overall coordination and project management is needed to advance industry-wide Reform.

We will establish a “Reform Project Management Committee”(tentatively referred to as the “PM Committee”) under the Committee for Reform of Securities Clearing and Settlement System as a reform promotion body at the practitioners’ level.

We will establish a “Project Management Office”(tentatively referred to as the “PM Office”) as a cross-industry secretariat to support the PM Committee (see Figure 6-3).

<p>PM Committee</p>	<ul style="list-style-type: none"> • Functions as a committee for <u>promotion and coordination at the practitioners’ level</u> and is <u>expected to meet biweekly</u>. • Includes participation from each industry segment: financial institutions (<i>e.g.</i>, securities firms, banks, trust banks, etc.), infrastructure providers (<i>e.g.</i>, exchanges, JSDA, JSCC, JASDEC, etc.), the BOJ and executive authorities. • Conducts reviews of issues be discussed <u>with an “Extended PM Committee”</u> including representatives of the Committee for Reform of Securities Clearing and Settlement System including issuing corporations and institutional investors as required. • Defines working groups under the PM Committee as required and <u>leads the discussion and reform promotion in each working group</u>. • <u>Coordinates implementation of the overall Reform Program</u> based on the discussions, decisions, and progress of the working groups.
<p>PM Office</p>	<ul style="list-style-type: none"> • <u>As a secretariat for the Committee for Reform of Securities Clearing and Settlement System and the PM Committee</u>, responsible for the following project management: <ol style="list-style-type: none"> (1) Defines/updates the Reform Plan Overview and monitors the overall progress (2) Prepares/updates the issue list and monitors progress of each issue (3) Facilitates information sharing and coordination among working groups and organizations concerned (4) Identifies new issues and/or delays and takes necessary actions (5) Coordinates overall communication and develops updates for industry participants

Figure 6-3 Project Organization for Securities Settlement Systems Reform (under current assumptions)



- The industry-wide Reform project management committee (PM Committee) will coordinate discussion topics and issues to be resolved. Working groups will be established as necessary.
- Each working group will be led by the PM Committee.
- The PM Office, as a secretariat of the PM Committee, will provide overall project management for the industry-wide Reform.

- Infrastructure providers will coordinate infrastructure development discussions within in their respective product and settlement areas.
- Information should be shared on an on-going basis between each working group/organization and the PM Office.

- Information should be shared on an on-going basis between industry associations and the PM Office.
- Reform Topics/issues need to be coordinated between industry associations and working groups under the Committee for Reform of Securities Clearing and Settlement System.

- Information should be shared on an ongoing basis between related executive authorities/parties concerned and the PM Office.

*1 We assume the “Securities Settlement System Reform Promotion Working Group” will be expanded to a PM Committee to facilitate broader discussion of specific issues/topics.
 *2 We assume the Securities Settlement Systems Reform Center which is the secretariat of the “Securities Settlement System Reform Promotion Working Group” will be reorganized to a PM Office, to facilitate industry-wide efforts and actively participate in the Reform.
 *3 Working groups and committees established by each industry association are also included.

6.3 Changes in Industry Segments

Brokerage, asset management, and custody firms will need to evaluate the impact of the Reform to their business. The following table describes points for each sector to consider.

Preparation for the Securities Settlement Systems Reform by industry segment

<p style="text-align: center;">Brokerage/Dealing</p> <p>(e.g., Securities firms and bank treasury)</p>	<ul style="list-style-type: none"> · Prepare operational and system changes for the revised book-entry, clearing, and settlement infrastructure. · Evaluate opportunities to subcontract components of the settlement process mindful of core competencies.¹ · Evaluate opportunities to provide new settlement services to other firms.
<p style="text-align: center;">Asset Management</p> <p>(e.g., Insurance firms, trust banks, institutional investors, investment funds, investment management firms)</p>	<ul style="list-style-type: none"> · Evaluate ways to use the matching infrastructure (e.g., connect directly to the matching infrastructure, use systems provided by vendors, subcontract components of back office processes (including matching)).
<p style="text-align: center;">Custody</p> <p>(e.g., Trust banks, custodians)</p> <p>* Including book-keeping institution's business processes</p>	<ul style="list-style-type: none"> · Prepare operational and system changes for the revised book-entry, clearing, and settlement infrastructure. · Evaluate opportunities to provide new settlement and agency services to other firms. · Evaluate opportunities to utilize settlement services provided by other book-keeping institutions.

¹ Each industry participant needs to restructure its business processes and systems to meet the requirements of the securities settlement systems reform as the securities settlement infrastructures are being implemented. There would be several changes to settlement related businesses depending on the industry participants' customer segments and strategies.

Some examples are described as follows:

- Medium to small retail brokers/dealers may outsource their street-side settlement processes to reduce costs and efforts to respond to the securities settlement systems changes. It will be necessary to prepare such environment that both brokers/dealers and service providers can efficiently and flexibly respond to the changes.
- Wholesale brokers/dealers may also decide to strategically outsource their settlement related processes both in street-side and customer-side to reduce costs and efforts to respond to the securities settlement systems changes in the future, and focusing on the front-side business as their core competence.
- Large institutions will keep their own settlement related processes within the four walls to maintain competitiveness in their brokerage/dealing business in terms of operation costs and quality, etc.

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