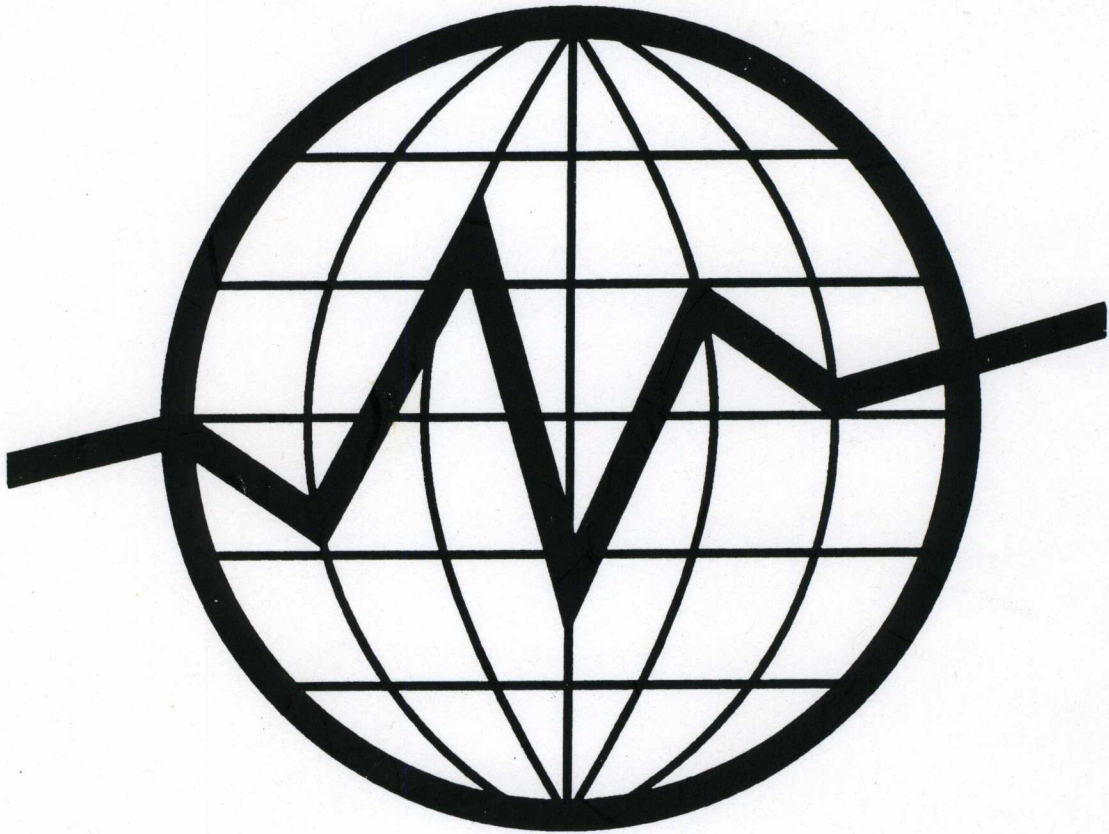


**CLEARANCE AND SETTLEMENT  
IN THE MARKETS OF THE MEMBERS  
OF THE TECHNICAL COMMITTEE**



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*AN UP-TO-DATE REPORT ON THE IMPLEMENTATION OF  
THE GROUP OF THIRTY RECOMMENDATIONS*

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IOSCO General Secretariat  
May 1993



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## **INTRODUCTION**

At the February 9 and 10, 1993 Trinidad meeting of the Technical Committee it was decided that the General Secretariat should prepare an up-to-date document indicating where the markets represented at the Technical Committee presently stand on the Group of Thirty (G30) recommendations on clearance and settlement.

A substantial status report on clearance and settlement systems was produced by the G30 at the end of the Autumn of 1992. This status report on the implementation of the G30 recommendations included data on all the countries of the members of the Technical Committee.

The General Secretariat has collated the G30 data in the present report. This information is presented on a country by country basis in alphabetical order in Sections 3 to 15. It is completed by the subsequent information provided by the members of the Technical Committee.

Section 1 presents the nine G30 recommendations on clearance and settlement systems.

Section 2 contains a summary table on the implementation of the G30 recommendations in all the countries of the Technical Committee members. This short form table was prepared, on the basis of the detailed data contained in Sections 3 to 15, to provide at a quick glance global information on a comparative basis. This comparative table was reviewed by the members of the Technical Committee.





## **Group of Thirty Clearance and Settlement**

### **Recommendations**

1. By 1990 all comparisons of trades between direct market participants (that is, brokers, broker/dealers, and other exchange members) should be accomplished by T+1.
2. By 1992 indirect market participants (such as institutional investors or any trading counterparties that are not broker/dealers) should be members of a trade comparison system that achieves positive affirmation of trade details.
3. Each country should have an effective and fully developed central securities depository, organized and managed to encourage the broadest possible industry participation (directly and indirectly), in place by 1992.
4. Each country should study its market volumes and participation to determine whether a trade netting system would be beneficial in terms of reducing risk and promoting efficiency. If a netting system would be appropriate, it should be implemented by 1992.
5. Delivery versus payment (DVP) should be employed as the method for settling all securities transactions. A DVP system should be in place by 1992.
6. Payments associated with the settlement of securities transactions and the servicing of securities portfolios should be made consistent across all instruments and markets by adopting the "same day" funds conventions.
7. A "rolling settlement" system should be adopted by all markets. Final settlement should occur on T+3 by 1992. As an interim target, final settlement should occur on T+5 by 1990 at the latest, except where it hinders the achievement of T+3 by 1992.
8. Securities lending and borrowing should be encouraged as a method of expediting the settlement of securities transactions. Existing regulatory and taxation barriers that inhibit the practice of lending securities should be removed by 1990.
9. Each country should adopt the standard for securities messages developed by the International Organization of Standardisation (ISO Standard 7775). In particular, countries should adopt the ISIN numbering system for securities issues as defined in the ISO Standard 6166, at least for cross-border transactions. These standards should be universally applied by 1992.







**Comparative Summary Table on the Present Implementation of  
G30 Recommendations on Clearance and Settlement in all  
the Countries of the Members of the Technical Committee<sup>1</sup>**

COUNTRIES	GROUP OF THIRTY RECOMMENDATIONS ON CLEARANCE AND SETTLEMENT								
	1	2	3	4	5	6	7	8	9
Australia	Yes	No	No	Yes	No	No	No	Yes	P
Canada	Yes	Yes	Yes	Yes	P	No	No	Yes	P
France	Yes	Yes	Yes	Yes	Yes	Yes	P	P	P
Germany	Yes	No (2)	Yes	No (2)	Yes	Yes	Yes	Yes	P
Hong Kong	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No
Italy	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Japan	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No
Netherlands (The)	Yes	No	Yes	Yes	Yes	Yes	No	Yes	P
Spain	Yes	Yes	Yes	No	Yes	Yes	P	P	Yes
Sweden	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	P
Switzerland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
United Kingdom	Yes	Yes	P	No	No	Yes	No	Yes	P
United States	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No

Yes = The G30 recommendation has been implemented.

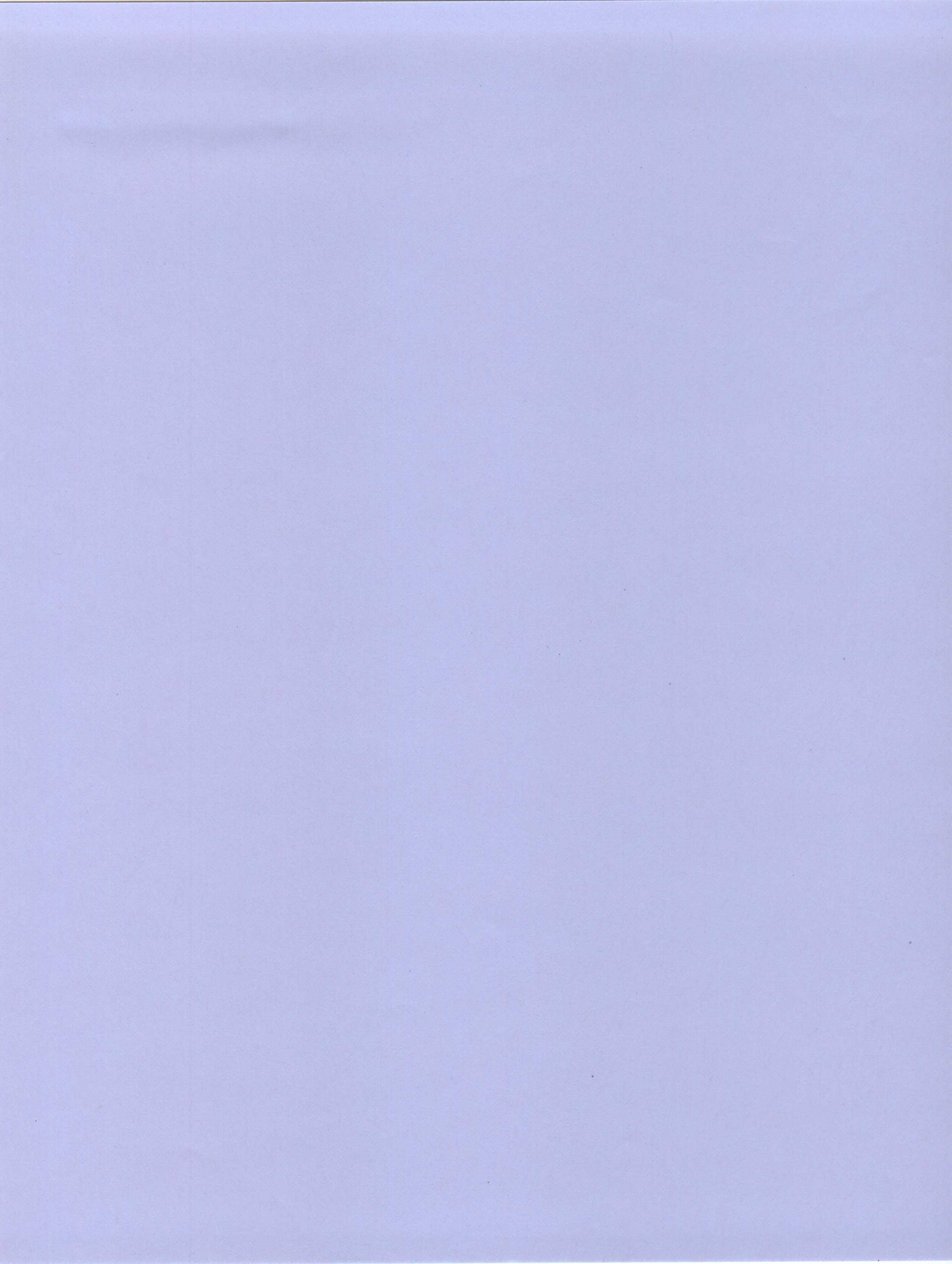
No = The G30 recommendation has not presently been implemented.

P = The G30 recommendation has, at the present time, only been partially implemented.

1 = The data contained in the Summary Table should be interpreted in light of the detailed notes contained in Sections 3 to 15 of this report.

2 = See the note from Germany in Appendix 6.







AUSTRALIAN  
SECURITIES  
COMMISSION

OFFICE OF THE CHAIRMAN  
MELBOURNE

15 April 1993

Our Reference: 92/000711/E-8272JS

Mr Paul Guy  
Secretary General  
International Organisation of Securities Commissions  
C.P.171  
Tour de la Bourse -  
800 Square Victoria 45 Etage - Montreal  
Quebec - H4Z 1C8 Canada

Dear Mr Guy

**IMPLEMENTATION OF THE G30 CLEARANCE & SETTLEMENT  
RECOMMENDATIONS**

I refer to your letter dated 1 March 1993 received on 15 March 1993 concerning the implementation of the G30 Clearance and Settlement recommendations.

I have reviewed the collated summary table and confirm that the Australian section is correct. It is important to note, however, that the summary table may not, if taken out of context, present a complete picture of the significant reforms in equity clearance and settlement underway in Australia. As the full report to G30 highlights Australia has adopted a 3 stage approach to reform and has successfully implemented the first two stages and has now successfully moved to a T+ 5 settlement regime. The development and implementation of CHES (Clearing House Electronic Sub-Register System) is well underway. In part, the non-achievement of the G30 reform goals is a result of the deliberate incremental reform strategy adopted.

It would be of concern to us if the summary table was taken out of context of the full description of the reforms in the G30 Report upon which it is based. Our caution in this regard is based on our previous experience of the use by third parties of summary charts of material provided to IOSCO.

Yours sincerely

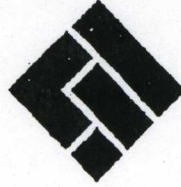
SHANE TREGILLIS  
DIRECTOR MARKETS BRANCH

R E C U

23 AVR. 1993

O I C V





AUSTRALIAN  
SECURITIES  
COMMISSION

OFFICE OF THE CHAIRMAN  
SYDNEY

28 April, 1993

Mr Jean-Pierre Cristel  
Assistant to the Secretary General  
International Organisation of Securities Commissions  
Tour de la Bourse, 45th floor  
800, square Victoria  
Montreal  
CANADA

Dear Jean-Pierre,

Thank you for your letter of 22 April, 1993 regarding the G30 Clearance and Settlement Report.

We have perused the report and advise that the status report is accurate. With regard to the summary table, we understand that the information is in short form, however we should like to note that many of the recommendations which are currently recorded as not being met are in fact in the process of being implemented via the CHESSE system.

Yours sincerely,

Peter Clark  
Head of International Relations

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## STATUS REPORT FOR AUSTRALIA

### I. DEVELOPMENTS TO 1992

This report focuses on the progress in the reform of clearing and settlement in the Australian equity market. Key developments include the recent introduction of a T + 5 settlement period, the implementation of a retail Securities Lending Scheme and the continued development of the Clearing House Electronic Subregister System (CHES) by the Australian Stock Exchange Ltd (ASX).

In 1989 the ASX began the implementation of the main G30 recommendations. This is occurring in three broad stages as follows:

- Stage One - Introduction of optional uncertification ("dematerialization") of equity securities through FAST (Flexible Accelerated Securities Transfer) system.

FAST enables security holdings to be held in uncertificated form rather than requiring a company to issue certificates to shareholders as evidence of title. Private shareholders obtain access to FAST by entering into a sponsorship agreement with a stockbroker. The sponsoring broker is responsible for all matters related to change of ownership or change of status for shareholdings sponsored by that broker.

In May of this year, the ASX introduced FAST Issuer Sponsorship for newly listing companies. As a result, securities holders who are neither sponsored by a broker nor an institutional participating investor will be able to hold securities in an uncertificated mode under the FAST system. The introduction of issuer sponsorship is designed to facilitate the inclusion of largely inactive shareholders in the system. This concept has been included in the design of CHES.

In January 1992 the ASX introduced Listing Rule 3X(1)(a) which enables the ASX to initiate a recommendation to the Australian Securities Commission that companies be authorized to participate in FAST. The ASX is now pressing ahead with mandatory participation in FAST to ensure that all companies and securities are brought into the new system as soon as possible.

- Stage Two - Introduction of a T + 5 fixed period settlement discipline for FAST eligible securities, subject to the provision that there must be a liquid lending market in securities designated for T + 5 settlement.

Stage 2 was implemented in March 1992 and involved enhancements to the ASX broker/broker settlement system and broker back office systems, changes to ASX rules and legislative amendments to Corporations and Taxation Law.

- Stage Three - Realization of the Clearing House Electronic Subregister System (CHES) initiative to provide paperless transfer of securities, delivery versus payment, and the capacity to move to a T + 5 fixed settlement discipline.

Several limitations to the equities settlement and transfer processes in Australia still exist:

- The success of dematerialization initiatives notwithstanding, the majority of securities holdings are still held in certificated form;



- The process of transfer and registration still involves paper documentation, and hence procedures which are susceptible to delay and overload in periods of high market activity;
- The system does not offer guaranteed delivery versus guaranteed payment.

With the FAST system and T + 5 now operational, the next stage is to proceed with CHES and DVP settlement. Developments in this area are detailed below

## II. STATUS IN AUTUMN 1992

### A. Summary

The current status of the implementation of the G30 recommendations for equities settlements is summarized in Section III:

Recommendation 1	Operational
Recommendation 2	CHES - 4th Quarter 1994
Recommendation 3	Not planned-Alternative CHES Proposal - 1st Quarter 1994
Recommendation 4	Operational
Recommendation 5	CHES - 4th Quarter 1994
Recommendation 6	Not under consideration
Recommendation 7	T + 5 - Operational T + 3 1995
Recommendation 8	Operational
Recommendation 9	ISO 6166 Operational ISO 7775 No Date Fixed

### B. Status of G30 Recommendations

#### Recommendation 1: Trade comparison by T + 1 for direct market participants

Comparison by T + 1 for direct market participants has been operational for some time in Australia. The ASX broker/broker settlement system (BBS) is the only equity settlement system in Australia that is currently automated. It maintains records of outstanding obligations between ASX member brokers on a trade for trade basis, determines net delivery obligations for a broker in each eligible security, and calculates the daily net money settlement of each broker.

BBS also provides ancillary facilities to support a same-day interstate delivery service (via the medium of a clearing house nominee) and a retail level securities lending service.



### Recommendation 2: Trade comparison for indirect market participants

Non-broker trades cannot be settled through the current system (BBS) which is only available for broker/broker settlements. If trades are transacted outside the ASX, settlement is arranged between the two parties on a "white transfer" as opposed to the normal "on market pink" transfer under the BBS system.

This recommendation will be achieved with the introduction of CHESSE and is on target for the fourth quarter of 1994.

### Recommendation 3: Central securities depository

Australian issuers are fundamentally opposed to any innovations in the processes of clearing, settlement and transfer of ownership that would detract from their current ability to determine beneficial ownership and to communicate with shareholders. The issuers generally accept the extent to which ownership is presently masked through holdings of major custodian nominees, but they are opposed to any scheme that introduces a depository style 'super nominee' within the hierarchy of legal ownership.

This should be seen in the context that all Australian companies issue registered shares. Bearer shares are not permitted under the Corporations Law. Consequently Australia will implement a name-on-register solution to achieve book entry transfer.

While Australia has said 'No' to a central securities depository (CSD), the FAST system together with the proposed name-on-register system to be introduced with CHESSE will be our replacement for the CSD. The name-on-register system will be implemented with Phase 1 of CHESSE due in the first quarter of 1994.

### Recommendation 4: Netting

As part of the introduction of T + 5, and to minimize the number of trades for which delivery is not made on T + 5 (fails), a system for routine netting of BBS transactions on a daily basis was introduced in May 1992. This ensures that each broker who has traded in a particular security on the day has a simple net obligation on T + 5 for one of the following:

- to make one or more deliveries of a security;
- to receive one or more deliveries of a security; or
- to have no delivery obligation, that is, the broker has netted "out".

This system has been implemented through changes to the Business Rules of the ASX and amendments to the National Guarantee Fund provisions of the Corporations Law. The latter are designed to ensure that the fund continues to offer the same level of protection for brokers and their clients.

Concerns about broker insolvency led to the introduction of a system of netting by novation in which each broker/broker contract is replaced by two contracts, one between the selling broker and ASX, the other between ASX and buying broker. The ASX contractual obligations are being undertaken by a new entity, TNS Clearing Pty Limited (TNS), a special purpose wholly owned subsidiary of the ASX. TNS has two components: the Delivery Netting Service (DNS) and the Payment Netting Service (PNS). Settlement of cash occurs via PNS, but DNS does not involve itself in the physical delivery process. It satisfies its legal obligations by giving directions to sellers to deliver directly to buyers for non "netted" trades by issuing delivery orders against net position for "netted" trades.



### **Recommendation 5: Delivery versus payment**

CHESSE settlement will be based on delivery versus payment (DVP) by which we mean "the irrevocable exchange of securities for funds." The current system employed by the ASX requires documents be delivered to the Exchange clearing room by 12:15 daily or to the buying broker's office by 12:30. At the same time the selling broker gives a "delivery docket" to the Exchange which details the securities and funds required for delivery to the buying broker. This enables the Exchange to identify the trade in the system, to detail the trades for settlement to the buyer, and to draw the cheque to the seller.

The Exchange then issues a net statement to each broker listing all purchases and sales for which delivery has been made either by the broker or to the broker. The net amount of the statement is either paid to or collected from the Exchange by 3:00 p.m.

### **Recommendation 6: Same day funds**

Australia is not developing a single settlement system to cover all financial instruments. There are different systems for the various instruments.

The CHESSE system is for the settlement of equities. The Reserve Bank Information and Transfer System (RITS) has been developed for the settlement of transactions in Commonwealth Government securities on a delivery-versus-payment basis. Austraclear Ltd operates the clearing and settlement system for the Australian money market, and the functions of clearing and settlement of futures is now with the Sydney Futures Exchange Clearing House Pty Ltd, a wholly owned subsidiary of the Sydney Futures Exchange.

The National Guarantee Fund (NGF) covers the current ASX settlement procedure whereby the ASX issues a cheque against earlier "good" delivery of securities. The cheque is effectively guaranteed by the NGF but cleared funds are not available until the next day. Bank cheques (a cheque drawn on a bank's own account thereby guaranteeing payment) are used for block trades settled outside the system between consenting brokers. These transactions are covered by the NGF. CHESSE will involve linking settlements with automatic payments through participating banks, and therefore same day funds payment will apply with its introduction in late 1994.

### **Recommendation 7: Rolling Settlement on T + 3**

In May 1992 the ASX introduced a T + 5 fixed period settlement regime for all securities. The introduction by the ASX of the T + 5 system involved a package of changes to existing procedural and regulatory requirements based on amendments to legislation and ASX Business and Listing Rules.

The components of the T + 5 system include:

- the FAST system
- T + 5 Settlement Regulation
- Seven day "ex" period
- transfer of franked dividends
- transaction netting service
- securities lending service
- FAST interbroker delivery service (FIDS)
- ASX administration of fails
- brokers' in-house system and procedures



The system has been based on the ASX broker/broker settlement system (BBS) which maintained records of outstanding obligations between ASX member brokers on a trade for trade basis and determined the daily net money settlement of each broker in response to notifications from brokers of the transactions they have delivered.

T + 5 has achieved the primary objective of introducing predictability into the settlement processes and this, in turn, has provided the basis for greater efficiencies. The efficiencies have led to improvements in cash flows, reduction in funding costs and a more orderly flow of settlements.

CHESSE Phase 2 will provide the capability to introduce T + 3 settlement; however, it is by no means clear that, under current procedures, transactions having foreign counterparties can be routinely cleared for settlement by T + 3 because of the time zone differences and the effect of having chains of intermediary custodians and settlement agents. It must be noted that T + 3 settlement will impose demanding standards of performance, particularly on foreign participants in the Australian market.

#### **Recommendation 8: Securities lending and borrowing**

The ASX implemented a retail security lending service to support the implementation of T + 5 in May of this year. Where a client is unable to deliver sold securities by the due date, securities may be borrowed subject to availability, to avoid a fail on T + 5. ASX acts as an intermediary to aggregate retail requests for securities loans of less than \$75,000 by brokers. Westpac Custodian Nominees Limited acts as the supplier of securities and manager of the securities pool to support this service.

The implementation of the Securities Lending Service (SLS) required changes to Taxation Law to ensure that the lending and borrowing of securities and the transfer of franked dividends between borrowers and lenders were not affected by the provisions relating to the capital gains tax and stamp duty. Legislative amendments, which apply to the wholesale lending market as well as the ASX's retail service, became effective on 27 June and 1 August 1991. Exemptions from stamp duty for SLS transactions have also been obtained.

Amendments to the Corporations Law have ensured that the use of the ASX securities lending service and the netting of broker/broker transactions do not diminish the protections available under the National Guarantee Fund.

The ASX has placed a number of restrictions on the lending scheme to ensure that the broker takes all possible steps to effect delivery before referring to the SLS. The ASX only provides the SLS to members and on the terms and conditions contained in ASX Business Rule 4.43. The total market value of a security loan must not exceed \$75,000 at the upper end and a broker shall not lodge an application if the market value of the securities to which the application relates is under \$5000 [ASX Rules 4.43 (4), (5), (8) and (44)]. Also a broker cannot lodge more than one application per security on any business day. The selling broker who borrows on behalf of a client may incur a borrowing cost, but this will normally be significantly less than the fail administration fee.

The lending system has significantly reduced the number of fails as shown by recent figures. Over the period May to June 1992, the daily average rate of trades failing for FAST securities that are not included in the securities lending pool has been 11 trades compared to 223 trades failing to settle for non-FAST category stocks. FAST securities that are covered by the SLS have an average daily fail rate of only 6.



### **Recommendation 9: ISO message standard and ISIN numbering**

The ASX is the National Numbering Agency for assigning ISIN numbers to Australian securities to achieve the standard recommended by the G30. The ASX is also a member of the Association of National Numbering Agencies. The ASX will still use the original system of security coding set up by the Exchange some time ago. Each company is allocated a three letter code which is closely related to the company name.

The ASX has allocated an International Securities Identification Number (ISIN) to each company and issue. Overseas participants in the Australian securities markets may use this numbering system when dealing with the Australian custodians, brokers, and the ASX. While the ISIN is available to overseas participants, it is not expected that the current ASX codes will be changed. At this stage, however, the systems are set up to enable utilization of ISIN. Phase one of this recommendation has been implemented. The introduction of ISO 7775, the international standard for securities messages, has been postponed and no date has been set at this stage for its implementation.

### **III. DEVELOPMENTS AFTER 1992: A PHASED APPROACH**

The implementation plan for the Clearing House Electronic Subregister System (CHES) is based on a phased approach of providing the CHES electronic subregister in Phase 1 and DVP settlement in Phase 2.

#### **A. Phase 1: the Electronic Subregister**

The Chess project has moved from the concept stage to the implementation stage in the last few months with the commencement of Phase 1 at the beginning of June 1992. Work has begun on the electronic subregister, including subregister administration functions, electronic transfer, and a CHES communications infrastructure sufficient to maintain the subregister.

The subregister will be recognized in law as part of the legal register of members upon which each individual member's holding and registration details are maintained. This is in contrast to the depository nominee approach to electronic transfer, common in overseas settlement systems, in which holding records are maintained as sub-accounts within the registered holding of a "super" nominee.

The subregister will have three levels; participants, holder and holding. A participant (a custodian or broker) in the CHES clearing house will be identified by its 5-digit Participant Identifier (PID) code.

A holder with holdings on the CHES subregister will be identified by a Holder Identification Number (HIN). The holder name and address registration details will be used as legal registration details for any holding established in CHES for the holder. The same HIN can be used to set holdings in any CHES-eligible security for a holder, thus using one common registration name and address record for each holding. Participants who control the HIN usage also control the related holdings and will electronically notify name and address details for HINs to CHES, prior to a HIN being used for transfers and settlement.

Holdings in CHES will be identified by a combination of a holder's HIN and a security code. The security code will be held in ISIN format. For the securities of Australian incorporated issuers, the securities code within the ISIN is identical to the familiar ASX security code. CHES will accept both ISIN and ASX codes.

Holdings in CHES will also have reservation subpositions for option cover with the Options Clearing House and for takeover acceptances. The electronic transfer of securities between holdings in CHES will reflect the change of ownership and company membership. This electronic transfer will eliminate the need for paper based



delivery and registration. Any movement on a CHES holding for a broker-sponsored, non-participant holder will be reported in a holding statement sent directly to the registered address of the holder at routine intervals.

With the commencement of work on Phase 1 in June of this year, the timetable envisages that the external interface specifications will be confirmed as fixed by January 1993. User testing will take place in early 1994 and is expected to finish around May 1994. The operation is expected to go "live" in June 1994.

The Corporate Law Reform Bill 1992 sets out the legislative amendments designed to provide the basic legal underpinnings for the introduction of CHES. This legislation is due for introduction in the Autumn 1992 session of Parliament.

The Bill provides for Approval of Securities House by the Attorney-General if:

- its business rules are satisfactory;
- its business rules make suitable provisions for disciplining of participants; and
- the public interest will be served by the approval.

Other provisions require notification of amendments to Clearing House Business Rules, provide for assistance to the Commission, ensure compliance by issuers of marketable securities with the Clearing House rules, and include a power of the Court to order compliance with the rules.

The Bill also provides for coverage of transactions by the National Guarantee Fund and for the mechanics in relation to title to, and transfer of, securities. The current legislative provisions in this area require amendment as they are based on the existence of a paper document of transfer, and this will not exist for those transfers effected via electronic transfer as envisaged by CHES. CHES continues to be based on the concept of electronic transfer of legal title. This differs from the TAURUS proposals in the U.K. that are based upon the notion of a "statutory entitlement." The issue arising from the electronic transfer of title, that directors will not be able to exercise any discretion to refuse registration of transfers, is the subject of on-going consultation.

One of the key risks that remains in the CHES implementation plan is the possibility that user organizations may not be ready to use the system when it goes live in mid-1994. To reduce this risk, the program over the next six to twelve months includes training of the prime CHES users and personnel in the support area of the clearing house operations. A task force has been set up to monitor and resolve problems in the area of external interface specifications (EIS).

This will:

- help potential users gain a thorough understanding of the CHES interface
- monitor the progress of the external organizations in developing their CHES interfaces
- provide timely feedback to the central CHES development and technical committee

During 1993 further modifications will be made to the ASX rules to enable access to the National Guarantee Fund by the clearing house if a broker cannot meet its financial settlement obligation when the CHES system is operational in 1994. Further amendments will be required to the ASX's business rules covering membership and operational use of CHES. These will be developed in the coming months along with the penalty and appeal procedures.

To safeguard the clearing house against claims that may arise out of the operation of the system, the development committee will be considering the liabilities of the clearing house, the type and form of indemnities that will be provided, and the required form of insurance.



## B. Phase 2: the DVP Settlement System

The start of Phase 2 will overlap that of Phase 1 by about five months. Work will commence around February 1993. This will entail the development of the DVP settlement system (including presettlement, commitment, and settlement functions) and the remaining communications infrastructure with banks.

To achieve DVP and a short, fixed-period settlement, CHESSE will facilitate the transfer of legal ownership of securities and the exchange of funds for payment quickly and irrevocably, with minimum transactions and with minimum fails (transactions which do not settle on the due date).

DVP will be supported by two main principles: the clearing house will have direct control (as agent of the issuing companies) over the transfer of legal ownership of a company's securities; and the clearing house will have the ability to effect irrevocable transfer of a participant's funds through the banking system. Settlement will occur in CHESSE when securities movements are effected on the subregister between participants and, in conjunction, CHESSE instructs the banks through an electronic interface to effect payment.

CHESSE DVP settlement will be effected by posting a single daily net financial movement for each participant to the banking system and net movements to participants' securities holdings on the CHESSE subregister. CHESSE settlement will be effected by the clearing house, commencing at 10:00 a.m. each business day, at which time CHESSE will determine both the final net funds and securities settlement obligations for that day. CHESSE will then request authorization from participants' banks for payment. The banks will authorize funds payments within the terms of their arrangements with clients, notify CHESSE, and hold the committed funds in escrow.

Settlement participants will be required to establish financial settlement facilities with a bank participating in CHESSE settlement. Because both payment and securities delivery will be netted for settlement purposes, only one movement in each case will be shown against participants' bank accounts and securities holdings respectively.

Following the commencement of Phase 2 in February 1993 the external interface specifications are expected to be confirmed as fixed by September 1993. User testing will start around September 1994 and live operations are expected to commence by December 1994.



## ANNEX: Bibliography

TITLE	DATE ISSUED
CHESS-Report on Strategic Benefits of CHESS	January 1990
CHESS-System Overview	February 1990
FAST Latest Developments	May 1990
CHESS-System Development Phase 1 Overview	October 1990
CHESS-The Business Case-A Forecast of Equity Market Activity 1991-1997	January 1991
CHESS-Business Case-An Industry Sector Report for Institutional Investors	March 1991
CHESS-Business Case-An Industry Sector Report for Brokers	March 1991
CHESS Business Case-An Industry Sector Report for Custodians	March 1991
CHESS-Evaluation of System Solutions	April 1991
CHESS-Australian Equities Market-Clearing & Settlement Steering Committee-Exposure Document	May 1991
ASX Trade Date + 5; Broker/Broker transactions Transaction Netting Service; Securities Lending Service Broker Reference Guide	November 1991
FAST-Outline of Registry Processing Procedures for Issuers Sponsored Uncertificated Holdings	January 1992
CHESS- An Overview	May 1992
CHESS-Broker Impact Report	May 1992
CHESS-Institutional Investor & Custodian Impact Report	July 1992
CHESS-Issuer & Registry Impact Report	July 1992







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March 24, 1993

Mr. Paul Guy  
Secretary General, IOSCO  
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Montreal, Quebec  
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Dear Paul:

I had the material you forwarded with your March 1, 1993 letter on the G30 Clearance and Settlement Recommendations reviewed by staff in the Capital Markets Branch. They confirm that the information contained in those documents is correct and that the summary table properly reflects the status of the implementation of the G30 Recommendations in Canada.

Staff did point out two points that may be updated on the summary attached as p.8 to the Status Report for Canada. Under Recommendation #2, the Uniform Settlement Rule was implemented in 1992. Under Recommendation #7, the implementation of the Debt Clearing System has been scheduled for mid-1993.

I trust this is of assistance.

Yours truly,

Robert J. Wright

cc: Tanis MacLaren



Commission  
des valeurs mobilières  
du Québec

Montréal, le 2 avril 1993

Bureau du président

Monsieur Paul Guy  
Secrétaire Général  
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C.P. 171, Tour de la Bourse  
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OBJET: Implantation des recommandations du Groupe des trente  
sur la compensation et le règlement de valeurs  
mobilières

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Monsieur Guy,

Comme suite à votre lettre du 1<sup>er</sup> mars 1993, je vous confirme que les informations pour le Canada présentées au tableau sommaire, concernant l'objet ci-haut mentionné, reflètent bien l'état d'avancement des travaux.

Toutefois, j'attire votre attention sur l'application depuis le 1<sup>er</sup> janvier 1993 de la Règle de règlement uniforme (USR). Cette règle prévoit que toutes les opérations sur les valeurs admissibles devront être confirmées et réglées électroniquement par les systèmes de compensation et de règlement des sociétés canadiennes de dépôt. De même, aux cours des derniers mois des efforts importants ont été réalisés pour trouver une solution aux problèmes reliés à la mise en oeuvre du service de compensation des titres d'emprunt (DCS). L'implantation de ce système est prévu pour la fin de l'année.

La concrétisation de ces deux importants projets concours à la réalisation de l'objectif ultime de règlement en trois jours qui est maintenant prévu pour 1994.

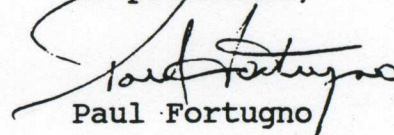
J'espère que ces informations vous seront utiles, veuillez agréer Monsieur Guy, l'expression de mes meilleurs sentiments,

R E Ç U

05 AVR. 1993

O I C V

Le président,



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# STATUS REPORT FOR CANADA

## I. INTRODUCTION

Canada's securities clearance and settlement sector has benefitted directly from the focus of the 1989 Group of Thirty report and recommendations. By establishing cross functional Steering and Working Committees, the priorities of risk reduction and containment, harmonization, and improved efficiencies have received national attention. In addition, our program for improvement has been widely accepted.

Support for the Group of Thirty in Canada is both strong and influential. Our project has emphasized full industry participation, a national consensus, and unprecedented interchange between the public and private sectors. The incentive to change is well understood and the program's momentum is established.

Canada's "Program for Change" was approved in mid-1991 following a detailed business case analysis and a thorough investigation of the impact on various sectors. Beginning in late 1991 and continuing through 1992, all energies have been directed toward the completion of the defined critical path projects: the steps which the Canadian Steering and Working Committees viewed to be the most important for Canada in the short and medium term. With the exception of T+3 settlement and payment finality issues, our systems and processes already meet the original recommendations through sophisticated settlement systems. The enhancements contemplated in the program for change are designed to build on that platform.

In this report, section one will provide a brief overview of activities before 1992.

Section two will provide a snapshot of our current status with respect to each of the nine recommendations including evidence of success and indications of how each recommendation may be affected by our critical path projects.

In the third section we will project future activities according to the implementation plan which has been defined by the Canadian Working Committee. Strategic activities are planned to continue well beyond 1992 to ensure continuous improvement in our market infrastructure.

## II. DEVELOPMENTS TO 1992

Canada's clearance and settlement systems continue to operate in an efficient, secure, and dependable manner. The Group of Thirty's report gave the needed impetus and support to initiatives, many of which had already begun in Canada, that would further enhance the efficiency and security of the marketplace. Prior to 1989, many developments suffered from a lack of consensus between senior public and private sector interested parties. A truly national industry strategy was lacking.

### A. Implementation Planning

The Canadian Steering Committee accepted the recommendations made by the Working Committee to improve our clearance and settlement infrastructure. In its report of June 1990, the Working Committee identified the changes necessary to meet the objective:

"Settlement of all equity and debt transactions in book entry form against final payment on trade date plus 3 by 1993."



However, in order to gain widespread support for the program, it was necessary to assess the financial and operating implications of the changes.

During the period from late 1990 to mid-1991, the Canadian Group of Thirty Working Committee developed a business case for the recommendations as well as detailed implementation plans for the critical path projects.

This phase of the project was completed in the summer of 1991. The business case included a quantification of one-time costs, ongoing costs and benefits, opportunity costs and the value of risk reduction. The total one-time cost for the Canadian program will be CAD 15-20 million, the majority of which will be spent on new clearing and settlement technology *which would have been required in any event*. The net effect of the cost/benefit analysis was positive for the industry and, most importantly, for each sector.

Following the approval of the business case and the implementation plans by the Canadian Steering Committee, the Working Committee established a project organization comprised of three working groups (Legal and Regulatory, Technology, and Communications and Education) supported by a full-time project director.

The working groups focus on promoting and facilitating broad industry adoption of the critical path projects which represent a gradual and sequential approach to reaching our objective. The critical path outlines the activities for the eight projects that are viewed to be the most important for the Canadian marketplace. Each project, in turn, employs its own critical path process.

The issue which has required the most concentrated effort has been determining the appropriate policy and procedures for riskproofing the planned Debt Clearing System (DCS) at the Canadian Depository for Securities Limited (CDS). This requirement arises partly from the absence of same-day settlement or payment finality. A large value transfer system (LVTS) which would provide payment finality is now in the early stages of development and is not currently available. Several alternatives for the LVTS are now being considered, and the outcome of discussions will be known by early 1993. It is possible that some short term solutions will be articulated. In the interim, our securities clearance and settlement systems must be riskproofed to provide certainty of settlement and irrevocability.

From 1989 through 1991 the Canadian financial community was determining the costs and benefits of the recommendations, establishing the priorities for the marketplace, creating an organizational structure that would permit us to implement the recommendations, and gaining widespread support for the program.

### B. T + 3 Objective

Technically, Canada's securities markets could move to T+3 settlement within a short period of time. However, in order to generate the efficiencies, risk reduction, and harmonization which characterize our program, the Working Committee regards T+3 settlement as the *result* of our critical path, not as an activity unto itself.

To achieve T+3 settlement, two enabling projects must be completed: earlier affirmation of third party trades for settlement and full immobilization. A key step towards achieving these goals will be the implementation of a "Uniform Settlement Rule" (USR), which requires timely confirmation and affirmation as well as book entry settlements between depository participants. The USR has already been passed by Canada's self-regulatory organizations, and full implementation is targeted for late 1992. This rule will effectively govern the confirmation and affirmation activities as well as mandate the use of book entry settlement facilities.

Progress toward immobilization is also viewed to be part of the essential underpinning for the achievement of T+3. The Canadian program, from its inception, has dealt with both equities and long-term debt instruments



without distinction. Equities are already largely immobilized and there has been significant progress in the immobilization of debt. Total immobilization of securities will be completed through enhancement of practices and policies to deal with certain constraints and to ensure that the beneficial holders or retail investors are not adversely affected through nominee registrations. Such discussions have been taking place over the past year. (Dematerialization of securities is considered a longer-term objective, primarily due to the current structure of our legal and regulatory system.)

Agreement has been reached that T+3 settlement will be implemented concurrently in the United States and Canada to avoid the potential for abuse from arbitrage opportunities, as well as inefficient procedures in the large volume of bilateral cross border trading and settlement. Unilateral implementation of T+3 would, in fact, be *disharmonious*.

In summary, the reduction in Canada's settlement time frame from T+5 to T+3 will be the *result* of a series of other activities included in our critical path: an effective Uniform Settlement Rule, growth in immobilization, improved shareholder communications, and enhancements to clearing and settlement systems. These improvements are currently under way in most sectors of Canada's securities industry and progress is being made towards the overall objective.

### III. STATUS IN AUTUMN 1992

The following section will provide a brief description of Canada's current status with respect to each of the Group of Thirty's nine original recommendations.

#### Recommendation 1: Trade comparison by T + 1 for direct market participants

Virtually all direct participant trades are currently compared by T+1.

#### Recommendation 2: Trade comparison for indirect market participants

Most indirect market participants are represented by agents who, as participants of CDS, use the CDS ELTRA system to report and compare indirect market participant trades. WCCC does not offer third-party settlement services at the present time.

Third parties may use proprietary or other private networks to communicate with settlement agents (direct participants). The recently approved Uniform Settlement Rule will provide incentive for third parties to provide positive affirmation to their agents in a timely manner to permit settlement within the prescribed time frames. Improvement in the acceptance of the existing communications systems by institutional investors is evident.

Settlement data is available to indirect participants, or their agents, via standardized system "gateways".

Affirmation by T+3 for client trades in equities and bonds has improved significantly over the past two years and currently averages approximately 75 percent.

#### Recommendation 3: Central securities depository

There are two mature depositories in Canada. Securities are immobilized and held in nominee name. West Canada Depository Trust Company (WCDTC) and West Canada Clearing Corporation (WCCC)



serve the Vancouver market for equities listed on the Vancouver Stock Exchange and its broker/dealer participants. The value of securities on deposit at West Canada is CAD 3 billion. The Canadian Depository for Securities Limited (CDS) is the larger depository with CAD 410 billion in securities on deposit currently. Its participants include banks, trust companies, dealers, and other financial institutions.

Improvements to the linkage between WCDTC and CDS are planned.

Previous barriers to some institutions (such as insurance companies) participating directly or indirectly in book-based securities depositories have been removed through recent changes in federal legislation. The ongoing removal of provincial and federal regulatory and functional barriers to the use of depositories is a high priority and is the principal task of one of our expert Working Groups.

Expansion in the eligibility of securities has been a priority for the depositories. Currently, approximately 95 percent of all Canadian equities and over 70 percent of Canadian debt securities are eligible for deposit.

The implementation of CDS' Debt Clearing Service, which was expected to provide the additional functionality to expand the types of eligible instruments to incorporate federal Treasury Bills and other short-term instruments, has been delayed by discussions on risk containment and credit issues. The key issues may be defined as the short-term requirement to contain risk *within* the securities settlement systems in the absence of a same day settlement system. While system functionality has been defined in the CDS Debt Clearing Service, the current discussions centre on the appropriate level and form of collateral to protect against systemic failure. Discussions are taking place to resolve the few remaining important issues, following which an implementation date will be announced.

Early in the Working Committee process, it was determined that the new equity system functionality would be required to support the other changes contemplated.

The specific requirements for depository linkages involving CDS and any other depository, domestic or foreign, were published in June 1992. Any linkage will be subject to cost/benefit analysis and must meet stringent risk management criteria.

A project between the two transfer agents in Canada (who represent approximately 75 percent of all Canadian securities transfer activity) and WCDTC and CDS to create a "non-certificated" facility for the depositories' holdings will be implemented beginning in November 1992. In the new environment equities registered to the depositories' nominees will be held on the books of the transfer agents in "book entry" form. *Physical withdrawals will be available as required.* It is anticipated that this project will reduce costs and significantly improve the operating efficiencies and risk profile of the two depositories.

#### Recommendation 4: Netting

The continuous net settlement facilities at both CDS and WCDTC for broker to broker trades of book-based eligible securities meet the requirements of the Canadian marketplace. The design of the new equity clearing system at CDS has corrected the inconsistency concerning CNS trade guarantees. When it is implemented, both West Canada Clearing Corporation and CDS will guarantee trades on T+1.

The continuous real-time cash netting planned for trade for trade securities settlements will not be available until CDS' Debt Clearing Service is implemented.



**Recommendation 5: Delivery versus payment**

Although delivery versus payment is employed in Canada, payment is still made in the form of physical certified cheques. This form of payment is also employed for the netted funds positions at CDS and WCCC.

The outstanding issue involves the use of irrevocable, same-day funds. Finality of payment remains a key issue in the implementation of the Group of Thirty's recommendations and in the implementation of CDS' Debt Clearing Service which is expected to provide much of the needed functionality for the future.

The Canadian Payments Association, as part of its Large Value Transfer System (LVTS) project, is studying options for providing finality and certainty of payment. These discussions are primarily concerned with appropriate riskproofing mechanisms to protect against participants defaulting to the system. The complexity and cost of the systems development effort is also being reviewed. At present this project clearly represents a medium-term solution to the Canadian payment issues. In the interim, the various "satellite" settlement systems must be adequately riskproofed.

**Recommendation 6: Same day funds**

As is the case with the fifth recommendation, progress on the achievement of a true "same-day" funds convention is dependent on the resolution of certainty and finality of payment issues.

**Recommendation 7: Rolling settlement on T + 3**

Although there has been no change to date in settlement time frames, Canada still maintains its objective of reducing the current T+5 settlement period to T+3. It will occur concurrently with the change in the United States. The same settlement time frame will apply to equity and bond trades in the institutional and retail sectors. Some systems modifications may be required but, depending on timing, may merely need to be incorporated in the new equity clearing systems required by both WCCC and CDS.

As mentioned previously in this report, the Canadian Working Committee views T+3 as the result of several other activities which include the implementation of a Uniform Settlement Rule, electronic links to support earlier affirmation, the achievement of full immobilization, and certain improvements in shareholder communications.

**Recommendation 8: Securities sending and borrowing**

The securities lending and borrowing market is active and well-structured in Canada. In 1991 the Office of the Superintendent of Financial Institutions (OSFI) issued the "Guidelines on Securities Lending" which defines securities lending and establishes standards for activities. These standards affect all federally regulated financial institutions and pension plans.

Although the depositories support the settlement of affected transactions, they do not offer services related to securities lending nor do they monitor lending activity.

The Canadian Group of Thirty Working Committee has been asked to investigate and suggest solutions to the issue of "over-voting" of positions when securities have been lent. A sub-committee is currently dealing with this issue and will report on the necessary changes later in 1992.



#### Recommendation 9: ISO message standards and ISIN numbering

Given the predominance of the CUSIP system in North America, there is a requirement to continue to use the CUSIP/CIN format for day-to-day business. The ISIN is now in use for certain non-North American and global issues. New systems at the clearing agencies and depositories are being designed to accommodate ISIN's and the securities message standards (ISO 7775) are also being incorporated in all major developments.

Canada actively participates on ISO committees and working groups and although adoption of the standards will be gradual and dependent on business requirements, the Working Committee is encouraging such standardization through its working groups' education and communication efforts.

#### IV. DEVELOPMENTS AFTER 1992

As mentioned previously in this report, the Canadian Working Committee has developed and is following a detailed critical path project plan. Many activities are planned to continue beyond 1992:

- Implementation of the Debt Clearing Service,
- Redevelopment of equity clearing systems,
- Development of a Large Value Transfer System incorporating same-day funds and finality of payment, and
- Increased immobilization of debt and equity securities.

Of particular importance is the resolution of the outstanding issues related to risk management and finality of payment for both our securities clearance and settlement systems and our payments settlements. The specific risk containment structures and processes are expected to be agreed before 1993 leading to implementation of the Debt Clearing Service in the short term and the LVTS in the medium term.

The move to T+3 is viewed as the result of several activities which begin with the implementation of the Uniform Settlement Rule in 1992. Affirmation by T+1 will require much broader use of electronic confirmation and affirmation systems within the industry. All of these links are not yet in place, but the communication of the requirements has begun. National linkages must be firmly in place so that the location of domestic transactions is transparent. The business requirements and standards for linkages, both national and international, are being evaluated. Canada expects to be prepared to implement T+3 settlement at the same time as the U.S. market, which is now projecting a mid-1994 implementation.

Dematerialization of securities certificates remains a long-term objective of the Canadian Working Committee. The immediate focus is on immobilization of securities in the depositories. Some corporate debt issues and all money-market issues are not eligible for the depository and are currently settled physically. Systems development efforts are in progress as is the evaluation of constraints which prohibit immobilization. Unfortunately, some of the restrictions are embedded in laws, regulation and policies. Changes will be dependent on the political process.

The communication between shareholders and issuers will likely change gradually. The Canadian Working Committee has endorsed protection of the beneficial shareholders' rights and the broadening of national policies to ensure that all entitlements are available to the shareholder promptly, regardless of nominee registration. Some issuers in Canada are also requesting additional information about beneficial owners, and the mechanism for providing such information has not yet been established.



In summary, Canada is satisfied with its position relative to the Group of Thirty's recommendations and with its plan and progress to date in meeting all the recommendations. At this point, although many of the issues have been raised, not all the solutions are evident. There is a high level of national cooperation and the G30 project in Canada is a valuable forum for the discussions which will lead to solutions to these issues.

As at the time of this writing, virtually all of the critical path projects are either under way or are in the work plans of the appropriate industry participants. The Canadian Working Committee acts in a facilitating role and is heavily involved in the education and communication process. While we will not achieve our objective by 1992, we believe our program to be a success, given the degree of consensus achieved and the unprecedented cooperation between all sectors, both public and private, which have an interest in the activities of securities clearance and settlement.

Interested parties should contact Mr. Michael C.S. Baptista, Chairman, Canadian Working Committee or Mrs. Wendy Wynn, Project Director, for more detailed information.

ANNEX: G30 Recommendations - Status Summary - 1992

RECOMMENDATIONS	G30 TARGET DATE	STATUS	COMMENTS
1	1990	Completed	- Accomplished for majority of trades - Non-exchange, Non-CSD participant equity trading not incorporated - minor issue under review
2	1992	1992	- Uniform Settlement Rule approved by SRO's for implementation in 1992 - Third-party facility implemented at Canadian Depository for Securities (CDS) 1991
3	1992	Completed	- Review of national network linkages underway
4	1992	1992	- In place where appropriate
5	1992		- DVP exists in Canada. Finality of payment not yet in place
6	No date		- A large value transaction system (LVTS) which will address issues of certainty, finality, and default, is under development
7	T+5: 1990 T+3: 1992	T+5: Completed T+3: 1994	- T+3 settlement is viewed to be the result of the eight critical path projects. All activities are in progress and equity clearing systems are in development. - Uniform Settlement Rule implementation is scheduled for 1992. - Debt Clearing System pending implementation. - Requirement to synchronize date with the United States.
8	1990	Completed	- Few changes are planned in this area as the market is active and well-structured. In 1991 the Office of the Superintendent of Financial Institutions (OSFI) issued the "Guideline on Securities Lending" standards which affects all federally regulated financial institutions and pension plans.
9	1992	adoption time frame dependent on market and competitive pressure	- Adoption of standards will be gradual. - ISIN is now in use for certain non-North American issues. Use of ISO standards is being encouraged through the G30 Working Committee's education and communication efforts.







**COB**

N° COB 02458

Le Secrétaire  
GénéralMonsieur Paul GUY  
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H4Z 1C8 CANADA

Paris, le 15 AVR. 1993

Monsieur le Secrétaire Général,

Par lettre du 1er mars 1993, vous avez bien voulu nous soumettre l'extrait du rapport du Groupe des Trente concernant l'application en France de ses recommandations en matière de règlement-livraison.

Comme Frédéric Perier l'a déjà indiqué par téléphone à Jean-Pierre Cristel, ce document n'appelle pas d'observations de la part de la Commission des opérations de bourse.

Je vous prie d'agréer, Monsieur le Secrétaire Général, l'assurance de mes sentiments très distingués.

Jean-Claude DELESPAUL

*Jean Perier*  
*15/4/93*

COMMISSION DES OPÉRATIONS DE BOURSE

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## STATUS REPORT FOR FRANCE

### I. DEVELOPMENTS TO 1992

To process higher trade volumes swiftly and cost-effectively, the Paris authorities began dematerializing securities in 1984 and by 1988 had completed the process. Our new system is built on book entry transfers through a central depository, SICOVAM. Only duly approved participants may open securities accounts with SICOVAM, which records all transactions between participants as well as all outstanding securities in each issue.

In a second stage, we introduced a new clearance and settlement system, called Relit, based on DVP and standard settlement procedures. Relit is designed to enhance market security and ensure that settlement operations have no adverse impact on participants' cash and securities positions. It has helped to cut costs and raise productivity, both in the market generally and at the level of each participant.

The system's first basic principle is simultaneous payment and delivery. Settlement is made between buyers and sellers on the same day of account through an exchange of cash for securities. Relit's second basic rule is compliance with the standard time frames for settlement established by the market authorities. These time frames are compatible with practices on major foreign markets.

That said, Relit uses two separate procedures for final settlement. The first, based on rolling settlement at T+3, applies to all transactions on the cash market and fully meets G30's recommendation 7. The second applies to transactions on the monthly settlement market, which accounts for around 50 percent of all operations. Here, as the name implies, settlement takes place on the last day of each month.

Trade comparison procedures are identical in both markets.

#### A. Implementation of Relit

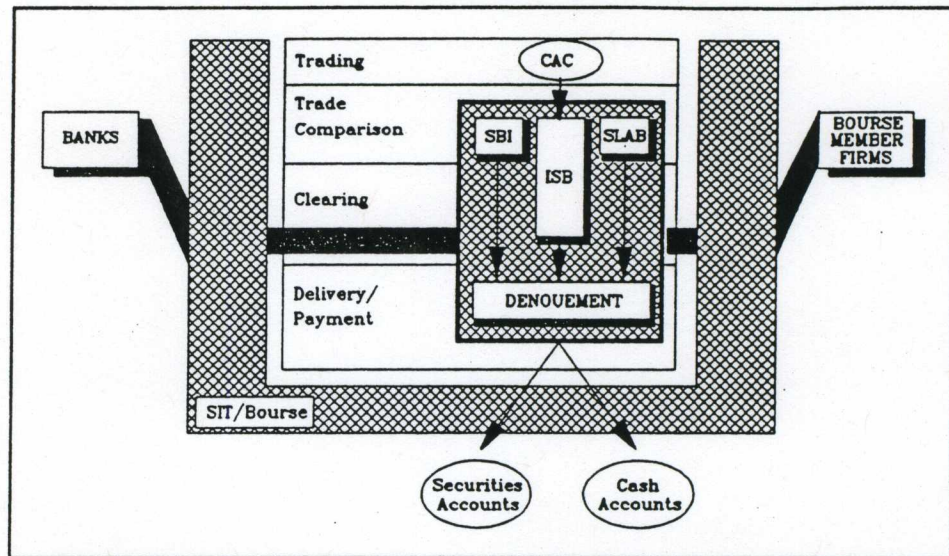
Implementation of Relit began late in 1990, and the system is now fully operational. Milestones included:

- October 1990: the system begins processing trades on the cash settlement market.
- October 1991: all trades on the monthly settlement market shift to Relit.
- March 1992: the standard time frame for delivery versus payment is cut from T+5 to T+3 for cash market transactions.
- April 1992: the last securities processed through the former system shift to Relit.
- June 1992: Relit begins processing Ecu-denominated securities.

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## B. How does it work?



In technical terms, Relit is made up of four systems which handle trade comparisons, clearing, lending/borrowing facilities, and settlement:

- **ISB (Inter-Sociétés de Bourse)**, to clear transactions between member firms through netting and guarantee settlement. In Paris there is no need for trade matching since all transactions made through the electronic trading system CAC are locked in.
- **SBI (Sociétés de Bourse-Intermédiaires)**, for bank-to-member firm transactions including rate confirmation and affirmation. Trade confirmations not answered within a specific time frame are considered accepted and sent on to final settlement automatically.
- **SLAB (Système de Livraison par Accord Bilatéral)**, for matching and preparation of clearing operations by all participants. SLAB is also used for transactions that are the subject of mutual agreement (on primary and grey bond markets, operations by mutual funds, and repos, for example.)
- **Dénouement**, for final settlement and accounting, guaranteeing delivery versus payment and applicable to all market participants.

Relit has also developed a sophisticated telecommunications network, SIT Bourse. This is based on the cash clearing network used by French banks, to which all participants are now linked.

ISB is managed by the Société des Bourses Françaises, the Bourse's business arm, while SBI, SLAB, Dénouement, and the SIT/Bourse network are managed by SICOVAM, France's central depository.



## II. STATUS IN AUTUMN 1992

### Recommendations 1 and 2: Trade comparison by T + 1 for direct and indirect market participants

The processing of trades between member firms through ISB begins on the evening of the trade-day (T). Trades are by definition locked in once they are executed through the CAC computerized trading system.

Since July 1992 virtually all trades in listed securities in France have taken place through the CAC system. Block trades are entered into the ISB subsystem for matching on T+1.

The member firm-to-bank system (SBI) reflects the particular structure of the French market in which banks - most of them far bigger than member firms - account for the lion's share of transaction volumes, even though they are not members of the Exchange. With SBI, trade affirmations must be received no later than the day before projected settlement day. In practice, 93 percent of contract notes are now issued at T and 94 percent of trades matched at T+1.

### Recommendation 3: Central securities depository

France's central securities depository is SICOVAM, whose functions already correspond to those cited by the G30. As noted above, dematerialization took place in 1984 in France. Today SICOVAM operates a dematerialized securities management system, handles the securities accounts of its members, and has developed links with foreign depositories. Most securities are registered with SICOVAM and the few exceptions are little traded. Virtually all new listings are registered with SICOVAM.

### Recommendation 4: Netting

Trades between member firms are netted through the ISB system operated by the clearing arm of the Paris Bourse's executive corporation, the Société des Bourses Françaises (SBF). The system not only reduces the amount of processing involved, but also guarantees final settlement of trades between member firms in the event that one of them defaults.

The fundamental principles involved are noted below:

- Acting as the sole counterparty for member-firm trading, the SBF may replace any defaulting firm.
- Guarantee deposits ensure cover for the market risk borne by each member firm.

With all French member firms now direct members of the clearing house, clearing risk is thus no longer shared among member firms in Paris.

To ensure settlement in the event of temporary default by a counterparty, the SBF has access to automatic securities lending facilities. Buy-in procedures round out the system and guarantee that all remaining fails are resolved within a standard time frame.

Regulations adopted in January 1992 distinguish between different types of member firms:

- Member firms with pure broker-dealer status are involved only in trading and do not act as clearers.



- Member firms may also opt to act as clearers for broker-dealers; as members of the clearing house, such clearers are responsible to this organization for all trades executed by broker-dealers.

This change in regulations allows for organizational streamlining without weakening the safeguards provided by the clearing house.

#### **Recommendation 5: Delivery versus payment**

Provision for simultaneous delivery versus payment on a same-day basis was built into Relit. On the settlement date agreed by parties to a transaction (T+3 for bourse operations), SICOVAM verifies that securities and cash are available in the accounts of the seller and the buyer and proceeds with final settlement. It updates the securities accounts of its members and orders same-day payment through instructions sent to the Banque de France. In the case of Ecu transactions, cash settlement is made through clearing members of BIS.

#### **Recommendation 6: Same day funds**

Insofar as participants are aware each morning of their theoretical cash inflow and outflow, they are able to anticipate their cash position, thus enabling them to use funds on the day of settlement. With Relit, cash movements are credited to or debited from their Banque de France account before the close of business, which makes for "same-day funds" in practical terms.

#### **Recommendation 7: Rolling settlement on T + 3**

Since March 9, 1992 the standard time frame for final settlement of cash trades has been T+3, down from T+5 previously.

Moreover, since June 26, 1992 trades executed on special terms agreed between two parties and matched through the SLAB system can be settled the same day (T).

For trades on France's monthly settlement market, (*Règlement Mensuel* or *RM*), settlement is currently on the last day of the month. Market authorities are now considering reforms under which trades between member firms would be on a cash basis and be settled at T+3. Such reforms remain conditional on a number of factors.

#### **Recommendation 8: Securities lending and borrowing**

Relit's clearing function between member firms includes an automatic stock loan facility to ensure swift delivery of missing securities to the buyer should a fail occur for transactions cleared through ISB as well as for primary dealers' operations (SVT). Extension to all participants is under review.

This is a step in the right direction but will have to be taken further with the creation of a true market for borrowing and lending securities in Paris.

In the monthly settlement market, the practice of borrowing and lending securities is already a reality. Plans to do away with the monthly settlement market will increase demand for such borrowing and lending.

In July 1991 an amendment to legislation covering security lending was voted. This gives greater security to lenders in case of default by granting them ownership of collateral. Global set-off can be



enforced provided a provision for it has been made in the lending contract. Participants are now looking into revisions to the standard contract.

However, contracts still lapse automatically in the event of a corporate action with tax implications (such as a dividend payment). Discussions are now under way with the tax authorities with a view to resolving this problem.

By the same token, a committee is currently considering ways to simplify accounting.

#### **Recommendation 9: ISO message standards and ISIN numbering**

While Relit is designed to be able to use ISIN codes, it applied the French coding system at start-up. Introduction of ISO standard 7775 is under review, and ISO standard 6166 is already in use for cross-border transactions only.

### **III. DEVELOPMENTS AFTER 1992**

With Relit now fully operational, the focus of efforts has shifted to making the most of available tools and enhancing performance wherever possible.

In keeping with this approach, the cash payment side of Relit will be upgraded at the end of 1993 when the final settlement (Dénouement) component of the system will gain real-time access to Bank of France accounts. This will mean that sums remaining on the account after settlement is completed may be withdrawn during the day and placed on the money market. Real-time administration of deposits and withdrawals will also allow the completion of settlement cycles each day.

The infrastructure now in place provides a firm basis for linking up with foreign depositories and clearing organizations, since trade comparison and clearing systems can also be used to handle international transactions, and settlement can be made in local or foreign currencies. Finally, the remote transmission network can serve as a local communications carrier for foreign transactions. Reforms now under consideration also concern cross-border settlement.



ANNEX: Bibliography

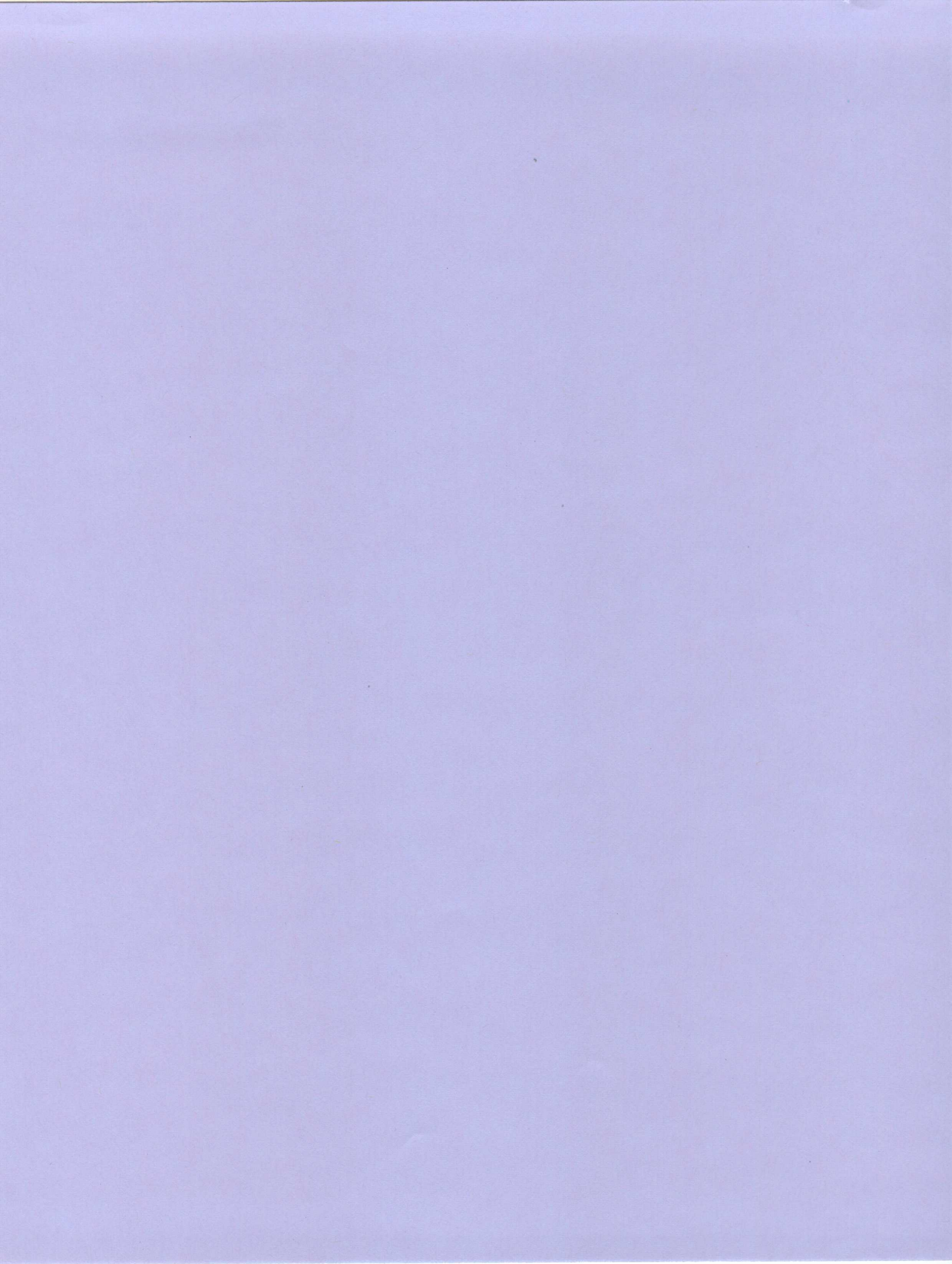
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Der Bundesminister der Finanzen

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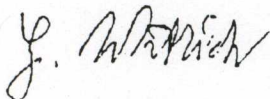
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Subject: Implementation of the G 30 Clearance and Settlement  
Recommendations in the Countries of the Technical  
Committee Members

Dear Mr. Guy,

in the enclosed summary table and Status Report for Germany are  
marked some modifikationen which we deem necessary to reflect the  
present Status of the German settlement system.

Sincerely yours



Georg Wittich  
Director



**Comparative Summary Table on the Present Implementation of  
G30 Recommendations on Clearance and Settlement in all  
the Countries of the Technical Committee Members**

COUNTRIES	GROUP OF THIRTY RECOMMENDATIONS ON CLEARANCE AND SETTLEMENT								
	1	2	3	4	5	6	7	8	9
Australia	Yes	No	No	Yes	No	No	No	Yes	P
Canada	Yes	Yes	Yes	Yes	P	No	No	Yes	P
France	Yes	Yes	Yes	Yes	Yes	Yes	P	P	P
Germany	Yes	No	Yes	No	Yes	Yes	Yes	Yes	P
Hong Kong	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No
Italy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Japan	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No
Netherlands (The)	Yes	No	Yes	Yes	Yes	Yes	No	Yes	U
Spain	Yes	U	U	U	U	U	No	U	U
Sweden	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	P
Switzerland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
United Kingdom	Yes	Yes	P	No	No	Yes	No	Yes	P
United States	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No

**Codes:**

- Yes = The G30 recommendation has been implemented.
- No = The G30 recommendation has not presently been implemented.
- P = The G30 recommendation has, at the present time, only been partially implemented.
- U = From the information provided, it is uncertain as to whether or not the G30 recommendation presently been implemented.

1) not applicable, trading in securities is Bank-Business  
 2) transactions are delivered Ad trade by trade  
 Netting is effected on the cash side



## STATUS REPORT FOR GERMANY

### I. DEVELOPMENTS TO 1992

Most of the G30 recommendations have already been implemented over past years. Interprofessional working groups, steering committees supported by the banking community, committees from the stock exchanges, and the German Central Securities Depository DKV (Deutscher Kassenverein AG) have given input to the evolution of the trading and settlement system.

Modernized sophisticated software packages are used in the German clearing system. With regard to improvements of on-line functions like recording, matching, and monitoring of settlements, an increase in speed and an intensified transparency have been achieved.

#### A. Developments at the Frankfurt Stock Exchange

One of the most notable developments was the integration of the former off-exchange Interbank Information System "IBIS" into the Frankfurt Stock Exchange (FWB) in April 1991. Since then IBIS has been an electronic dealing system for banks and brokers, open from 8:30 a.m. to 17:00 p.m. with immediate trade reporting and a direct electronic link to clearing and settlement at DKV. By this means, fast and reliable settlement of transactions at reasonable cost is guaranteed. In July 1992 there were 181 participants using more than 381 terminals, indicating a wide acceptance of the system by the market. Participation continues to increase. The participation of the regional stock exchanges in IBIS will be another step forward. Approximately 50 new participants are expected to join the system.

"BOGA" is a new trade confirmation system of the FWB which is used nationwide at the regional stock exchanges. The on-line part of BOGA ensures the monitoring of trades during the trading hours of the stock exchange. It will be used as a platform for a new order routing system.

#### B. Developments at the German Central Securities Depository

6 The German clearing system DKV (Deutscher Kassenverein AG) consists of the head office in Frankfurt and 5 regional branches. Since the end of 1990, central bookkeeping and permanent stock-taking in Frankfurt is available for all branches of DKV. All DM amounts from the DKV settlement appear on the accounts of DKV account holders; the resulting balances are cleared on a daily basis by branches of the Deutsche Bundesbank. In this way, the basis for the project CASCADE (Central Application for Settlement Clearing and Depository Expansion) has been implemented. It has been named following the idea of a CASCADE connection for security transactions. In fact, the chaining of delivery instructions with incoming securities will be one feature of the system.

For the time being CASCADE provides an on-line matching facility for account holders of DKV. Deliveries against payment via CASCADE are matched obligatorily. Also on-line inquiries about security transactions and cash balances are supported by this function. Instructions can be given electronically using the ISO/SWIFT standard or by means of an on-line terminal. The extended version will possibly include real-time settlement and currency (especially ECU) settlement.

Since April 1991 cross-border and nationwide deliveries have been effected free of payment through DKV via terminals. *and against*



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improvement of the electronic infrastructure of the FWB was the implementation of "BOSS" (Brown Order Service System) at the end of 1992. Today, transportation of electronic data begins at the counter of a bank and ends at the bank's office at the stock exchange. An order form has to be transported physically to the official broker who is responsible for the determination of the security's price. These two functions will be assumed by BOSS. The system provides an electronic link between the banks and the FWB. Incoming orders are automatically added to the central order-book of the official broker. Trade confirmations are immediately sent to the banks. For settlement the system is electronically linked to BOGA and DKV (see Annex). The flexibility of the system permits several combinations of floor trading and computer dealing and provides data for settlement and public information.

The Deutscher Auslandskassenverein (AKV), a subsidiary company of the DKV, is acting for its account holders to simplify cross-border security transactions. Since February 1991 the owner of AKV-accounts have been connected with the on-line settlement system "OLGA II." Security transactions involving settlements in foreign countries can be conducted via terminal. The development of the settlement process can be monitored. In this way settlement has become more reliable, more secure, and cheaper than before.

A general agreement between Monte Titoli in Italy and Deutsche Auslandskassenverein AG was made to avoid physical deliveries to Italy. Other agreements regarding deliveries and payments of cross-border transactions were arranged between DKV and the central securities depositories in the Netherlands, Switzerland, and Austria. Deliveries without payment can be arranged with the depository SICOVAM in France.

Since April 1991 brokers and security firms are accepted as members of DKV. As with banks they have to comply with certain prerequisites; for example, they must have an ordinary share capital of at least 6 million DM.

In November 1991 the first overall solution for same-day dealing and settlement was implemented. Settlement instructions are given through a file transfer or on-line. DKV must receive the instructions by 10:00 a.m. The receiver of the delivery has to confirm the details and the debit of his account (settlement-matching) before the settlement is carried out. Since May 1992 a cross-border "same-day-settlement" between DKV (using the electronic communication link of CASCADE) and the clearing institutions Cedel and Euroclear has been installed to improve customer service.

Germany can be considered one of the leading countries fulfilling the G30 recommendations. Nevertheless, further improvements towards increased market efficiency will be achieved during the next few years.

## II. STATUS IN AUTUMN 1992

### Recommendation 1: Trade comparison by T + 1 for direct market participants

All comparisons of trades between direct market participants, such as banks and brokers, are accomplished at the latest by T + 1. The matching of executed trades is an obligatory on-line function of the IBIS system. All executed trades can be monitored on the information pages of IBIS. For confirmation and settlement purposes, OTC trades can be fed into the IBIS system. The input transaction data is matched automatically and transmitted to the settlement facilities of DKV.

### Recommendation 2: Trade comparison for indirect market participants

There is presently no official trade comparison system for institutional investors. However, immediate trade confirmation by electronic links or telex is a common practice between market participants.



Central bookkeeping and permanent stocktaking is in place for all branches of DKV.

#### Recommendation 4: Netting

f. As mentioned above, a trade netting system in the form of an extended version of CASCADE is under construction.  
*Securities: not applicable*  
*Cash: netting executed*

#### Recommendation 5: Delivery versus payment

The existing settlement system of the DKV works on the basis of payment against delivery.

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The balances of market participants' DKV accounts are cleared at the daily clearing procedure of the Deutsche Bundesbank.

#### Recommendation 7: Rolling settlement on T + 3

The DKV is a step beyond the recommended settlement period of T+3. The official settlement cycle is T+2. Same-day settlement facilities are available at the DKV at the request of the customer.

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The securities lending and borrowing facilities in Germany are provided by the DKV and by several banks. In August 1992 63 lenders and 51 borrowers were registered at DKV. The liquidity in the system has been increased significantly.

Following the revision of the German Insurance Law in January 1991, insurance companies have been allowed to deal in futures, options and securities lending and borrowing under specific circumstances and up to a specific amount. This revision lifted a regulatory barrier to these activities.

#### Recommendation 9: ISO message standards and ISIN numbering

The ISO/SWIFT standards with the corresponding message types for communication purposes are used for new projects. The remaining programs are being adjusted step by step.

An electronic data link from DKV to Euroclear and CEDEL using Message Type 325 was implemented in May 1992. The use of this format is a precondition for the obligatory matching of orderbook settlements. Thus, the process of deliveries will no longer happen.

### III. DEVELOPMENTS AFTER 1992

The legal framework for multi-currency settlement was created by legislation in 1989. The increasing importance of the ECU is one more reason to extend the range of settlement capacities.

A couple of RCI issues have been quoted on the FWB OTC market since May 1992 with clearing and settlement being effected through Euroclear and Cedel. In the near future, probably at the beginning of 1993, market participants will be able to use the ECU clearing facilities of the FWB and DKV. If a bank wants to

Group of Thirty  
 Clearing and Settlement  
 Autumn 1992 Report

GESAMT S.05



## STATUS REPORT FOR GERMANY

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Modernized sophisticated software packages are used in the German clearing system. With regard to improvements of on-line functions like recording, matching, and monitoring of settlements, an increase in speed and an intensified transparency have been achieved.

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For the time being CASCADE provides an on-line matching facility for account holders of DKV. Deliveries against payment via CASCADE are matched obligatorily. Also on-line inquiries about security transactions and cash balances are supported by this function. Instructions can be given electronically using the ISO/SWIFT standard or by means of an on-line terminal. The extended version will possibly include real-time settlement and currency (especially ECU) settlement.

Since April 1991 cross-border and nationwide deliveries have been effected free of payment through DKV via terminals.



Another important improvement of the electronic infrastructure of the FWB was the implementation of "BOSS" (Börsen Order Service System) at the end of 1992. Today, transportation of electronic data begins at the counter of a bank and ends at the bank's office at the stock exchange. An order form has to be transported physically to the official broker who is responsible for the determination of the security's price. These two functions will be assumed by BOSS. The system provides an electronic link between the banks and the FWB. Incoming orders are automatically added to the central order-book of the official broker. Trade confirmations are immediately sent to the banks. For settlement the system is electronically linked to BÖGA and DKV (see Annex). The flexibility of the system permits several combinations of floor trading and computer dealing and provides data for settlement and public information.

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Germany can be considered one of the leading countries fulfilling the G30 recommendations. Nevertheless, further improvements towards increased market efficiency will be achieved during the next few years.

## II. STATUS IN AUTUMN 1992

### Recommendation 1: Trade comparison by T + 1 for direct market participants

All comparisons of trades between direct market participants, such as banks and brokers, are accomplished at the latest by T + 1. The matching of executed trades is an obligatory on-line function of the IBIS system. All executed trades can be monitored on the information pages of IBIS. For confirmation and settlement purposes, OTC trades can be fed into the IBIS system. The input transaction data is matched automatically and transmitted to the settlement facilities of DKV.

### Recommendation 2: Trade comparison for indirect market participants

There is presently no official trade comparison system for institutional investors. However, immediate trade confirmation by electronic links or telex is a common practice between market participants.



**Recommendation 3: Central securities depository**

Central bookkeeping and permanent stocktaking is in place for all branches of DKV.

**Recommendation 4: Netting**

As mentioned above, a trade netting system in the form of an extended version of CASCADE is under construction.

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The securities lending and borrowing facilities in Germany are provided by the DKV and by several banks. In August 1992 63 lenders and 51 borrowers were registered at DKV. The liquidity in the system has been increased significantly.

Following the revision of the German Insurance Law in January 1991, insurance companies have been allowed to deal in futures, options and securities lending and borrowing under specific circumstances and up to a specific amount. This revision lifted a regulatory barrier to these activities.

**Recommendation 9: ISO message standards and ISIN numbering**

The ISO/SWIFT standards with the corresponding message types for communication purposes are used for new projects. The remaining programs are being adjusted step by step.

An electronic data link from DKV to Euroclear and CEDEL using Message Type 525 was implemented in May 1992. The use of this format is a precondition for the obligatory matching of cross-border settlements. Thus, the refusal of deliveries will no longer happen.

**III. DEVELOPMENTS AFTER 1992**

The legal framework for multi-currency settlement was created by legislation in 1989. The increasing importance of the ECU is one more reason to extend the range of settlement capacities.

A couple of ECU issues have been quoted on the FWB OTC market since May 1992 with clearing and settlement being effected through Euroclear and Cedel. In the near future, probably at the beginning of 1993, market participants will be able to use the ECU clearing facilities of the FWB and DKV. If a bank wants to



participate in the new ECU clearing, it has to hold an account with a German ECU clearing bank. In contrast to the general FWB rules, settlement has to be performed in accordance with the Eurobond market rule of T+7. Beyond that, efforts are being made to extend the clearing of currencies at the FWB to other important currencies such as the US dollar.

In addition, a system for dematerialized deliveries of registered shares (Vinkulierte Namensaktien) is being developed. For the time being, registered shares are held outside the DKV system. They must be delivered physically. Only a few issues of insurance companies are in registered form. The change of the beneficial ownership must be approved by the issuer. Due to this improvement, the registration process will be shortened and costly physical deliveries can be avoided.

One of the most notable system improvements will be the development of the electronic trading system EHS (Elektronisches Handelssystem). Compared with IBIS, it will be a more versatile system with an extended capacity serving all stock exchange traded securities which could possibly, at a certain point, replace floor trading. The concept of the system has already been completed. The price fixing mechanism is based on the auction principle with a central order book which would undoubtedly increase liquidity in the market. Plans for the near future, however, still concentrate on parallel floor and computer trading.

A further step in the improvement of physical securities transactions will be the completion of the electronic register for securities numbers (CARAD) of the DKV. All movements of physical securities will be registered. Control functions for twofold recording of numbers will improve protection against falsifications.

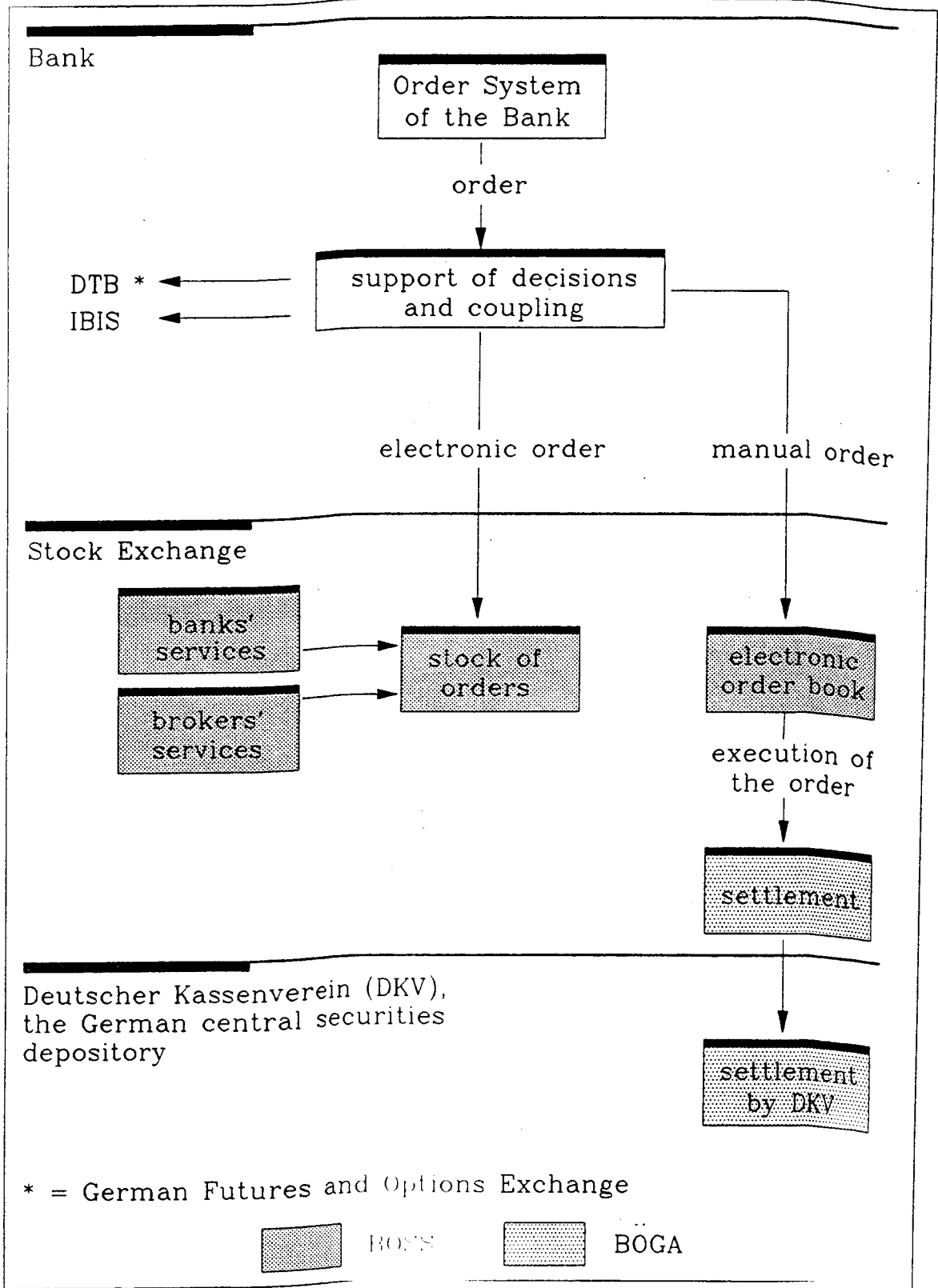
The current securities lending system of the DKV will be extended to an on-line version towards the end of 1992. Thus, an overview of supply and demand will be available on screen for each participant.

Further improvements planned include:

- increasing the number of foreign central securities depositories connected with DKV,
- the execution of delivery instructions dependent on clearly defined book entries (chaining) as a further part of the settlement service CASCADE, and
- real time settlement of cash and securities as another challenging target for the future.



ANNEX: How an Order will be Carried Out at the FWB in the Future









證券及期貨事務監察委員會  
SECURITIES & FUTURES COMMISSION

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2 April 1993

Mr. Paul Guy  
Secretary General  
International Organization of Securities Commissions  
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Square Victoria 45-étage  
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Canada

Re: Implementation of the G30 Clearance and Settlement Recommendations in the  
Countries of the Technical Committee Members

Dear Paul,

Thank you for your note of March 1, 1993, distributed to members on the IOSCO Technical  
Committee concerning the above.

In reviewing the summary table on the implementation of the G30 recommendations as you  
requested, we suggest that a change be made concerning Hong Kong and G30 recommendation  
number 6. The current payment system used to settle securities transactions in Hong  
Kong does not constitute "same day" funds as that phrase is generally used in the  
industry. The box under G30 recommendation number 6 should therefore state "No" for  
Hong Kong.

In reviewing the status report for Hong Kong in relation to G30 recommendation  
number 4, we note that Hong Kong implemented on October 7, 1992, its planned continuous  
net settlement system.

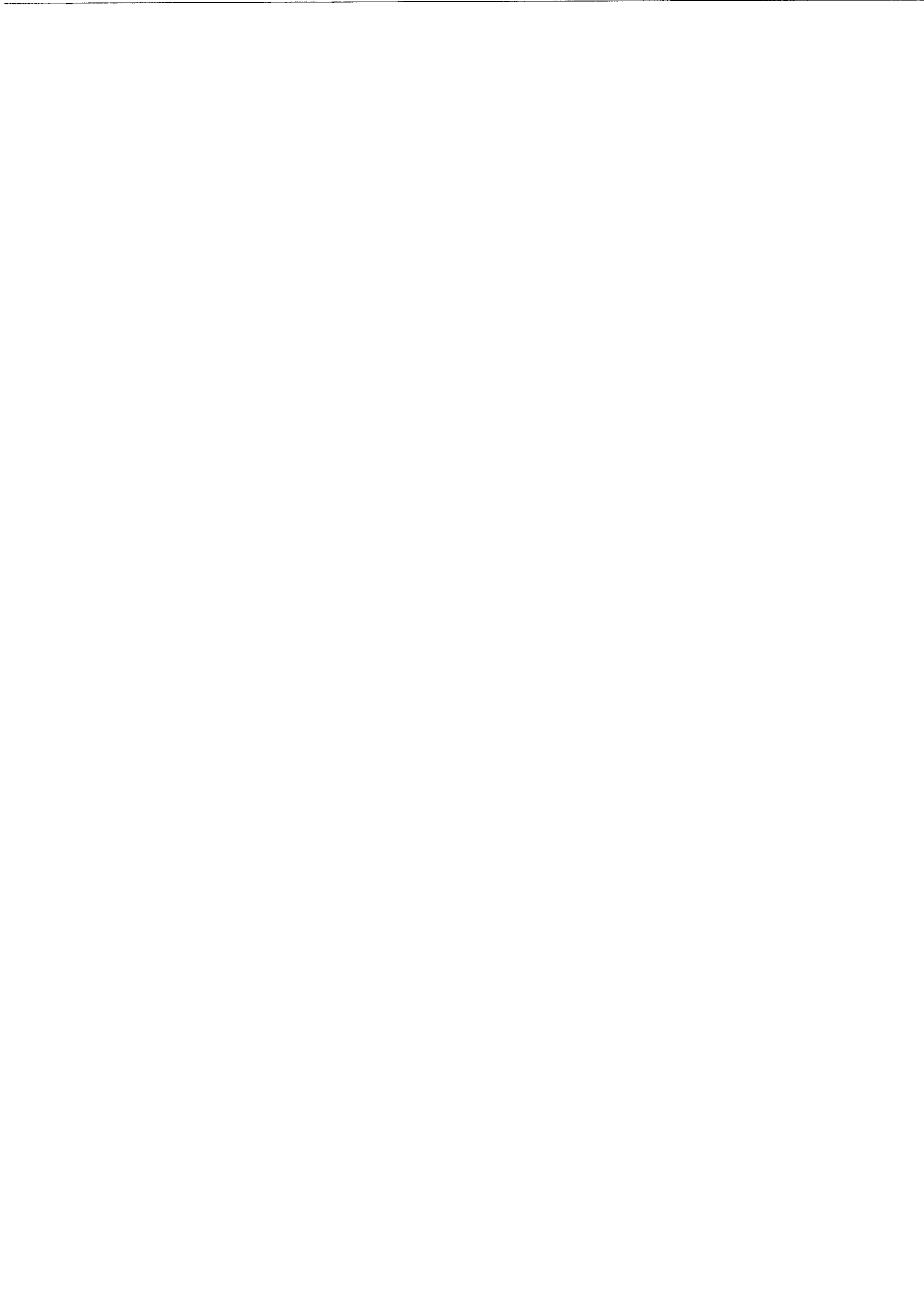
Sincerely,

Robert B. Gilmore

c.c. Robert Nottle  
Michael Wu

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# STATUS REPORT FOR HONG KONG

## I. DEVELOPMENTS TO 1992

Hong Kong Securities Clearing Co. Ltd. (HKSCC) was incorporated on May 5, 1989 to design and operate a Central Clearing and Settlement System (CCASS) for implementation by the end of 1991. While CCASS had been designed and tested and was ready for implementation on schedule, the launch of the clearing and settlement system was delayed until June 24, 1992 when the HKSCC was recognized by the Securities and Futures Commission (SFC) as a "Clearing House."

In the absence of the required legislative protection at the time of the initial launch of CCASS, the system currently only provides clearing and settlement services on a trade-for-trade (TFT) basis instead of a continuous net settlement (CNS) basis.

Enactment of the Securities (Clearing Houses) Ordinance was required to protect CNS under CCASS from the effect of existing statutory insolvency rules in which the affairs of a participant who becomes bankrupt or goes into liquidation may be interfered by a liquidator. As the HKSCC will become a principal counterparty in each broker-broker trade through novation, any interference with the settlement process by a third party such as a liquidator will cause serious disruption to CCASS and bring the netting process to a halt. The Securities (Clearing Houses) Ordinance was enacted in mid July 1992; this will permit the present TFT to be supplemented by CNS under CCASS before the end of 1992.

### A. The Traditional Settlement System

Securities settlement has traditionally been based on a physical delivery system whereby individual trades are settled by exchanging cheques for physical share certificates with no part of the settlement process centralized or automated. Take broker-broker trades for instance. When a trade is effected, the selling broker has to deliver the appropriate quantity of share certificates sold to the buying broker on settlement day. In exchange, the selling broker will receive a cheque for the agreed sale proceeds from the buying broker.

### B. The New Trade-for-Trade Settlement System

Since the launch of CCASS on June 24, 1992, the traditional physical delivery system for broker-broker trades on stocks admitted into the system has been replaced by a centralized and automated trade-for-trade settlement system.

Under TFT, instead of share certificates being physically delivered by selling brokers to buying brokers, settlement of shares between brokers must occur through electronic book entry debits and credits to the stock accounts of the relevant broker participants in CCASS on a trade-for-trade basis.

It will take approximately one year to admit all stocks into CCASS. For broker-broker trades, the physical delivery system will continue to operate for those stocks not yet eligible for settlement in CCASS.

Money settlement is based on electronic payment instructions submitted by the HKSCC through the clearing system of the Hong Kong Association of Banks (HKAB) for the debit of the buying brokers and the credit of the selling brokers in the bank accounts designated by these CCASS broker participants, thereby replacing the physical delivery of cheques. The HKSCC acts as a facilitator and does not guarantee settlement of money obligations. CCASS participants may opt to settle between themselves on either delivery versus payment (DVP) or free of payment (FOP) terms.



Trade data and trade amendment data are transmitted from the trading system of The Stock Exchange of Hong Kong (SEHK) to CCASS. Broker participants need not input trade details into the system.

Besides broker-broker trades, CCASS also handles broker-custodian transactions, stock borrowing or lending, stock pledging, and portfolio movements. These transactions require the input of settlement instructions into CCASS by each broker, custodian, stock lender, or stock pledgee participant for matching and settlement by the system.

Share certificates of listed companies are admitted into the system by phases and immobilized when they are deposited by participants in the CCASS depository, which also provides common nominee services.

The SEHK extended the settlement period from T+1 to T+2 on June 8, 1992.

### C. The Future Continuous Net Settlement System

The new TFT settlement system will be supplemented by a CNS system under CCASS before the end of 1992.

In addition to the centralized and automated facilities provided by TFT under CCASS, CNS will offer novation and netting, and the HKSCC will guarantee substantially all broker-broker trades effected on the SEHK.

The HKSCC has also developed a risk management and guarantee system (RMGS) to monitor and control its risk exposure as a central risk-taker when CNS is implemented. Key features of the risk management measures under RMGS will:

- mark-to-market and collect any net unfavorable marks on both pending and overdue stock positions,
- monitor brokers' contribution to a Guarantee Fund and collect additional deposits if necessary,
- generate buy-in orders by the end of T+3 for execution on T+4 morning, and
- secure bank guarantee and/or holding of shares allocated to brokers as collateral.

## II. STATUS IN AUTUMN 1992

The design of CCASS fulfills most of the recommendations of the Group of Thirty on international standards for clearing and settlement.

### Recommendation 1: Trade comparison by T + 1 for direct market participants

The present trading system accommodates this recommendation, and CCASS improves on it.

The computer-assisted trading system currently in place in the SEHK is a one-sided matching system. This does not require both the selling broker and the buying broker to input executed trade details into the trading system. The input of trades is the sole responsibility of the selling broker. The buying broker is simply required to check the accuracy of the input. If the buying broker does not reject the input of the selling broker at the end of the trading session, the trading system assumes that both parties agree to the trade details. Brokers may request trade amendment after the trading session. Trade amendments are processed by SEHK on an individual basis.

Since the launch of CCASS, trades for settlement on T+2 are transmitted from the SEHK to the HKSCC electronically at the end of T-day. All trades are preliminarily locked in at 6:00 p.m. on T-day, subject to trade amendments. The HKSCC will only accept trade amendments from the SEHK up to 12:00 noon on T+1 for final lock in. Of course, with a one-sided system it is still possible for the buying broker to neglect a comparison and then discover a discrepancy. But since the trade has already been finally locked in, both counterparties will have to revoke the original trade through execution of off-setting and new trades.

This recommendation may be given further effect when the SEHK's proposed Automatic Order Matching and Execution System is introduced in late 1992 or early 1993.

### **Recommendation 2: Trade comparison for indirect market participants**

This recommendation will not be followed at the initial stages of CCASS.

Under the traditional settlement system, indirect market participants, such as institutional investors, communicate directly with brokers and custodians to settle a trade. This practice does not change much at the initial stages of CCASS when only brokers, custodians, stock lenders, and stock pledgees are admitted as direct participants. Investors still need to settle through brokers and/or custodians.

While the HKSCC recognizes, in theory, the desirability of including indirect participants in positive affirmation of trade details, in practice, this sort of positive affirmation by indirect participants would require a two-sided matching system. This is not planned initially for CCASS.

The extension of CCASS services to the investor level will only be considered over the next two years. Until this occurs, the HKSCC will have to rely on participants in CCASS to take their own initiative and provide indirect market participants with the facilities for positive affirmation of trade details.

### **Recommendation 3: Central securities depository**

This recommendation has been adopted.

CCASS and the CSD have been covering the entire spectrum of clearance, settlement, and safekeeping functions, including a computerized system of book entry transfer of securities on a trade-for-trade settlement basis, an enhanced delivery versus payment system through the ability to interface electronically with participants and their designated banks, and the safekeeping of share certificates for participants. Post-settlement processing of securities and information, such as corporate actions and dividend/interest processing, has also been a key component of the system.

CCASS features immobilization of share certificates within a full-service CSD, with optional physical withdrawal and registration. The share certificates deposited by the participants are largely held in the name of CCASS common nominee. A portion of the immobilized shares will be maintained in the form of jumbo certificates to save vault space.

In the initial stages of CCASS implementation, the following types of securities traded on the SEHK are eligible for safekeeping by the CSD and for settlement through the system:

- ordinary shares
- preferred shares
- registered warrants



Later enhancement of CCASS may include additional types of securities such as covered warrants and debt securities. Transactions in listed issues that are not eligible for settlement under CCASS will be required to be settled outside the system directly between the concerned counterparties as is traditionally done.

#### **Recommendation 4: Netting**

This recommendation will be implemented before the end of 1992 when CCASS employs a continuous net settlement (CNS) system.

The HKSCC will guarantee the settlement of broker-broker trades to be settled on the CNS system under CCASS. It is anticipated that the CNS system will substitute for the TFT system before the end of 1992. The HKSCC will in effect stand in between the buying and selling broker participants as counterparty to both in the settlement of broker-broker trades.

The CNS system will operate for all trades effected on the SEHK except for a very small percentage that are isolated and settled on a TFT basis because of risk management considerations or at the request of the original counterparty broker participants. It is envisioned that isolating broker-broker trades for risk management purposes will be done only in very rare instances where the HKSCC considers a broker participant's market risk exposure to the system to be excessive and the broker participant chooses not to furnish additional margin to collateralize that risk. Settlement of broker-broker isolated trades and broker-custodian transactions will be effected on a transaction by transaction basis, although HKSCC will facilitate money crediting and debiting, if requested to do so, by forwarding electronic payment instructions to the designated banks of the delivering and receiving participants through the clearing system of HKAB.

#### **Recommendation 5: Delivery versus payment**

CCASS will have initiated two enhancements to the current DVP system during 1992.

Under the traditional physical delivery settlement system, the Hong Kong securities market already works on a delivery versus payment basis. Selling brokers delivering share certificates to buying brokers will receive a cheque from the counterparty buying broker at the time of each delivery of share certificates.

The DVP principle is maintained within CCASS, but with timeliness increased and risk decreased. Since the launch of CCASS on a TFT settlement basis, the physical exchange of cheques has been replaced by debits and credits to the participants' designated bank accounts based on system-generated electronic payment instructions for clearing through the clearing system of the HKAB. The HKSCC facilitates money payment but does not guarantee money settlement.

When CNS is introduced by the end of 1992, DVP will be further enhanced. The HKSCC will guarantee money settlement for all broker-broker trades by becoming a counterparty to these transactions through the legal process of novation. These trades will constitute the substantial majority of all transactions. At the end of settlement processing, there will be a single netted money balance due to or from the HKSCC for each broker participant having settled CNS transactions. The HKSCC will also facilitate money payment through debiting and crediting the broker participants' designated bank accounts based on system-generated direct debit instructions and direct credit instructions for clearing through the clearing system of the HKAB. The designated banks of the broker participants will provide the HKSCC with positive confirmation by 9:30 a.m. on the day following settlement (T+3) of whether the payment instructions from the HKSCC have been successfully cleared. Until

that time, the HKSCC may hold as collateral any securities held in the participant's CCASS clearing account.

For other types of transactions (that is, broker-broker isolated trades, and trades involving custodian, stock lender, and stock pledgee participants), the HKSCC will not guarantee settlement but will facilitate money payment if requested by the participants, as in the case of TFT.

#### **Recommendation 6: Same day funds**

This recommendation will be followed by CCASS for the great majority of trades.

By guaranteeing settlement for all netted novated trades settled on the CNS basis as described above, the HKSCC will, in effect, be guaranteeing delivery versus payment in same day funds for the majority of trades that are effected on the SEHK. Even though the HKSCC will not receive confirmation of good funds from the broker participants' designated banks until 9:30 a.m. on T+3, from the market's perspective the HKSCC has made the funds good on T+2 by guaranteeing money settlement.

For CCASS under TFT and other types of transactions under CNS (that is, broker-broker isolated trades, and trades involving custodian, stock lender, and stock pledgee participants), HKSCC will, if requested by the participants, facilitate money payment by generating appropriate electronic payment instructions for clearing through the clearing system of the HKAB. "Same day" funds will ultimately be the responsibility of the concerned parties.

Although only ordinary shares, preferred shares and registered warrants will be accepted for clearance and settlement in CCASS, they constitute the majority of securities traded on the SEHK.

#### **Recommendation 7: Rolling settlement on T + 3**

CCASS has adopted a T+2 rolling settlement system.

CCASS follows the T+2 settlement period by preliminarily locking in broker-broker trades at 6:00 p.m. on T-day and by only allowing amendments to these trades up to 12:00 noon on T+1 for final lock-in. Settlement processing on T+2 must either be initiated by the delivering broker participant through on-line facilities or by relying on multiple batch processing runs automatically initiated by the system on settlement days.

Except for buy-ins initiated by the HKSCC on T+4 morning, other disciplines, such as compulsory stock borrowing and fines against broker participants who have not settled on T+2 are not planned in the initial stages of CCASS. However, should subsequent experience prove either of these procedures necessary or desirable to preserve the integrity and efficiency of the settlement process, the HKSCC has reserved the right to implement them in the future.

#### **Recommendation 8: Securities lending and borrowing**

CCASS already follows this recommendation.

Securities lending and borrowing was introduced by the SEHK in August 1991 when legislation to waive, in effect, ad valorem stamp duty on securities lending and borrowing transactions was passed. The legislation waives the ad valorem stamp duty for all securities lending and borrowing where the



stocks are returned by the borrower to the lender within 14 days of the securities lending and borrowing transaction.

The HKSCC has decided not to become involved directly in offering securities lending and borrowing services but rather to let the existing arrangements serve the needs of the trading community. However, should existing arrangements of securities lending and borrowing prove inadequate to expedite settlement effectively, HKSCC may consider acting as a lender of last resort and enforcing compulsory stock borrowing.

### **Recommendation 9: ISO message standards and ISIN numbering**

This recommendation will be followed in Hong Kong, although the timing is somewhat uncertain.

The HKSCC will consider studying the conversion of its present securities numbering system to meet ISIN specifications. In fact CCASS has been designed with the capability of handling the securities message standards developed by ISO and the ISIN numbering system for securities issues. However, the conversion would be a fairly lengthy and costly process, with the potential for some short-term disruption of trading operations.

But given the international orientation of the Hong Kong market, the HKSCC believes it is in the long-term best interest of the market to adopt such standards. The timing, however, will depend on when ISIN is agreed to and implemented in other major markets, and on how long the implementation process will take in Hong Kong.

## **III. DEVELOPMENTS AFTER 1992**

In terms of the nine international standards for clearance and settlement recommended by the Group of Thirty, HKSCC, through the operations of CCASS, anticipates compliance with all of them by the end of 1992 with the probable exception of Recommendation 2 (trade comparison for indirect market participants) and Recommendation 9 (ISO message standards and ISIN numbering).

Further consideration will be given to the possibility of implementing those two recommendations. In addition, a range of further enhancements to the system are envisaged.

- **Support to Automatic Order Matching and Execution System**

CCASS will provide support to the Automatic Order Matching and Execution System (AMS) to be introduced by the SEHK in early 1993, if not late 1992. AMS will enhance the present partly physical and partly automated order matching and execution system by automatically matching and executing orders from buying brokers with corresponding orders from selling brokers.

- **Settlement System Scope Expansion**

The HKSCC will include additional types of securities such as covered warrants and debt securities for clearance, settlement, and safekeeping under CCASS after all ordinary shares, preferred shares, and registered warrants have been admitted.

Also, the HKSCC is considering extending CCASS services from the intermediary to the investor level over the next two years.

- **Further Enhancement of Delivery Versus Payment**

The HKSCC is seeking to achieve a real DVP system so that good funds can be simultaneously exchanged for securities on settlement day (T+2) instead of relying on the designated banks of CCASS participants for positive confirmation by 9:30 a.m. on the day following settlement day (T+3) of whether the payment instructions from the HKSCC have been successfully cleared.

- **Dematerialization of Shares**

For greater settlement efficiency and risk reduction, a wholly scripless settlement system to replace immobilization of securities remains the HKSCC's ultimate goal.

- **Settlement of Cross Border Transactions**

The HKSCC will later on look into the possibility of linking up with overseas clearing houses to improve the settlement of cross-border transactions.







*Commissione Nazionale  
per le Società e la Borsa*

SGE/RM/A3002560

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COPIA

Rome, 6 APR. 1993

Subject: Implementation of G30 Clearance and Settlement  
Recommendations.

Dear Mr. Guy,

I refer to your letter of March 1st, 1993 concerning the implementation of G30 Clearance and Settlement Recommendations in the Countries of the Technical Committee Members.

I should be grateful if you would amend the text of the status report for Italy as follows:

1

CAP. 00198 SEDE DI ROMA, VIA ISONZO 19-0 - TEL. 84771 - TELEX 612434  
CAP. 20123 SEDE DI MILANO: VIA BRISA. 3 - TEL. 877841-2-3-4-5 - TELEX 323507



**CONSOB**

## 1. THE REFORM OF CLEARANCE AND SETTLEMENT

- Point one: unchanged.
- Points two and three: replaced as follows:

In Resolution 5498 of 2 October, adopted in agreement with the Bank of Italy after consulting the operators involved, the Consob established the timetable for the tasks to be accomplished in order to arrive at a cash market by 1 January 1993 with a system of rolling settlement on the third day after the trade date (in accordance with G-30 Recommendation 7).

The resolution in question indicated the following preconditions as essential for carrying out Recommendation 7:

- replacement of the existing automated trade comparison procedures for the matching of shares for settlement at monthly intervals with new procedures for the shortened three-day cycle (in conformity with G-30 Recommendation 1 and 2);
- the dematerialization of securities at the clearing houses by making it obligatory for them to be deposited with the central securities depository Monte Titoli (in conformity with G-30 Recommendation 3);
- the introduction of securities lending and borrowing (in conformity with G-30 Recommendation 8);
- the modification of the Italian options market ("mercato dei premi") to bring it into line with the new cash market.

The rolling settlement procedure planned for the Italian

**CONSOB**

market is characterized by the complete automation of the procedures whereby, once they have been matched on the day after the trade date (T+1), trades are settled right up to the crediting of the amounts involved on the accounts of the intermediaries participating in the clearing houses. In order to facilitate the matching of trades effected on the Italian market on behalf of foreign operators, the cut-off time for the matching procedure was set to correspond to 16.00 New York time.

\* \* \*

The unavailability at the scheduled time of the new version of the automated trade comparison procedure for the matching of trades between direct and indirect market participants (G-30 Recommendations 1 and 2) in the cash market prevented the latter (and hence the T+3 rolling settlement) from starting as planned on 1 January 1993 (Consob Resolution 6727 of 22.12.1992).

- Point four: Replaced as follows:

At the end of 1991 a start was made on the shift to the new system of screen-based trading, in which not only stockbrokers may participate but also the securities firms established pursuant to Law 1/1991, which have been operational since January 1992.



**CONSOB**

(text follows)

The features of the new screen-based trading system, which links all the intermediaries operating in Italy and permits trades to be effected indifferently among counterparties, have made it necessary to introduce guarantee arrangements ensuring, first and foremost, the final settlement of trades effected by participants in the screen-based market, as well as respect of the time limits fixed in the stock exchange calendar for monthly settlements. Until the switch is made to T+3 settlement, which will enormously reduce the risk of failures, the regular completion of the monthly settlement at the clearing houses is fully assured by the guarantee system referred to above, which was adopted in the Italian market under provisions agreed between the Consob and the Bank of Italy and issued on 17 June 1992.

- Point five: The last two lines starting from "... and commission dealers. (Law 1/1991 ...) can be suppressed.

(text follows)

Following the entry into operation of the Stock Exchange Council in February 1993, this body is responsible for dealings with CED Borsa on matters concerning the technical tasks involved in the implementation of the project for the introduction of the

**CONSOB**

cash market and the adoption of the related system of T+3 rolling settlement.

In February 1993 the Consob and the Bank of Italy initiated consultations with the Stock Exchange Council and all the interested market participants to fix the new date for the start of the cash market and the adoption of the related system of T+3 rolling settlement.

## 2. STATUS IN THE SPRING OF 1993

Amendments to the text

### Recommendation 1

Replace Point two with:

"An integrated system (that will be compulsory for both direct and indirect market participants) is being developed for comparing trade data once rolling settlement is introduced in the equity markets."

### Recommendation 2

Replace with:

"Pursuant to Consob Resolution 5446 of 7 August 1991, the



**CONSOB**

automated system now in operation is also compulsory for members of the clearing system (stanze di compensazione), i.e. banks and "non-trading" securities houses.

**Recommendation 7**

Replace with:

"Work is in hand aimed at the introduction of rolling settlement for transactions in equities on day T+3. The date for of the changeover will be established in a new Consob Resolution, to be issued after consultations with the Bank of Italy in replacement of Consob Resolution 5498 of 2 October 1991.

Yours sincerely,

Enzo Berlanda  
Chairman

6934007R.let

CB/pp

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# STATUS REPORT FOR ITALY

## I. THE REFORM OF CLEARANCE AND SETTLEMENT

Share transactions are at present settled as part of the monthly settlement procedure, which follows the account settlement model. The stock exchange month runs from the middle of one month to the middle of the next. As all the trades made during the stock exchange month are settled on the last working day of the calendar month, settlement comes between 15 and 45 days after the trade. Recently, in line with the recommendations of the Group of Thirty, measures have been taken to reduce the risks inherent in the periodic build-up of positions and the fact that operators' solvency is verifiable only once a month.

By resolution 5498 of October 2, 1991, adopted after consultation with the Bank of Italy, the Consob<sup>1</sup> has ruled that as of January 1, 1993 all shares traded shall be made on a cash basis, with settlement on the third stock exchange day following the trade. In accord with Recommendation 7 of the Group of Thirty, the shortening of the settlement period will significantly reduce the risk of non-payment.

The Consob resolution, moving further to implement the G30 recommendations, requires all authorized stock exchange operators to belong to Monte Titoli S.p.A., the depository trust company for all listed shares and bonds. The transfer of securities in settlement of the final balances at the monthly settlement will thus be effected exclusively through Monte Titoli book entry, with no need for the physical movement of certificates in the clearing houses.

On January 1, 1992 the securities investment firms instituted by Law 1/1991 became operational. These firms, which will eventually supplant stockbrokers, can be multifunctional. The law permits them to trade in listed securities on customers' behalf and on their own account, participate in the underwriting and placement of securities, manage securities portfolios, take orders for the purchase and sale of securities, and provide advisory services in the securities field.

Participation in securities settlement is governed by a decree issued on December 12, 1991 by the Minister of the Treasury. It extends eligibility for clearing-house membership not only to entities entitled by law to engage in securities trading (i.e. stockbrokers and authorized securities investment firms) but also to credit institutions and commission dealers. (Law 1/1992 requires that by December 31, 1992 commission dealers must either become securities investment firms or cease activity).

These measures continue the reform of the Italian securities market that has been under way for several years to restructure the settlement system in such a way as to help expand trading volume and minimize settlement risk. Still to be defined are procedures for securities lending to supply any securities that may be lacking at settlement time.

Finally, the risk-control measures also include the institution of the Clearing and Guarantee House which will ensure the regular completion of the settlement procedures even in cases of participants' failure to meet their obligations.<sup>2</sup>

<sup>1</sup> Commissione Nazionale per le Società e la Borsa: supervisory body for the Stock Exchange and listed companies.

<sup>2</sup> The creation of such a body is called for by Law 1/1991; it is to act as clearing house for the markets in derivative financial products and to guarantee transactions on the cash market. The market in government securities futures will begin trading in September.



At the end of July, the Bank of Italy and the Consob issued the rules governing intervention by the House to ensure the completion of monthly settlement in case of an operator's failure to meet his obligations. To this end, as of September 1992, the House will dispose of a fund financed by monthly contributions from the operators proportional to their volume of trading.

If there are no insolvencies, the amounts paid in are returned to the members upon completion of the settlement procedure. If there are insolvencies, the missing securities or money will be supplied by the Clearing and Guarantee House using the fund already constituted; if these resources are insufficient, the House will levy new contributions from the operators.<sup>3</sup> The securities transactions necessary to cover the insolvency (the sale of securities not paid for or the repurchase of securities not delivered) are effected by the Stockbrokers' Executive Committee.<sup>4</sup> The final losses resulting from these transactions are apportioned among all participants in the monthly settlement according to the value of the securities transactions settled by each through the clearing houses.

This means that in the cash market, unlike the futures market, the Clearing House does not act as central counterparty. Its role is that of "administrator" of the funds made available by the operators to guarantee the completion of the settlement procedure as scheduled, but without taking any risk on its own account.

## II. STATUS IN AUTUMN 1992

### Recommendation 1: Trade comparison by T + 1 for direct market participants

An automated system for daily comparison and rectification run by CED-Borsa<sup>5</sup> is already in operation. The system verifies the trades made by direct market participants (stockbrokers and securities investment firms) by the day following the trade.

A system is now being developed for comparing trade data once rolling settlement replaces the present monthly settlement in the shares markets on January 1, 1993 under Consob resolution 5498 of October 2, 1991.

### Recommendation 2: Trade comparison for indirect market participants

The automated system now in operation is also open to indirect market participants, and in 1993 its use will be compulsory for members of the clearing houses (banks and commission dealers).

### Recommendation 3: Central securities depository

All listed shares brought into the monthly settlement are administered by Monte Titoli S.p.A. Recently the central depository system was opened to the shares of cooperative banks.

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<sup>3</sup> In no case will the House draw on its own capital to guarantee the cash market.

<sup>4</sup> The Stockbrokers' Executive Committees are technical stock exchange bodies elected by the brokers of each stock exchange. Under Law 1/1991, the committees are to be supplanted by a single, national body, the Stock Exchange Council, composed of representatives of the securities investment firms, banks and credit institutions, listed companies, the Consob, the Bank of Italy, and the Chambers of Commerce.

<sup>5</sup> The electronic center for the Stock Exchange in Milan.

Since January 1, 1992 all operators that utilize the monthly settlement procedure have had to be members of Monte Titoli S.p.A., and the settlement of the securities balances generated by the monthly liquidation has been effected exclusively through book entry with Monte Titoli S.p.A.

**Recommendation 4: Netting**

The settlement procedures of the clearing houses (both daily and monthly) provide for multilateral netting of the positions reported by the members.

**Recommendation 5: Delivery versus payment**

For trades settled through the clearing houses, securities delivery and cash payment are simultaneous.

**Recommendation 6: Same day funds**

The settlement procedure followed by the clearing houses makes the final balances in securities and in cash available to members on the same day.

**Recommendation 7: Rolling settlement on T + 3**

Consob resolution 5498 of October 2, 1991 provides for the institution, on January 1, 1993, of rolling settlement for all shares transactions, with settlement on day T + 3.

**Recommendation 8: Securities lending and borrowing**

The possibility of instituting securities lending and borrowing in Italy in order to facilitate the settlement of shares traded is being studied by a working group of representatives of the Consob, the Bank of Italy, and stock exchange operators.

**Recommendation 9: ISO message standards and ISIN numbering**

Consob resolution 5446 of 7 August 1991 mandates that starting January 1, 1995, 12-character national securities identification codes shall be adopted in conformity with ISO standard 6166.



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MINISTRY OF FINANCE  
THE JAPANESE GOVERNMENT

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CANADA

April 2, 1993

Dear Mr. Guy:

Thank you for the letter dated March 1, 1993 concerning the Implementation of the G30 Clearance and Settlement Recommendation in the Countries of the Technical Committee Members.

It would be appreciated if you would add "in July, 1993" just after "To be implemented" at the last sentence in page 6 of the "Status Report for Japan" (please refer to the attached paper). We don't have any other comments.

Sincerely yours,

*T. Uemura*

Tadashi Uemura

Director

for International Affairs

Securities Bureau





The definition of DVP in relation to netting (especially multilateral) settlement and its practical execution has not been clarified yet. In light of this fact, for the time being, we are regarding as appropriate a settlement system which in practice secures the safety of settlement as DVP intends. The safety of settlement, we understand, may be secured for practical purposes when the obligations of delivery of securities and payment of funds are duly fulfilled on the settlement day under the control of a clearing and settlement system backed up by safety measures to provide protection against default risks among members (participants).

In the Settlement System of the TSE, both securities and funds are delivered/paid through the TSE's settlement accounts on the same settlement day under the supervision of the TSE. In addition, the TSE provides safety measures to protect against risks. In cases where funds have not been paid while some securities have already been delivered, the TSE rejects the further delivery of securities to the failing member as well as making use of the Default Compensation Reserves.

As mentioned above, even under the multilateral netting settlement employed by the TSE, the objectives of DVP have been attained for all practical purposes. We believe Recommendation 5 has already been implemented.

#### Recommendation 6: Same day funds

Not implemented.

The same-day funds convention is employed for settlement between direct and indirect market participants. However, between member firms of the TSE, funds are settled by way of checks with next-day funds availability. A few exceptions exist such as settlement for trades of Government Bonds. Same-day funds settlement could be accomplished by exchange of checks with same-day funds availability or by electronic-fund-transfer in the Zeugin System or the BOJ System (Nichigin Net). The TSE and parties concerned have been studying which of the two alternatives is the most desirable with respect to feasibility, merits and demerits, and the possible consequences for the settlement procedures between securities houses and their clients.

#### Recommendation 7: Rolling settlement T + 3

Already implemented.

T+3 settlement cycle for equity trades on TSE is in place.

#### Recommendation 8: Securities lending and borrowing

Already implemented.

There is no major barrier to lending and borrowing of securities.

#### Recommendation 9: ISO message standards and ISIN numbering

To be implemented in July, 1993. \*

Stock exchanges are preparing for the introduction of the New Securities Numbering System. The introduction of the standardized message format has also been discussed between the parties concerned.





# STATUS REPORT FOR JAPAN \*

## I. DEVELOPMENTS TO 1992

### A. The Establishment of a Trade Affirmation System (Rec. 2)

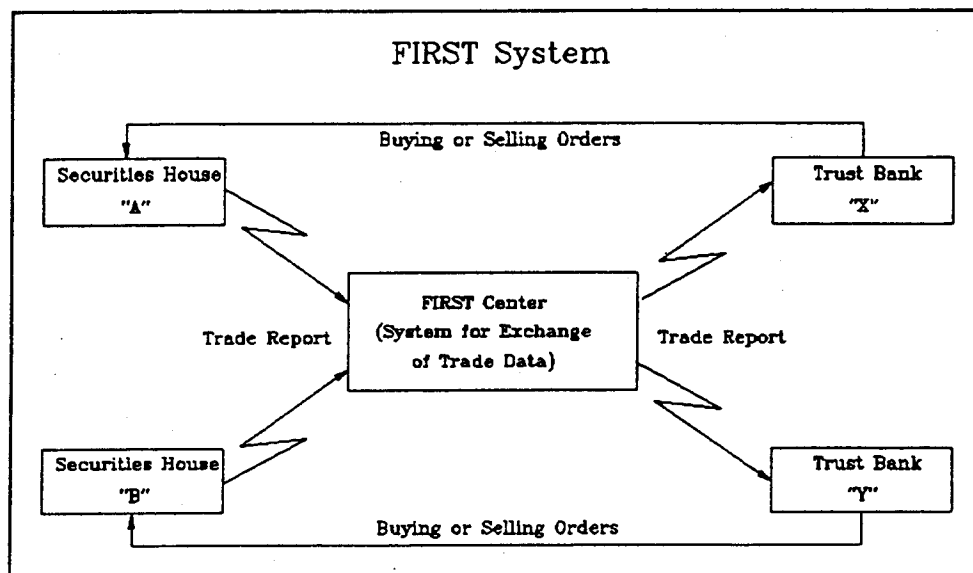
There are two separate systems in operation for trade affirmation between direct market participants and indirect market participants. One is FIRST (Funds Information Relay System), which is a reporting system between securities houses and domestic institutional investors such as trust banks for executed trades on stock exchanges. The other is the Instruction Matching System for Non-Residents which was developed to affirm settlement instructions from overseas investors.

#### (1) The FIRST System

The trade affirmation system between securities houses and trust banks called the "FIRST System" has been in operation since April 1989.

Before the First System, securities houses and trust banks used to affirm their trade results with each other over the telephone or by facsimile. Each trust bank, in turn, had to feed the data received from securities houses into its own electronic system. Increasing trade volume, however, made such procedures burdensome for both securities houses and trust banks, spurring both parties to improve the situation.

Faced with this need, securities houses and trust banks started in June 1988 to develop the affirmation system to enhance efficiency. The FIRST System became operative in April 1989 for equities, convertible bonds, warrants and government bonds. In response to users' needs, the System began accepting trade data for futures and options in June 1992.



\* This Report was discussed and approved by the G30 Recommendations Implementation Conference, Tokyo, in July 1992.

Under the FIRST System, trade data are first transmitted from securities houses' in-house electronic systems to the FIRST Center in the NTT Data Communication Systems Corporation. At the Center, the data are sorted out and then sent to the in-house electronic systems of trust banks. With this System, the trade affirmation procedure between the two parties has been considerably streamlined.

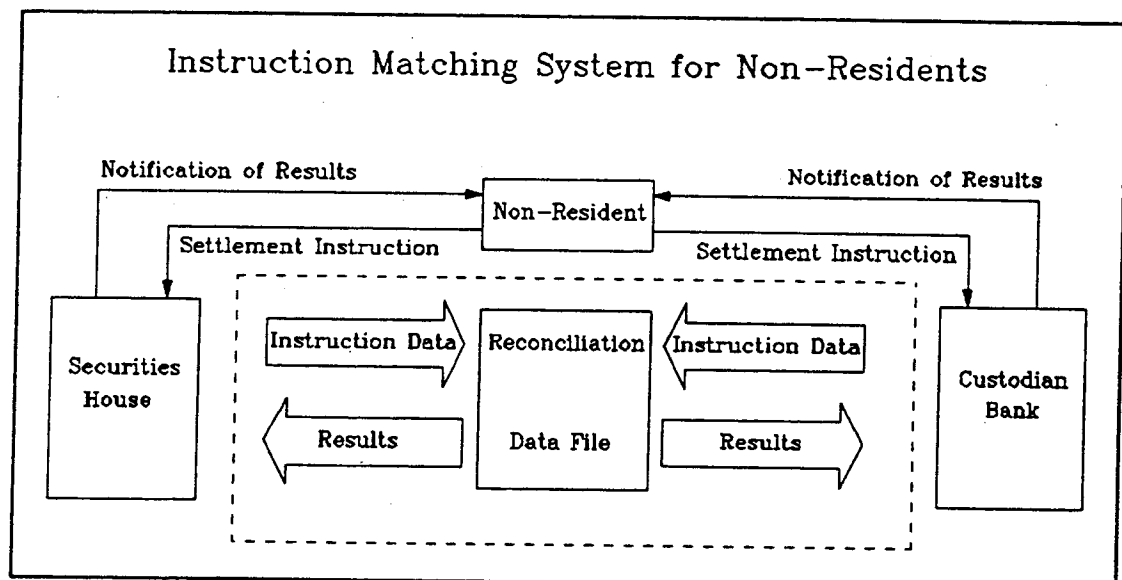
The FIRST System started operations with the participation of four securities houses and eight trust banks. The number of participants has been increasing and is expected to reach as many as 47 by the end of 1992.

## (2) The Instruction Matching System for Non-Residents

In addition to the trade affirmation system (FIRST) mentioned above, a matching system, called the "Instruction Matching System for Non-Residents," has been operative for those trades which involve non-residents.

Customarily, many non-residents place buying and selling orders with securities houses, while they use commercial banks as custodians. In this case, a trade settlement instruction is sent separately to both the securities house and the custodian bank, making it necessary to confirm these two separate instructions between the securities house and the custodian bank prior to actual settlement. Formerly, they relied on telephone or facsimile for this matching of settlement instructions. But, with a continuing increase in investments from overseas into the Japanese capital market, a more efficient instruction-matching system between securities houses and custodian banks was needed.

To this end, a working group consisting of some securities houses and custodian banks (later, almost all present participants joined) started discussion on the development of a more efficient confirmation network system in 1987. The System started the operation with the participation of ten firms (four securities houses and six custodian banks) in December 1991. Thanks to the System, subsequent troubles arising from mismatching will be avoided and the efficiency and assuredness of settlements have been significantly enhanced.





In this System, when the participants receive trade instructions from non-residents (buying or selling instructions to securities houses, and instructions for the movement of securities and funds to custodian banks), both participants enter the instruction data into the Matching Center which is operated by NTT Data Communications Systems Corporation. Instruction data are composed of customer code, settlement day, originating participant's code, counterpart participant's code, detail of delivery (payment) or receipt of securities, issue code, trade volume and amount of funds due. They are automatically compared by the System and the results, matched or unmatched, are transmitted to the participants promptly. Almost all stocks and bonds traded in the market are eligible for the System.

In the System, a uniform identification code system for non-residents is indispensable. However, such identification was never used in traditional confirmation by telephone or facsimile. To solve the problem, NTT Data Communications Systems Corporation, developed the new identification code number system unique to the System for non-resident investors.

With the addition of two firms in March 1992, the number of participants in the System as of June 1992 has increased to twelve, consisting of five securities houses (including one foreign securities house) and seven custodians.

The System has not yet attracted the majority of trades involving non-residents because of the small number of participants.

#### B. The Establishment of a Central Securities Depository (Rec. 3)

In the two decades since 1973, the Japan Securities Clearing Corporation (JSCC), a wholly-owned subsidiary of the Tokyo Stock Exchange (TSE), has operated a book entry system for settlement of trades in all stocks listed on the TSE, thereby playing a role of de facto clearing securities depository in Japan. The system was run on the basis of an agreement between the TSE and its member securities houses for the exclusive purpose of ensuring the efficiency and accuracy of the settlement of trades effected in the TSE market. But the system inherently had some drawbacks: it served only stocks listed on the TSE, and participants in the system were limited to member securities houses of the TSE. In principle, stock certificates deposited with the JSCC had to be returned to member securities houses for registration at every record date. To deal with these issues, a legal study was started in 1979 with the aim of establishing a national central securities depository covering participants and securities nationwide.

As a result of the study and discussion at the Securities Exchange Council and the Legislative Council, the "Laws Concerning Central Depository and Book Entry Delivery of Share Certificates and Other Securities" (the Law) was enacted in May 1984. The Japan Securities Depository Center (JASDEC) was then established in December 1984 and designated, in accordance with the Law, as a securities depository organization by the Ministers of Justice and Finance in May 1985. Subsequently, with the cooperation of related institutions and companies including issuers, JASDEC initiated preparation for operational procedures and then developed computer systems to implement the central depository and book entry delivery system.

In accordance with the original schedule, JASDEC started its pilot operation in October 1991 with 50 stocks listed on the TSE. It extended its service to all of the remaining stocks listed on the TSE in January 1992. All stocks listed on the Osaka and Nagoya stock exchanges were added in April and July 1992 respectively. As the last stage, stocks listed on the other five exchanges and those traded in the OTC market were included in October 1992. Thus, transfers for settlement of trades on all stock exchanges and OTC are currently effected by book entries at JASDEC.

The Law requires that JASDEC obtain the consent of the issuing companies to make their stocks eligible for the system. Although such consent by the issuing companies is legally at their discretion, almost all listed or OTC-registered companies have given their official consents to JASDEC.

The number of participants in JASDEC as well as that of eligible issues is increasing. The JASDEC system started with the participation of the 124 member securities houses of the TSE, Japan Securities Finance Co., Ltd., 33 banks, TSE and JSCC. The number of participants almost doubled to 270 as of October 1992.

### C. The Adoption of an ISIN Numbering System

The responsibility for developing and introducing the ISIN numbering system into the Japanese securities market has been undertaken by the Securities Identification Code Conference (SICC) comprising stock exchanges of Japan (SICC is a Japanese numbering agency authorized by ISO). The securities code system, since its inception in 1953, has been partially modified from time to time. However, there has remained an inherent structural limitation. Because a specific range of numbers is allotted to each industry sector in the case of stocks, and a different specific range of numbers to each type of security in the case of debt issues, the current securities code system would face problems in the event of a possible significant change of industrial environment or the emergence of new types of securities. And furthermore, ISO recommended in 1981 the introduction of ISIN by each country to go along with internationalization.

Against this background, SICC launched a study to review the existing securities code system and to consider the adoption of ISIN. In October 1982, the SICC organized the "New Securities Code Study Group," consisting of experts from securities houses. In July 1986, following three and a half years of discussion, the SICC adopted as its basic policy the development of a new securities code system consistent with ISIN, to be introduced in 1992.

In accordance with this policy, SICC created the "First New Securities Code Implementation Committee," with participation of the Bank of Japan (BOJ) and the Japan Local Bond Association as well as other experts from securities industries. After intensive discussion at the Committee, the SICC made public in February 1988, the "New Securities Code Specification (Draft)." Based upon further discussion and comments from various sectors of industry, the 12-digit-structured New Securities Code System (including a Country Code of 2 digits, Core Code of 9 digits, and Check Digit of 1 digit) was established in July 1988. Since then, SICC has published the "New Securities Code Book" annually and has made every effort to promote the New Securities Code System, not to mention the distribution of the Book to related institutions both in Japan and overseas. Also in September 1989, the "Second New Securities Code Implementation Committee" - consisting of stock exchanges, securities houses, and banks - was organized to facilitate a smooth transition to the new system, and stock exchanges have been initiating the preparatory work for developing computers and other infrastructure.

In September 1992 SICC resolved that the implementation of the new securities code would be delayed from the end of 1992, as initially scheduled, to July 1993. The stock exchanges will begin to use the new securities code along with the present securities code. Securities firms, however, will continue to use the present securities code for domestic purposes, at least for the time being. If the parties agree, the new securities code may be used for communication between overseas institutions.

## II. STATUS IN AUTUMN 1992

### Recommendation 1: Trade comparison by T + 1 for direct market participants

Already implemented.

Member securities houses of the TSE compare trades immediately after the trades. When trades are done, the TSE sends trade data to both parties (buyer and seller) involved in the trades (two-sided comparison). This comparison procedure is an integral part of trades rather than a part of a post-trade clearing process.

### Recommendation 2: Trade comparison for indirect market participants

Already implemented.

Each direct market participant compares his trade with his client's immediately after the trade, by telephone, telex, computer, facsimile, etc. Although the scale may not yet be large, comparison systems or networks already exist; the FIRST System for institutional investors (47 participants) and the Instruction Matching System for Non-Residents (12 participants) are in operation.

### Recommendation 3: Central securities depository

Already implemented.

JASDEC has been in operation since October 1991. It handles almost all stocks listed on stock exchanges, and traded OTC in Japan. The number of eligible issues reached about 2,500 in autumn 1992, and the number of participants in JASDEC has increased to about 270 companies, including major securities houses, banks and insurance companies. The number of shares deposited at JASDEC has increased to about eleven billion shares as of September 1992.

### Recommendation 4: Netting

Already implemented.

The TSE uses a (multilateral) netting system to clear securities and funds for equity trades. In multilateral netting, securities purchased and sold are netted across all member firms by issue, and funds are further netted across all issues for settlement.

### Recommendation 5: Delivery versus payment

Already implemented.

In general, DVP is employed for settlements between securities houses and their clients. Since the settlement between member securities houses of the stock exchanges is based upon multilateral netting, no correlation exists between securities and funds settled as seen in trade-for-trade settlement. Also, funds are further netted across all issues and only one balance is derived. In fact, the conventional concept of DVP which presupposes the simultaneous exchange of securities and cash value to settle a transaction is valid in trade-for-trade settlement but not in a netting settlement. There is no correlation in a netting environment between securities and funds to be exchanged; in some circumstances, both securities and funds may move in the same direction.



The definition of DVP in relation to netting (especially multilateral) settlement and its practical execution has not been clarified yet. In light of this fact, for the time being, we are regarding as appropriate a settlement system which in practice secures the safety of settlement as DVP intends. The safety of settlement, we understand, may be secured for practical purposes when the obligations of delivery of securities and payment of funds are duly fulfilled on the settlement day under the control of a clearing and settlement system backed up by safety measures to provide protection against default risks among members (participants).

In the Settlement System of the TSE, both securities and funds are delivered/paid through the TSE's settlement accounts on the same settlement day under the supervision of the TSE. In addition, the TSE provides safety measures to protect against risks. In cases where funds have not been paid while some securities have already been delivered, the TSE rejects the further delivery of securities to the failing member as well as making use of the Default Compensation Reserves.

As mentioned above, even under the multilateral netting settlement employed by the TSE, the objectives of DVP have been attained for all practical purposes. We believe Recommendation 5 has already been implemented.

#### **Recommendation 6: Same day funds**

**Not implemented.**

The same-day funds convention is employed for settlement between direct and indirect market participants. However, between member firms of the TSE, funds are settled by way of checks with next-day funds availability. A few exceptions exist such as settlement for trades of Government Bonds. Same-day funds settlement could be accomplished by exchange of checks with same-day funds availability or by electronic-fund-transfer in the Zengin System or the BOJ System (Nichigin Net). The TSE and parties concerned have been studying which of the two alternatives is the most desirable with respect to feasibility, merits and demerits, and the possible consequences for the settlement procedures between securities houses and their clients.

#### **Recommendation 7: Rolling settlement T + 3**

**Already implemented.**

T+3 settlement cycle for equity trades on TSE is in place.

#### **Recommendation 8: Securities lending and borrowing**

**Already implemented.**

There is no major barrier to lending and borrowing of securities.

#### **Recommendation 9: ISO message standards and ISIN numbering**

**To be implemented.**

Stock exchanges are preparing for the introduction of the New Securities Numbering System. The introduction of the standardized message format has also been discussed between the parties concerned.

### III. DEVELOPMENTS AFTER 1992

Early implementation or further development is desired with respect to:

- **The trade affirmation system**

- **FIRST System**

Although the FIRST System was originally intended for trade affirmation between securities houses and trust banks, it is highly desirable that the System widen participation by inviting institutional investors (other than trust banks) to join in order to further enhance efficiency of the affirmation procedures of the securities industry as a whole.

- **Instruction Matching System for Non-Residents**

Participation in the Instruction Matching System is open to all securities houses and banks. Wider participation and more frequent usage by securities houses, non-resident clients, and banks offering custody services are both desirable and indeed indispensable for the development of the System.

- **Central securities depository**

JASDEC has already covered almost all of the equity issues listed on the exchanges and traded at OTC, with participation extended to banks, insurance companies as well as securities houses.

The task of JASDEC is now shifting from implementation to the promotion of the system in order to make itself more deeply rooted and widely used in the Japanese capital market.

- **Same day funds**

Early implementation by related institutions is expected. However, this will depend on the progress of the studies and discussions now under way.

- **Standardized securities code and message types**

Smooth implementation of the New Securities Code System in institutions other than stock exchanges is to be discussed by SICC and related parties.





# STE

STICHTING TOEZICHT EFFECTENVERKEER

(SECURITIES BOARD OF THE NETHERLANDS)

Mr. Paul Guy,  
Secretary General of the  
International Organization of Securities  
Commissions  
Montréal, Quebec  
CANADA  
Fax: 09-1.514.875.26.69.

29 March 1993

Our ref: 93-271/EC/abo

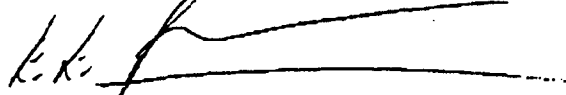
Dear Mr. <sup>Paul</sup>Guy,

We wish to answer to your letter of 1 March 1993 on the subject of the Implementation of the G 30 Clearance and Settlement Recommendations in the Countries of the TC Members.

We can inform you that the information on the situation in The Netherlands in the status report and the comparative summary table needs only one correction. This correction refers to recommendation 9: ISO message standards and ISIN numbering. The use of the ISIS Numbering System is currently already the common practice in The Netherlands. A decision to make this System compulsory can be expected shortly. The ISO Standard 7775 has not yet been formally adopted but the use of this standard is increasing.

Therefore in our opinion the relevant code in table 9 with reference to the situation in our country can be changed from 'U' to 'P'.

Yours sincerely



Bert Canneman  
Director-secretary



## STATUS REPORT FOR THE NETHERLANDS

### I. INTRODUCTION

This Report deals with the clearance and settlement of transactions on the Amsterdam Stock Exchange. This process covers transactions in bonds as well as shares. In the Netherlands large transactions (AIM, or Amsterdam Interprofessional Market System, transactions) may be effected without making use of the clearance and settlement system of the stock exchange. AIM transactions are trades between members of the stock exchange and institutional investors - domestic and foreign - in excess of Fl. 1 million for share transactions and transactions in bonds exceeding Fl. 2.5 million. Transactions between members and foreign professional intermediaries may also bypass the clearing and settlement system.

As the report is focused especially on equities, it does not address the clearance and settlement of certificates of deposit, commercial paper, and medium term notes, which are effected at the Netherlands central bank.

### II. DEVELOPMENTS TO 1992

There are three interprofessional organizations active in the settlement of stock exchange transactions: Effectenclearing (the securities clearing corporation); Necigef, Nederlands Centraal Instituut voor Giraal Effectenverkeer B.V. (the central securities depository of the Netherlands); and Kas-Associatie (the bank for the securities industry).

#### A. Effectenclearing

Effectenclearing, which is a 100 percent subsidiary company of the Amsterdam Stock Exchange, has been in operation since September 1963. It has a number of functions: providing confirmation of transactions, clearing transactions, guaranteeing settlement obligations, and performing an intermediary role in the settlement itself.

All stock exchange transactions are passed on to Effectenclearing via an automatic linkage between the Trade Support System and the Effectenclearing systems. As soon as Effectenclearing has processed the trades and given confirmation to the Stock exchange parties, Effectenclearing becomes the counterparty of the buyer and the seller.

Each stock exchange day Effectenclearing nets the buying and selling transactions of each stock exchange party and so itemizes the numbers and types of securities to be delivered or received and the guilder equivalent due or owed. Settlement takes place by delivery of securities to Effectenclearing which subsequently passes them on. In addition, the clearing corporation initiates the cash settlement between deliverer and receiver. Therefore, settlement itself consists of a movement of securities and a movement of cash. Movements of securities take place via Necigef and movements of cash via Kas-Associatie.

#### B. Necigef

The Giro-based Securities Transfer System Act of 1977 put into effect a generally applicable giro-based securities transfer system. The administration of the Act is in the hands of the Nederlands Centraal Instituut voor Giraal Effectenverkeer B.V., or Necigef, which is the central securities depository of the Netherlands.



The introduction of the giro-based securities transfer system virtually eliminated physical deliveries. Delivery in physical form by Effectenclearing is confined to a number of securities not suitable for giro-based transactions. The giro handling of a stock exchange transaction proceeds as follows. The delivering party instructs Necigef to debit its account in a particular security to the credit of Effectenclearing. Effectenclearing finds that its account with Necigef has been credited and subsequently determines to which participant delivery must be made.

### C. Kas-Associatie

All the participants in Effectenclearing maintain a cash account with Kas-Associatie, a 60 percent subsidiary of the Amsterdam Stock Exchange. Information on the money equivalent of the securities delivered and received for each stock exchange party is supplied by Effectenclearing to Kas-Associatie, which then credits and debits the accounts of the participants. In addition, Kas-Associatie functions as delivery address for "hoekman" members (specialists) and brokers not directly linked to Necigef.

### D. Clearing and Settlement Project

Under the old system delivery of securities took place on the initiative of the participant who had a position to deliver in the administration of the clearing organization. The delivering party had to make the delivery within ten stock exchange days of the transaction date. Within these limits, the participant was free to determine the timing of delivery. The "recipient to be" was left in a state of uncertainty as to the time of delivery and did not know exactly when payment would have to be made. This delivery time frame of a maximum of ten stock exchange days was not practical. A purchase of securities in Amsterdam employed for a sale in the Eurobond market settled via Cedel or Euroclear could take ten days to settle following the transaction date. However, the delivery into the Eurobond market settled via Cedel or Euroclear must take place on the seventh calendar day following the transaction date. In these situations the mismatch between the settlement time frame in Amsterdam and elsewhere could give rise to losses.

In July 1989, the functional specifications of the new system were laid down. The most important element was the adoption of the fixed settlement date of seven calendar days following the transaction date. This settlement time frame ties in with what has been determined in the Eurobond market and usually corresponds to the settlement time frame of five stock exchange days, which is at present the settlement period in USA. On February 5, 1990 the change-over to the new settlement time frame was made. Buying and selling transactions are netted each stock exchange day for each stock exchange party. Under this system the balance must be received or delivered, as the case may be, on the seventh calendar day following the transaction day, thereby ending the delivering party's freedom to choose the delivery time.

### E. Automatic Securities Collection

As the delivery time is now fixed, the so-called automatic securities collection can also be used. This increases the efficiency of deliveries and cuts costs in the back office. Automatic security collection opens the possibility for Effectenclearing, duly mandated by the stock exchange party, to debit the stock exchange party's securities account at Necigef for its delivery obligation vis-à-vis Effectenclearing. The stock exchange party does not itself have to offer delivery instructions to Necigef.

The introduction of automatic securities collection has considerably simplified the process. All that the stock exchange parties now have to do is to enter their order or transaction data in the Trade Support System and settlement takes place automatically without any further manual intervention required from the stock exchange

parties. The operation, which is characterized by optimum efficiency and minimal costs for the participants, is the result of fully integrated automatic processing.

#### **F. Acceleration of Book Entry Procedure**

At the end of 1990 a further improvement of the settlement system was implemented. Until then the settlement process was organized in such a way that settlement with stock exchange parties for deliveries made to them and performed by them was effected on settlement date. Value dating of the settlements did not take place until the stock exchange day following the settlement date. This is the so-called "next day" funds practice. Another drawback was that securities which had been received from a delivery by Effectenclearing could not be received on that same day.

Effectenclearing has co-operated with Kas-Associatie and Necigef to bring about an improvement in the settlement process with the object of changing the settlement periods so that monies received from or paid to Effectenclearing could be appropriated or covered on settlement date. The modification of the process also had to take into account the possibility of redelivering these securities on that same settlement date. For this purpose Necigef introduced an extra book entry stage. The new situation of delivery versus payment is referred to as "same day funds." The change-over to the accelerated book entry procedure was introduced November 26, 1990.

### **III. STATUS IN AUTUMN 1992**

#### **Recommendation 1: Trade comparison by T + 1 for direct market participants**

Through the Trade Support System (TSS), the Amsterdam system gives a transaction confirmation on the transaction date to the participants. This confirmation serves as a transaction comparison. The TSS is a computer based centralized on-line system. The transaction confirmation is shown on the screen of the trading parties as well as in hard copy. The TSS is directly connected with the computer systems of the Effectenclearing. Immediately after trading hours all transactions are submitted to the Effectenclearing without any further interference. In the morning of T + 1, transaction confirmations are given by the Effectenclearing to its members.

#### **Recommendation 2: Trade comparison for indirect market participants**

The speedy availability of transaction confirmation enables the Stock Exchange member to correctly inform his client about the execution of the order. This diminishes the necessity for indirect market participants to be members of the trade comparison system. Members of the stock exchange are in direct contact with their customers, either via telephone on the exchange floor or through the dealing room in members' offices. All securities are traded continuously during trading hours, and thanks to the Trade Support System, information on executed orders can be furnished immediately by the direct market participants to their clients (indirect participants).

#### **Recommendation 3: Central securities depository**

Necigef is the central securities depository (CSD) and giro institute in the Netherlands. Necigef has been operational since 1977 under the Giro Securities Transactions Act. The Act provides for supervision by the Minister of Finance. The Act also protects the investors by means of co-ownership of the securities. The shares in Necigef are held, each for one third of the issued capital, by De Nederlandsche Bank (the central bank), the Amsterdam Stock Exchange, and a holding company for four leading Dutch banks. Participants in Necigef are De Nederlandsche Bank, other banks and

stockbrokers with the status of credit institution, Effectenclearing, and the option clearing institute. Hoekman firms and brokers that are non-credit institutions participating in Effectenclearing have access to the securities giro circuit and services through a participant in Necigef, usually Kas-Associatie. Necigef provides centralized safe keeping for virtually all Amsterdam-listed securities that are fully immobilized. At this time virtually all securities transactions on the Amsterdam Stock Exchange are processed by giro.

#### **Recommendation 4: Netting**

Effectenclearing has used a netting system since 1963. All transactions per security per participant in the Effectenclearing are netted on a daily basis. The daily balance is settled seven calendar days after trade date. The netting involves both securities and money. It is a completely automated batch-oriented system. Netting is a multi-lateral process at the end of the trading day between the Effectenclearing and its participants.

After the transactions have been submitted to the Effectenclearing, the Effectenclearing acts as counterparty for the original trading parties. The Effectenclearing guarantees the delivery of the securities to the buyer and the payment of the securities to the seller.

If a member cannot meet its obligations to the Effectenclearing, this does not affect the obligations of the Effectenclearing towards the other participants. Whenever such a situation occurs, the Effectenclearing can rely on a guarantee fund set up to protect the participants and customers. This guarantee fund is supervised by the Amsterdam Stock Exchange and is funded by its members.

#### **Recommendation 5: Delivery versus payment**

The Effectenclearing ensures delivery versus payment (DVP). Settlement is effected by book entry. Normally instructions from the selling party to Necigef, the Dutch securities depository, occur through continuous authorization to the Effectenclearing. The selling party instructs Necigef to debit his account in a certain security and to credit the Securities Clearing Corporation's account with Necigef. Necigef advises the Effectenclearing which, in turn, instructs Necigef to debit its account and to credit the buying party's securities account with Necigef. The buying party then receives notification and the circle is closed.

The Effectenclearing ensures delivery against payment by effecting the delivery of securities at Necigef and the payment of the corresponding proceeds with Kas-Associatie. All members of the Amsterdam Stock Exchange maintain a cash account with the Kas-Associatie, the bank for the securities industry.

The Effectenclearing and Necigef both use fully integrated computer facilities situated at the Amsterdam Stock Exchange. The Effectenclearing is electronically interfaced with the Kas-Associatie.

The process is organized in such a way that the Effectenclearing will not deliver securities to the buying party unless the payment for the securities has been assured.

#### **Recommendation 6: Same day funds**

In the course of 1990 a function was built into the clearing and settlement system whereby the Effectenclearing, authorized by its members, is allowed to debit the seller's account with Necigef directly for the delivery of the securities on settlement date. This means that an order will be executed, cleared, and settled without any interference of the market participants.



Until November 26, 1990 the delivery versus payment was effected on a next day funds principle. Since that day, however, the same day funds rule has been applicable.

The securities and the payments are available for further deliveries and for use in the money market on settlement day. The same day funds principle was made possible by starting the process of the settlement in the early morning on settlement date. The main stages of the process on settlement date (T+7) are given below.

00:00 hours	first book entry stage at Necigef with deliveries to Effectenclearing
01:30 hours	Effectenclearing makes pro-forma deliveries and calculates movements of cash on the basis of received securities
08:00 hours	deadline for Effectenclearing to inform the participants as to movements of securities and cash
10:15 hours	irrevocable approval by Kas-Associatie of cash movement; cash and securities become available for further usage
12:00 hours	second book entry stage at Necigef, during which pro-forma deliveries by Effectenclearing are executed and also deliveries to other Necigef participants are processed
16:00 hours	third book entry stage at Necigef, during which deliveries to other Necigef participants are processed
21:00 hours	execution of movements of cash by Kas-Associatie
22:00 hours	daily statements of Effectenclearing, Necigef, and Kas-Associatie become available

**Recommendation 7: Rolling settlement on T + 3**

The Amsterdam Stock Exchange implemented the first phase of the changeover to a rolling net settlement method for settling securities transactions on February 5, 1990. The date on which the settlement of a transaction must be effected has been fixed at seven calendar days after the transaction date, which is consistent with the ISMA (International Securities Market Association) rules. In line with FIBV (Fédération Internationale des Bourses de Valeurs) October 1991 recommendation, no further steps have yet been taken to move to T + 3.

**Recommendation 8: Securities lending and borrowing**

The introduction of fixed settlement and a functioning lending facility or process are deemed to be inextricably linked to each other. Lending facilities are offered by the major banks. The function of the central lending facility is to act as an intermediary in instances of imminent non-settlement. In such events, a system should come into action automatically and do the accounting work attached to the lending and borrowing of securities. Initiatives have been taken to implement this recommendation (see section 3).

### **Recommendation 9: ISO message standards and ISIN numbering**

All listed securities carry both a domestic securities code, which consists of five digits, as well as the ISIN code.

A subsidiary of the Amsterdam Stock Exchange functions as national numbering agency for ISIN codes. These codes have been recorded in the data base of the Amsterdam Stock Exchange for many years for use in the trading, clearing, and settlement environment. For example, the output of the Effectenclearing and Necigef show the ISIN code for all listed securities. The Amsterdam Stock Exchange has taken the initiative to start an ISIN User Committee in the Netherlands where the members of the Amsterdam Stock Exchange and Necigef, the Kas-Associatie, and the Central Bank are represented. The main purpose of the committee is to promote the ISIN Numbering System, especially for cross-border transactions, and to initiate and support any developments for further implementation of ISO 6166.

Dutch banks are actively involved in the development of message types implemented by SWIFT and ISO and are large users of the SWIFT network.

### **III. DEVELOPMENTS AFTER 1992**

As there is a close connection between introducing a fixed settlement date and the functioning of a well equipped lending facility, it is planned that an automatic lending and borrowing facility be set up, in addition to the lending facilities provided by the Dutch banks. This will enable the selling party on the stock exchange to deliver securities which it does not actually have in its possession on the stipulated date of delivery by borrowing them. The function of the centralized system will be to act as intermediary in cases of non-settlement by lending and borrowing securities and to handle the associated administrative activities.

Whenever the selling party is not able to settle its position with the Effectenclearing, the Effectenclearing will automatically use the facility. Mechanisms and procedures will be added to make sure that eventually the seller will deliver and be charged appropriate costs.

The specifications of the lending and borrowing facility are being discussed with the members of the Amsterdam Stock Exchange. It is expected that the fully fledged automatic facility can be implemented at the end of 1992. A precursor to this automatic facility might be operational a couple of months earlier.







ANALISIS ECONOMICO

Mr. Paul Guy  
Secretary General  
INTERNATIONAL ORGANIZATION OF  
SECURITIES COMMISSIONS  
800, Square Victoria - 17 etage  
Montreal (Quebec)  
HYZIC8 CANADA

Madrid, March 25 1993

Dear Mr. Guy,

Please find enclosed a short summary of the present state of implementation of the G30 recommendations on clearance and settlement in Spain, in response to your letter of March 1st 1993.

We have noticed that the status report sent in 1992 by the Spanish Clearing and Settlement Service was not very precise, thus giving rise to the large amount of "U" entries in the table prepared by the General Secretariat. We have tried to correct this situation providing very short but (hopefully) precise comments about the present state of implementation of each recommendation.

Should you require any further precision or clarification, please contact me, so that we can provide all the information before the suggested deadline.

Sincerely,

Eudald Canadell  
Director of Economic Analysis and

Paseo de la Castellana, 19  
28046 Madrid  
Telf.: 585 15 00  
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**IMPLEMENTATION OF THE GROUP OF THIRTY CLEARANCE AND SETTLEMENT RECOMMENDATIONS IN SPAIN****R.1 : Yes**

More than 95 percent of market transactions are conducted through the CATS electronic trading system. At the same day the Stock Exchanges submit to the SCLV (Clearance and Settlement Service) the relevant information on daily trades. All trades between direct market participants are determined and matched before the beginning of the next day trading session.

**R.2 : Yes**

The indirect market participants are members of the SCLV. Until T+5, the SCLV receives from all its members positive affirmation of trades details.

**R.3 : Yes**

The SCLV is the Central Securities Depository for all securities listed in the Spanish Stock Exchanges.

**R.4 : No**

Neither by volume nor by trading concentration a netting system has been considered beneficial. The trades are settled trade by trade in the SCLV.

**R.5 : Yes**

The SCLV is a securities and cash clearing management entity. Based on a daily communication between the SCLV and the Central Bank of Spain, the securities are credited in the securities buyer account in the CSD at the same time as the cash is credited in the cash account of the seller in the Bank of Spain.

**R.6 : Yes**

The credit entries relate to settlement of securities in the cash accounts of the Bank of Spain are made according to the "same day" convention at the settlement day.

**R.7 : Partially implemented**

The current rolling settlement system is operating on a time frame of T+7. It is scheduled to move to T+5 before the end of 1993. Moving to T+3 is a longer term target.



**R.8 : Partially Implemented**

Securities lending and borrowing will be implemented before the end of 1993, and the mechanism and procedures of the borrowing/lending system have already been designed and decided. The existing taxation barriers have already been removed.

**R.9 : YES**

The ISIN number has been adopted by the SCLV as the identifier of all securities. The ISIN is a mandatory field in all the communications between SCLV and the depository entities.

The ISIN is also used by custodian banks, brokers and institutional investors to send portfolio information to the Ministry of Finance, Bank of Spain and CNMV.

# STATUS REPORT FOR SPAIN

## I. INTRODUCTION

The regulation and institutional structure of the Spanish capital market have recently experienced major changes to improve transparency, safety and, efficiency. These overall changes have obviously imposed the need to enhance, at the same time, the technical infrastructure that lies behind trading and settlement procedures, offering an opportunity to move closer to international standards.

Spanish settlement for listed securities has always been managed by the four Stock Exchanges: Madrid, which is responsible for 85 percent of all market trades, Barcelona, Bilbao and Valencia. However, a new regulation Act published in July 1988 aimed at the establishment of a single central depository to handle both the settlement of all listed securities and the maintenance of book entry records. The Act also imposed the conversion to book entry as a condition for continued listing. This development provided the need and opportunity for building a new settlement system that coincided with the publication of the Group of Thirty recommendations and the development of new settlement systems in other international markets.

We are still working on the implementation of the new settlement and book entry system as a necessary step to meeting the institutional and legal requirements. A new company has already been set up under the name of "Servicio de Compensación y Liquidación de Valores" (SCLV), and it is currently working on the tasks and responsibilities associated with the development and implementation of the new system. The assumption of all clearance and settlement activities within the new company will not occur until the final system is put in place at which point all listed securities will be dematerialized.

There are two kinds of SCLV shareholders: the four Spanish Stock Exchanges that hold 40 percent of the total equity, and all institutions that participate in settlement and hold the other 60 percent of equity in proportion to their respective annual settlement figures. This latter group is composed of market members, national and foreign commercial banks, and saving banks. This diversified distribution of the central depository's shares is considered to be a guarantee of stability in the normal operation and decision making of the company.

## II. DEVELOPMENTS TO 1992

Three different settlement systems are presently run by the four Stock Exchanges and applied to different types of listed securities. The most used system of these three, dealing with "fungible" securities, accounts for nearly 90 percent of trading and has been recently much improved to bring it closer to the final specifications of the new book entry based system, thus easing the overall process of migration. The main characteristic of this system is the disconnection between the settlement of trades and the exchange of titles. Following settlement, special custodian accounts are updated daily for each type of security in the Stock Exchanges. In this way the excess or shortfall of titles between what is physically deposited at the custodian and what ought to be can be calculated. Physical certificates are moved periodically to reconcile the physical with the calculated deposits.

During 1991 and 1992, there have been four developments in this system to improve its functionality and efficiency:

- The settlement system described was formerly applied only to bearer securities. To enlarge its scope, it was improved at the end of 1990 to incorporate registered securities as well. This expansion has simplified our former situation by gathering a greater number of different types of securities and trades within the same general system.

As a result of this change, all purchases and sales of registered securities, together with investors' identification data supplied by members to the Stock Exchanges, are presented to the issuers by means of electronic file transfers. This enables them to update their own shareholder records and prevent the settlement of trades when the sellers' name does not coincide with the previously recorded buyer's identification.

- In November 1991 Spanish settlement was moved from a weekly account regime to a rolling basis. Since then, settlement has occurred on T+7, which is an intermediate step on the way to the T+5 that will be achieved when the new system is in place.

The change from weekly to daily settlement, keeping the same mean time of seven days between trading and settlement, has moved us to a better position to reduce settlement periods further and has also significantly lowered the number of failures on settlement day.

- Physical certificates have been fully immobilized since April 1992 within the depository institutions. The exchange of securities resulting from settlement generates debits and credits in the special accounts maintained by Stock Exchanges on behalf of depositories in much the same way as will happen in the future book entry procedures, with no need to move certificates from one participant to another.
- A major technological goal was achieved last year. All settlement participants are being connected to Stock Exchanges and to SCLV through an X.25 network, enabling all information to flow electronically either online or through file transfers.

With these four enhancements to our settlement procedures during the last two years, we have tried to accustom our market participants to some of the practices that will necessarily become part of our future environment and thus facilitate the final conversion to the new book entry system. Meanwhile, there are gains in efficiency and Spain comes closer to international standards.

Finally, and from a more institutional point of view, we should refer to the establishment of the new central depository in April 1992 which is expected to take over settlement activity in winter once the already developed system is fully tested and installed. All types of depository institutions have been requested to initiate the procedures for membership in the central depository and test their own developments against the new system.

### III. STATUS IN AUTUMN 1992

The new book entry system to be run by SCLV is planned to start before the end of year. Its built-in features are expected to become operational from the start and can be presented in relation to the Group of Thirty recommendations.

#### Recommendation 1: Trade comparison by T + 1 for direct market participants

Market transactions, 90 percent of which are put through the CATS electronic trading system, will be recorded and matched on the same day they take place. All trading positions between direct participants will be known before the next trading day begins, promoting a higher discipline among participants and gaining market transparency. The information will also be captured by the Stock Exchanges, which will check that the price and amount of securities reported by both trading parties are the same.



## Recommendation 2: Trade comparison for indirect market participants

All members of the central depository will have accounts in the new system and will be able to participate in settlement, assuming responsibility for trades whenever these are allocated to them by a trading broker member of the Spanish Stock Exchanges. As part of the process of entering trade information into the system, brokers will notify the Stock Exchange where the trade took place, and, through it, the central depository, which member of SCLV is expected to be responsible for the settlement of each trade.

This communication process among brokers, Stock Exchanges, and SCLV that leads to the allocation of trades among settlement participants will happen from T through T+3 and should be consistent with the transactions data previously presented and matched between direct participants at T. While matched transactions represent the direct trading commitments negotiated between brokers in the market, the trade-by-trade information later supplied by each to the Stock Exchanges and SCLV should break up each declared transaction unit into client orders, each allocated to different members for settlement.

The indirect participants will have the opportunity to confirm or reject the trades assigned by brokers, as in a matching system. By these means, all brokers will be able either to settle their own trades or to direct them to the customer custodians for settlement. This latter procedure is widely used at present and is known in the Spanish market as the 'rapport' option. No institutions other than custodians or Stock Exchange members, such as fund managers, will be allowed to hold accounts in the system or to become shareholders of the central depository.

## Recommendation 3: Central securities depository

The setting up of the central depository as a step towards the implementation of book entry will allow us to meet the third recommendation of the Group of Thirty when the new system starts. SCLV will be the single central depository in charge of all book entry records associated with every security listed in any of the four Stock Exchanges. A deadline will be given for the dematerialization of all listed securities.

When registered securities are settled, investor identification information will be communicated from members to the central depository and from the depository to the relevant issuers to allow them to keep their shareholder registers properly updated. The information on security ownership kept by the custodians will be considered correct whenever any discrepancy between records arises when checking the sellers' identification against the issuer files. Consequently, issuers will not be allowed to prevent a sale from being settled if they detect a discrepancy in their files.

## Recommendation 4: Netting

The new system will perform a centralized and multilateral clearance of trades among participants. This multilateral clearing brings two benefits to the market:

- More efficient processing of trades because institutions responsible for settling trades will interact with only one party, the central depository, instead of with each original counterparty.
- Minimization of settlement risks to the extent that the central depository is able to ensure the delivery of securities or the payment of funds, even if a participant fails.

Through this netting mechanism, the central depository is interposed between buyers and sellers of securities and will protect each of them from the potential failure of the other.

#### **Recommendation 5: Delivery versus payment**

The centralization of settlement through multilateral clearance of each participant's trades in the central depository, together with the connection between the depository and the Central Bank of Spain for all fund transfers, will enable the new system to comply with the delivery versus payment standard. The system will process all debits and credits resulting from settlement in the participant's accounts during the same day, ensuring the delivery of securities and the payment of funds between the central depository and each party are simultaneous in time and are firm enough to avoid the risk of any participant losing both assets.

#### **Recommendation 6: Same day funds**

All fund transfers deriving from settlement in the new system will be presented to Bank of Spain for allocation to the Bank's accounts during the planned settlement day in same day funds. This principle will be applied to the settlement of all securities within the scope of the central depository, covering the debits and credits of all participants.

#### **Recommendation 7: Rolling settlement on T + 3**

Rolling settlement is in fact already in place and will continue in the new book entry based system. Although at present we are settling on T+7, we will move to T+5 in the near future. T+3 remains a long-term target, although we wonder whether it is a realistic proposal considering its potential negative effect on foreign transactions.

Our concern relates to the fact that in foreign transactions several different institutions usually get involved, including the fund manager, the foreign broker, and the international custodian, as well as the Spanish broker and depository. The allocation of the trade to the Spanish custodian by the Stock Exchange member helps in the settlement of the trade or the transfer of securities or cash to the broker who settles the trade. This allocation requires a set of information flows through the different institutions that often requires more than three days.

However, we shall analyze the convenience of achieving further time frame reductions once we both get to T+5 and introduce the securities lending option. It is hoped that this latter facility will help avoid potential settlement failures.

#### **Recommendation 8: Securities lending and borrowing**

The new system will start without a facility to lend and borrow securities. However, stock lending is planned for 1993 as a way of preventing the failure of sales and thus permitting the introduction of a shorter settlement timetable. The tax regulation applied to securities lending, which was a constraint against its development, has already been removed. As a result, we foresee good potential for the supply of securities for these purposes.

#### **Recommendation 9: ISO message standards and ISIN numbering**

The new system will apply the 12-digit ISIN numbering standard to all securities. The Spanish securities identification numbers will be assigned by the Spanish supervisory agency, CNMV. Foreign securities, however, are currently coded through a temporary internal number allocated by the same Spanish agent instead of using that of the relevant foreign agent. We hope to use ISIN numbering on

foreign securities by the end of the year and thus fully comply with this standard. Thus far there is no plan to implement ISO message standards.

#### Other technological achievements

There is still another feature of the new system, apart from those relating to the nine recommendations of Group of Thirty, that we consider to be worth describing. It concerns electronic communications and the automation of information flows between participants and SCLV. It is our intention to oblige any institution wishing to become a member of the central depository, and therefore a participant in settlement, to connect its computer to the SCLV's through the use of either the public switching network or the X.25 private network that links Stock Exchanges with the central depository. To help load the custodian's systems with the information supplied by the central depository, two file transfer packages have been made available.

#### IV. DEVELOPMENTS AFTER 1992

The implementation of the new system at the end of 1992, fully based on book entry and under the control of the recently formed Spanish central depository, will be followed by a sequence of improvements designed to conform to international standards and to reduce further both risks and the settlement timetable. The main goals to be achieved during 1993 are the following:

- The introduction of a delivery versus payment option for the transfer of securities between the accounts of member institutions. We intend to protect final investors from the risk of losing control over both securities and funds under two possible circumstances:
  - When reallocating purchased securities from the account of the trading broker to the account of the custodian where the client holds his account. The transfer of securities under these circumstances will be synchronized with the transfer of funds through the central depository, avoiding any risk or additional cost to participants.
  - When transferring securities from the customer's custodian account to the trading broker. The central depository will simultaneously move securities and funds between the custodian and the broker accounts on settlement date, thus avoiding risks and financial costs to both parties.
- The shortening of settlement timetable from T+7 to T+5. The current T+7 schedule is only an interim step towards the T+5 settlement period which is well suited to our market practices.
- Online access to the new system will be available from the users' own terminals or computers in conjunction with the file transfer mechanisms already available. This facility is expected to enhance the overall performance of the system by allowing online queries about trades or accounts status and facilitating the flow of matching and transfer instructions between members.
- Finally, securities lending will become available to avoid settlement failures. Once this facility is in place and widely used by member institutions, we will be able to judge whether a shorter settlement timetable such as T+3 is realistic.



The way stock lending is designed to enhance securities settlement in Spain differs from that adopted by other countries. SCLV will allow any owner of securities to offer them for borrowing by the central depository through his custodian. Each settlement day the central depository will borrow on its own behalf as many securities as needed to avoid failed sales. Buyers will not be aware that this borrowing procedure has taken place. If the required securities are not delivered to the depository within a prespecified maximum number of days, it will buy in the securities and return them to the lender.



# FINANCIAL SUPERVISORY AUTHORITY

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Fax 514 875 2669

Stockholm April 2nd 1993

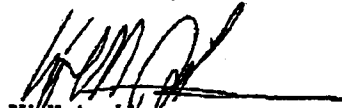
Mr. Paul Guy  
Secretary general of IOSCO  
C.P. 171 Tour de la Bourse  
800 square Victoria, 45 etage  
Montreal (Quebec)  
H4Z 1C8 CANADA

Dear Mr. Guy,

Implementation of the G 30 Clearance and Settlement Recommendations in the  
countries of the Technical Committee Members

In respond to your letter of March 1st, 1993, I want to confirm that the information given in the status report concerning the clearing and settlement systems in Sweden is still correct and adequat. No substansial changes has been made. The development of new (two) clearing and settlement systems on the money market is still under process, which could mean that the G 30 recommendations will be even more implemented later during this year.

Yours sincerely,

  
Kjell Arvidsson

Dokumentnr

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# STATUS REPORT FOR SWEDEN

## I. DEVELOPMENTS TO 1992

### A. Basic Information on the Swedish Equity Markets

In Sweden the security market can be divided into three sectors - the debt-security market, the derivatives market, and the equity market. All have their own important role in the financial system.

In the equity market, both institutional investors and individuals (about two million Swedes are shareholders) are participants. Trades must be carried out through one of the forty authorized banks and stockbrokerage companies which are brokers but not dealers. In contrast to the debt security market, there are no market makers in the market for listed shares.

Most banks and stockbrokers also offer a custody service to their clients that makes it easy for them to trade between in-house customers. Normally, however, trades are carried out between the banks and stockbrokers (acting on behalf of their customers) on the Stockholm Stock Exchange.

In the early 1980s, trading on the Stockholm Stock Exchange was relatively insignificant. However, a marked change occurred during the last decade. The annual trading value increased rapidly, from around SEK 8 billion to SEK 113 billion in 1989. In 1991 the trading volume amounted to SEK 125 billion (roughly USD 20 billion). In 1982 an OTC market was created for small and medium-sized companies.

### B. The VP System

During the sixties there was a growing need for a more rational and centralized service for trades on the Stockholm Stock Exchange. In 1981 this task was given to a company especially created for this purpose: The Swedish Security Register Centre (VPC) (Vardepapperscentralen VPC AB) owned 50 percent by the state, 25 percent for forty registered stockbrokers and banks, and 25 percent by the issuing companies.

During the 1980s, the need for a further step - a paperless system - became more and more acute, thanks to the fast growth in trading in the equity market mentioned above. At the end of 1989 a new system, called the VP-system and operated by the VPC, was put into practice for the clearing, settlement, and book entry of equities, including some debt-securities traded on the Stock Exchange. This process, supported by a new Share Accounts Act, was completed in 1990.

During 1990 all certificates of shares traded on the stock markets, including convertibles and some bonds, were converted to book entry form within this new system. In other words, all trading in equities in Sweden is now done in book entry form.

Aside from creating an efficient depository and clearing system, an important aim in designing and implementing the VP-system has been to provide a settlement mechanism that meets the requirement of "delivery versus payment". This has been achieved by linking the transfers of securities in the VP-system to the transfers of funds through the interbank clearing system, managed by the Riksbank, the Swedish central bank.

The VP-system contains a reconciliation register for each company, consisting of a daily journal and a share account in which shareholders in the company are registered. A reconciliation register is also available for each issuer of bonds and other debt-securities. The VPC is legally responsible for ensuring that the reconciliation register is maintained in the correct manner. Consequently, issuers do not keep any registers of their own.

All registrations in the VP-system are done on request from the owners of securities - totalling around two million shareholders - by account-operator institutions, primarily banks and stockbrokerage companies, authorized by the Financial Supervisory Authority. The holder of securities can choose to have such an institution act as nominee for his securities or have his own VP-account at the VPC. The vast majority of the participants have accounts of their own. For foreign investors, registration can be handled by foreign trustees who are authorized by the Financial Supervisory Authority. Investors may split their holdings between several accounts, and they may also have these accounts managed by different operators. Institutional investors, who are not account-operator institutions themselves and who do not wish to appoint a bank or a stockbroker for that purpose, can use the VKI (VPCs Kontoförande Institut AB), which is a subordinate company of the VPC, as a neutral account-operating institution. It should be noted, though, that VKI cannot execute purchase or sales instructions. For this purpose, the VKI must use a bank or a broker.

The basic services (opening accounts, making registrations, etc.) are free for the investors. The costs involved are borne by the issuers.

The VP-system registers such information as share splits, bonuses, new issues, and dividends. It also registers pledges taken on securities.

## II. STATUS IN AUTUMN 1992

### Recommendation 1: Trade comparison by T + 1 for direct market participants

The input of the trade is technically done on T and on T+1, from the stockbroker's own trading system linked to the VPC or from terminals placed with each stockbroker and connected to the VPC. On the input of a sale transaction, an immediate control is carried out against the VPC register. The input is rejected if the sale exceeds the number of shares that are registered to the seller. A reservation is made for all sale transactions that pass this input control.

A real time comparison is made with the corresponding input of buy transactions. The input normally takes place not later than T+1. The information of matched (and unmatched) trades is then presented immediately on each stockbroker's monitor. A control is also carried out to check whether the transaction will affect already booked but unmatched transactions.

### Recommendation 2: Trade comparison for indirect market participants

Institutional investors, who normally use the VKI as account operator, can use their own terminals connected to the VPC for transmitting buy or sell orders to the VKI and to make registrations confirming their trading activities. They also receive information from the system, which keeps them updated.

For other participants (such as individuals), information about all types of changes in their account position is sent by mail in the form of VP-statements. These are sent to the investors immediately after comparison is made.

### Recommendation 3: Central securities depository

The VPC has been given the task of being the central security depository for all listed Swedish shares. To a growing extent, however, the VP-system is also used for debt securities, including convertible bonds, options, and other bonds.



An issuer not listed on the stock exchange can choose whether or not he wants his securities registered at the VPC. No issuer using the VP-system maintains a register of his own; in all cases this is done by the VPC which has a legal responsibility for the correct maintenance of the registers.

#### **Recommendation 4: Netting**

The VP-system gives real time information to each stockbroker about his input of trades. The information includes clearance and settlement data such as the matched and unmatched trades in all securities concerned. The system calculates the net cash payment that has to be settled for each stockbroker on each settlement day. Securities are not subject to netting.

#### **Recommendation 5: Delivery versus payment**

At 10:00 a.m. on settlement day, the stockbroker is requested to place a bank guarantee with the VPC covering the amount due. If the broker is a bank, this is not necessary. A permanent guarantee for each stockbroker is registered within the system to cover the amount normally due. When all these net payments due from non-bank stockbrokers have been secured by bank guarantees, the matched trades are frozen. No additional input of data for that settlement day can be made. At this point, unmatched or uncomparated trades will be canceled. Settlement day occurs each business day of the week.

On settlement day all frozen transactions will be settled. The clearing and interbank system, managed by the Riksbank (the Swedish central bank) is used for the transfer of funds. By 11:00 a.m. each bank must have sufficient funds or a sufficient credit line in the Riksbank. These funds should cover both their own debts - arising from acting as brokers - and payments due from all stockbrokers for whom they have guaranteed payment. The delivery of the securities in book entry form takes place within the VP-system immediately after the funds have been cleared at 12:00 a.m. in the Riksbank.

No credit facility exists within the VP-system or the VPC. However, banks can borrow intra-day and overnight from the Riksbank, thereby creating an indirect credit facility in the system.

#### **Recommendation 6: Same day funds**

Because settlement payments are made over the books in the Riksbank, the clearing is finalized and the funds are fully available immediately after settlement, that is, by noon on settlement day.

#### **Recommendation 7: Rolling settlement on T + 3**

From the end of 1990, when all share certificates were converted to book entry form, all trades in VPC certificates were settled on T+5. This was changed to T+3 for all shares in September 1992. The process of shortening the lag between trade and settlement has not been accompanied by any substantial controversy; instead there has been a high degree of consensus on this move among all market participants.

#### **Recommendation 8: Securities lending and borrowing**

Since 1991 Swedish legislation has allowed brokers or dealers to have short selling positions on securities or to be involved in security lending. The VP-system does not itself provide any security lending facilities. However, the system does not in any way impede such activities conducted outside the system.

### **Recommendation 9: ISO Messages standards and ISIN numbering**

The VPC maintains the national register of ISIN numbers used for Swedish securities. An ISIN number has been allocated to all Swedish shares as well as to a number of other securities. All ISIN numbers are available to the banks and stockbrokers through terminals connected to the VPC security system and its security register. ISIN identification is part of the VPC-system. This enables the stockbrokers to use ISIN in transactions handling VPC securities both within Sweden and internationally.

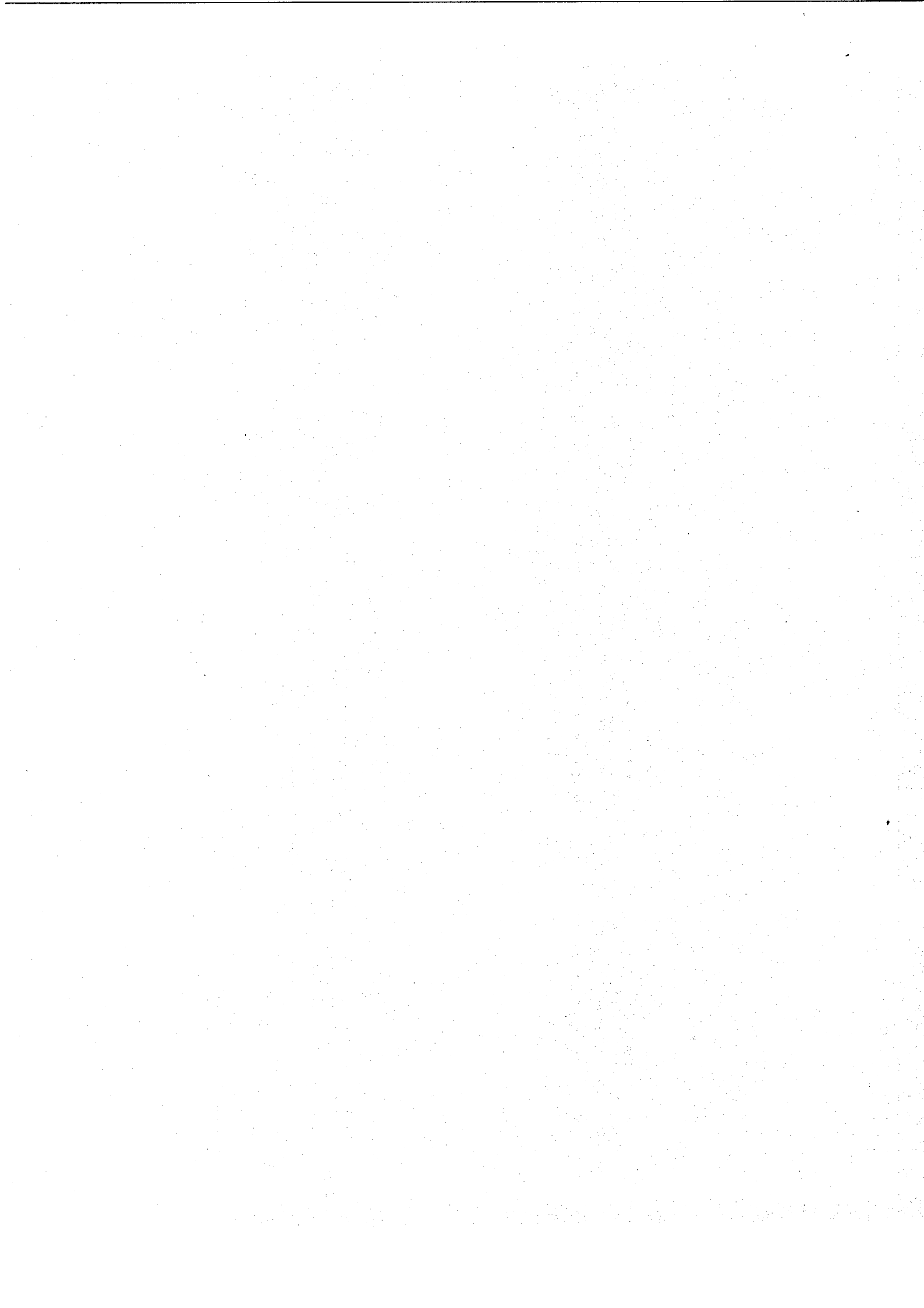
### **III. DEVELOPMENTS AFTER 1992**

Concerning clearing and settlement in the equity market, the VP-system can be regarded as fully implemented and complete. Therefore no substantial changes are planned for the foreseeable future.

The development of the VP-system during 1993 will be focused on the changes that will occur in other parts of the Swedish security market, one of which is the emergence of a non-institutional bond market. The VPC is also developing a new function in the VP-system to make it possible to include money market instruments. This new function may be implemented during 1993, provided that it gets the necessary approval from the Financial Supervisory Authority.

The development of market-maker functions for shares is another point under discussion.

During recent years the VPC and its counterparts in Norway, Denmark, and Finland have been making cooperative efforts in developing models for cross-border communication with other national and international securities depositories.





Kommission für Regulierungsfragen  
Commission de Régulation  
Commission for Regulation

Vereinigung der Schweizer Börsen  
Association des Bourses Suisses  
Association of Swiss Exchanges

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PER TELEFAX

Mr. Paul Guy  
Secretary General  
IOSCO  
800, Square Victoria  
Montréal - (Québec)

Dear Paul,

Re : Implementation of the G30 Clearance and Settlement Recommendations in  
the countries of the Technical Committee members

Following your letter of 1st March 1993, I can confirm the information contained in the  
document concerning Switzerland.

Yours very sincerely,





# STATUS REPORT FOR SWITZERLAND \*

## I. DEVELOPMENTS TO 1992

Following earlier developments in clearance and settlement systems and procedures, Switzerland already fulfills all essential requirements set by the Group of Thirty. The main changes to be reported for the period 1991/92 concern the timetables for the three most important on-going projects:

- EBS, the centralized Electronic Stock Exchange of Switzerland;
- SECOM, the SEGA Communication System; and
- INTERSETTLE Swiss Corporation for International Securities Settlements, the cross-border clearing organization.

The changes since 1990 are the following:

- **EBS:**  
The original concept had to be canceled. A new project has been started which will cover both equities and debt instruments. It is being developed by the Association Tripartite Bourses (ATB) which combines the securities markets of Zurich, Geneva and Basle.
- **SECOM:**  
Development work progressed in 1991 according to plan. However, the design of an improved DVP mechanism in cooperation with the Swiss National Bank has slightly delayed the implementation schedule.

## II. STATUS IN AUTUMN 1992

### Recommendation 1: Trade comparison by T + 1 for direct market participants

The stock exchanges of Zurich, Basle, and Geneva continue to practice T+0 for trade matching through their electronic trade matching system ("AV-System" = Abschluss-Verarbeitung).

### Recommendation 2: Trade comparison for indirect market participants

Stock exchange members in Switzerland act as principals. Therefore, clients' orders are not identical with the deals effectively concluded on the stock exchange. There is at this time no reason to link institutional investors or other participants to the "AV" trade matching system.

### Recommendation 3: Central securities depository

SEGA, the Swiss Securities Clearing Corporation, is a well established central securities depository which has been fully operational for more than 20 years. Approximately 500 participants can deposit more than 7,000 actively traded securities (equities, government and other bonds, notes, money market book claims, and other financial instruments) and settle them via the SEGA book entry transfer system.

\* This report has been prepared by SEGA, the Swiss Securities Clearing Corporation located in Zurich, and has been verified by a group of industry experts (composition: see Annex) on behalf of the Association of Swiss Exchanges, Zurich.

More than 90 percent of the transactions are settled on a delivery-versus-payment basis in Swiss francs. Swiss banks maintain accounts with the Swiss National Bank to which the funds resulting from a delivery-versus-payment transaction are credited or debited on settlement date. The funds can instantly be used to pay for other transactions (same day funds). Each of the participant banks is subject to the Swiss Banking Law.

INTERSETTLE, the Swiss Corporation for International Securities Settlements, makes the services provided by SEGA indirectly available to domestic financial intermediaries which are not or are only partly subject to Swiss banking legislation. Technically, SEGA and INTERSETTLE work with the same settlement platform. Inter-system deliveries can be effected among the participants of both clearing organizations without any problem.

#### **Recommendation 4: Netting**

Settlement is based on daily netting of securities and funds. Transactions are considered as provisionally executed until the funds are available on the participants' giro accounts with the Swiss National Bank. In case of a default, the transactions of a participant are eliminated from the system. The counterparty risk is borne by each counterparty. It is not assumed by SEGA.

#### **Recommendation 5: Delivery versus payment**

Members of the Swiss stock exchanges settle practically all their deals among themselves in SEGA-eligible securities through SEGA's DVP service. Funds are credited or debited on the correct settlement date to the giro accounts maintained with the Swiss National Bank 24 hours after the provisional booking of securities is carried out. Only one processing cycle takes place per day.

INTERSETTLE participants who do not hold an account with the Swiss National Bank effect their transactions via a Swiss franc account maintained with a member bank of the Swiss Interbank Clearing (SIC).

#### **Recommendation 6: Same day funds**

The securities processing system fulfills the "Same Day Funds" requirement.

#### **Recommendation 7: Rolling settlement on T + 3**

Rolling T+3 settlement is fully operational in Switzerland.

#### **Recommendation 8: Securities lending and borrowing**

Since 1990 all Swiss and foreign securities have been eligible for lending and borrowing. A number of Swiss banks provide this service.

#### **Recommendation 9: ISO message standards and ISIN numbering**

- ISO standard 6166

TELEKURS, the Swiss numbering agency, completed at the end of 1990 the assignment of an ISIN to all Swiss securities. About 80 percent of those foreign securities which are ISIN-eligible had been allocated an ISIN number. The assignment of an ISIN implies the cooperation of the numbering agency with the corresponding bodies abroad. Access to the TELEKURS data base using ISIN as the only access key is now possible. The ISIN is included in the corporate announcements provided by TELEKURS to its subscribers.



**ISO Standard 7775**

Many market participants in Switzerland send and receive daily a substantial number of 7775 messages.

**III. DEVELOPMENTS AFTER 1992**

- **EBS**  
The design phase is to be finished in the autumn of 1992, the development phase by August 1993. After the implementation phase, EBS is expected to become operational in October 1994.
- **SECOM**  
The new timetable provides for a gradual start in the middle of 1993 for domestic business, and a fully operational system in 1994.
- **INTERSETTLE**  
Since INTERSETTLE depends heavily on the functioning of SECOM, implementation will begin in the first quarter of 1994 with a first set of functions. Two following phases, introducing additional functions, are scheduled to be implemented before the end of 1994.  
  
After the full introduction of the SECOM clearing and settlement system in 1994, INTERSETTLE will provide additional services such as the settlement of securities trades on a global scale and carrying money accounts in Swiss francs and foreign currencies. Furthermore, INTERSETTLE will offer its participants a wide range of links to other securities markets through national and international central securities depositories and/or custodian banks.
- **Registered Shares**  
Registered shares of Swiss companies which are listed on the stock exchange have only recently been accepted into the SEGA system. A transition period has been fixed, ending in 1997 at the latest, during which the listed registered stock of all public companies has to be integrated into the SEGA system and all adjustments concerning legal matters, information technology and settlement procedures will have to be completed.

When these changes have been implemented, the status in relation to the Group of Thirty recommendations will be as follows:

**Recommendation 1: Trade comparison by T + 1 for direct market participants**

Once EBS is implemented, separate trade matching will cease to exist for securities traded via EBS, since all trades will be automatically settled as locked-in trades via the EBS-SECOM interface.

**Recommendation 2: Trade comparison for indirect market participants**

The future indirect participation of institutional investors and other market participants in the trade matching function will be discussed later in connection with the "EBS" project.

### **Recommendation 3: Central securities depository**

With the introduction of SECOM in 1994, cross-border transactions in Swiss and internationally traded securities and in all the usual currencies will be carried out via INTERSETTLE. SEGA will focus its activities mainly on the national clearing and settlement business and act as a service organization for INTERSETTLE in the field of securities processing. Like any other national clearing and settlement organization, SEGA and INTERSETTLE commit themselves to live up to the principle that securities should be deposited in their country of origin.

### **Recommendation 4: Netting**

The SECOM system will provide for the simultaneous, unconditional and irrevocable settlement of delivery and payment in Switzerland and abroad.

Trades stemming from the EBS system will be directly transferred to the SECOM system and kept in abeyance as so-called locked-in trades until processing is effected on the correct settlement date.

### **Recommendation 5: Delivery versus payment**

After the introduction of the SECOM system in 1993, the securities will no longer have to be available on the day before settlement, and each securities transaction in Swiss francs will be paid on a trade-for-trade, delivery-versus-final-payment basis, through SIC, the Swiss Interbank Clearing System.

### **Recommendation 6: Same day funds**

SECOM will permit SEGA and INTERSETTLE participants to settle all transactions in all the usual currencies in same day funds.

### **Recommendation 7: Rolling Settlement on T + 3**

Settlement on a rolling basis will also be practiced within the framework of the new securities settlement system SECOM. Since the SECOM data base will be accessible 24 hours a day for enquiries, order input or modifications, and since processing will not be carried out in cycles but continuously, it will be possible to shorten the settlement period further. After the introduction of EBS and the implementation of the corresponding interface with SECOM, all transactions within the Swiss market could be settled as same day settlements in same day funds.

### **Recommendation 8: Securities lending and borrowing**

INTERSETTLE, SEGA's partner organization, which has mainly been established for the purpose of settling cross-border transactions, plans to provide a fully automated securities lending and borrowing service beginning in 1994.

### **Recommendation 9: ISO message standards and ISIN numbering**

- ISO Standard 6166

In 1991 TELEKURS started making available ISIN conversion facilities to the user community. The schedule of implementation is:

Starting in the third quarter of 1993, the six-digit number for Swiss securities will be embedded in a twelve digit field and replaced by the regular ISIN number.

Starting in January 1994 the emphasis will shift from the Swiss securities number to ISIN. The Swiss securities number will from then on serve as information only.

Starting in June 1995 a Swiss securities number will no longer be allocated to foreign securities.

Starting in December 1995 new securities in the securities register will be identified by means of an ISIN only. For existing securities, the Swiss securities number will be provided as additional information.

Starting in January 1996 the transmission of the Swiss securities number as an identifier will cease.

**ISO Standard 7775**

Based on the developments of recent years, there is every reason to believe that the securities-related standardized messages emanating from Switzerland, whether through SWIFT or other networks, will increase significantly in the years to come.





## **ANNEX: List of Industry Experts**

Industry experts who verified this report prepared by the Association of Swiss Exchanges:

**Dr. Dieter Sigrist, Secretary, Association of Swiss Exchanges**

**Heinz Haeberli, Member of the Executive Boards of INTERSETTLE and SEGA**

**Heinz Hofmann, Senior Vice President, Credit Suisse; Chairman of the Board of Directors of SEGA**

**Dr. Richard T. Meier, Chief Executive, Zurich Stock Exchange**

**Kurt Meuche, Senior Vice President, Union Bank of Switzerland; Secretary, International Society of Securities Administrators ISSA**

**Ronny Vogt, Member of the Executive Boards of INTERSETTLE and SEGA**

**Peter Wittmann, Senior Vice President, Swiss Bank Corporation; Chairman ISO/TC 68/SC 4**

**Julius Zürcher, First Vice President, Swiss Bank Corporation; Chairman of the Board of Directors of INTERSETTLE**





SECURITIES AND INVESTMENTS BOARD

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CANADA

R E C U

19 MAR 1993

O I C V

17 March 1993

*Dear Paul,*

**G30 CLEARANCE AND SETTLEMENT RECOMMENDATIONS**

Despite recent events in London, your summary table on implementation of the G30 recommendations is correct. Of course, the status report is now irrelevant and we shall provide you with new information as and when it becomes available.

*Yours*

Barbara Muston

*Jean-Pierre*

*22/3/93*





## STATUS REPORT FOR THE UNITED KINGDOM

The UK Group of Thirty Steering Group (known as G15), under the chairmanship of Sir Andrew Hugh Smith, Chairman of the London Stock Exchange (LSE), has been charged with overseeing the implementation of the G30 recommendations in the UK. Efforts in the UK have been focussed on preparing for the introduction of Taurus beginning in 1993. Section I of this report describes the steps already taken. Section II compares the current status of UK equity settlement with the G30 recommendations. Section II sets out the plans which will bring the UK more fully into conformity with the recommendations and which will, moreover, provide a platform for further enhancements.

### I. DEVELOPMENTS TO 1992

Taurus is an ambitious project to transform and improve UK equity settlement in a single leap: it seeks to tackle a wider range of settlement issues than many simpler systems. The introduction of Taurus has taken longer than was originally envisaged and has involved a great deal of activity by many players. The extended timetable has meant that building blocks which have been put in place are based on sound foundations.

#### A. Taurus Parameters

The recent work on Taurus has been within a framework of agreed parameters. In the first place the UK has decided to dematerialise rather than to immobilise share certificates. Dematerialisation of all certificates is seen as the key to longer-term improvements in settlement, such as further reducing the settlement cycle, which go beyond the G30 recommendations. Dematerialisation means that the Taurus project has involved much detailed planning and development of hardware and software by the LSE as Taurus Operator and by the securities industry as participants. It has also required significant legal changes.

Another parameter which increases the complexity of Taurus is the intention to preserve as far as possible the existing rights of participants in the system and of shareholders. In particular, Taurus has been designed to allow all categories of investor, including small retail investors, to continue to enjoy the range of facilities available under the existing structure of the market. Taurus will, for example, preserve, and indeed extend, the UK tradition of wide access to the central settlement system; in addition to preserving the existing rights of a spectrum of settlement agents from large clearing banks to small retail brokers, Taurus extends direct access to the central settlement system to large investors, such as institutions. It is also envisaged that non-UK participants will be permitted to have direct access to Taurus settlement.

The Taurus system will be operated by the LSE which will be responsible for the central computer system, operate the network linking the participants, and set standards for membership of the system. Taurus is different from many other securities depositories in that it decentralises the holding of investor records and so introduces an element of competition into the system. It is intended to encourage competition between the providers of depository-type services (called commercial Taurus Account Controllers, or TACs), who will hold the records of investors' entitlements to stock, in addition to arranging transfers. This will allow investors to hold the records of their shareholding in the form which is most suitable for their business. It is expected that most major market intermediaries (such as banks, brokers and custodians) will become commercial TACs; major investing institutions may themselves become TACs and so hold their own entitlements to stock. In addition, each company whose shares enter Taurus will be required to provide a company TAC which will offer the basic TAC service free of charge to retail investors and any others who do not wish to hold their stock in a commercial TAC.

Taurus has also been designed to enable the UK to retain a system of registered shares which includes, for investors, the right to be registered directly with the issuing company and, for listed companies, higher levels of shareholder visibility than is the case in many other countries with registered shares. Records of investors' entitlements to stock will be held in accounts by the TACs, who will also transfer entitlement. The company register, however, will continue to constitute the definitive record of company membership. TACs will be required to notify the company registrar (via the Taurus Operator in the case of commercial TACs) of the names and shareholdings of their account-holders either on a regular basis, at least once a month, or on transfer of the entitlement. The registrar will then update the company register.

Over the past year the detailed progress required to achieve these objectives has been summarised in a published "Taurus Industry Plan," which sets specific development requirements and targets for each sector of the industry. The three main areas covered by the plan are the legal and regulatory environment for Taurus; the development by the LSE, as Taurus Operator, of the central systems; and the development by the securities industry, including listed companies, of its plans and systems for Taurus. Progress in implementing the plan is published monthly in the LSE's Taurus bulletins.

## B. Regulations and Rules

A major step towards the introduction of Taurus was made in February 1992, when the UK Parliament approved Regulations, under Section 207 of the Companies Act 1989, to provide the legal environment for Taurus. The Regulations set out essential features of the Taurus system and how securities may be dematerialised, held, and transferred within it. They cover, inter alia, the duties of the Taurus Operator, the supervision of participants, and the compensation arrangements.

The main innovation in the Regulations is the introduction of the new legal concept of entitlement. This was designed to retain the existing right of shareholders to be directly registered with the issuing company (whose register remains the definitive record of company membership) and also lends itself to a DVP mechanism. The Section 207 Regulations unbundle the package of rights represented by a share to provide the separate concept of entitlement. Entitlement is the power to instruct the issuing company to register a person as the holder of a unit of a security, and thus confers the power to cause a transfer of legal title to a share. A TAC will have the right to transfer entitlements to any other TAC. Such a transfer will transfer good title, which facilitates the design of a delivery versus payment system since it offers finality of delivery which is independent of the registration process. Entitlement does not itself constitute membership of the company; this remains with those who are registered. Entitlements may only be held by TACs, to the account of investors. The investors continue to enjoy all the other rights of company membership, and it is they who are registered in the company's register; this is updated on a regular basis from the records of the TACs.

The Section 207 Regulations give the Treasury, a government department, a rule-making power which is expected to be delegated to the Taurus Operator. The LSE, as the Taurus Operator-designate, is drafting the Taurus Rulebook which will contain much of the technical and procedural detail of the operation of the system; it hopes to publish the Rulebook in the first quarter of 1993. Consent for the LSE to commence the live operation of Taurus is dependent on the minister accepting the Operator's notification that it has viable systems to operate Taurus and that the regulatory, security, and compensation arrangements are adequate.

The regulation of the system and its participants is covered in the Taurus Participants Rules that were published as a draft for comment in June 1992. The consultation period was completed at the end of July 1992. The LSE continues to work on the fine details of funding the Taurus Compensation Scheme, which is intended to provide a compensation fund of £100 million per annum. In cases where the participant is unable to make good on a loss, the fund will protect the investor against loss from fraud or error in the exercise of statutory Taurus functions up to a limit of £250,000 per investor per claim.

### C. Technical Progress

Now that the structure and essential details of Taurus have been agreed upon, and the legal and regulatory framework is largely in place, the attention of the LSE as Operator and of the securities industry as potential Taurus participants has turned to the development, testing, and installation of their Taurus systems. The LSE is now developing and installing its central systems as the Taurus Operator; prospective TACs, brokers, and company registrars are installing the software and communications links which will allow them to participate in the new system. The LSE publishes monthly updates of the Taurus Industry Plan which show the extent of progress on the project across the whole industry. The LSE will begin preliminary testing with participants of message communications and record formats in September 1992. A full customer testing programme has been devised and is due to begin in January 1993. This will culminate in an industry-wide dress rehearsal for Taurus prior to the system beginning live operation.

The LSE has also made progress on implementing enhancements to the existing Talisman settlement system which are necessary for the introduction of Taurus. The Institutional Net Settlement Positive Acceptance (INS-PA) service was launched as an on-line system in February 1990. It allows same-day agreement that a trade may go forward for settlement within INS. The previous paper-based INS service, which was based on negative acceptance and gave INS participants the right to reject deals from INS any time after trade day up to and including settlement day, was withdrawn in July 1991. Under the INS-PA system, INS participants send a computer-networked message in which they positively accept all correct bargains and reject incorrect ones. This is a more sophisticated form of confirmation than negative acceptance, and it requires a faster response which is possible because INS-PA is an on-line system. Over 90 percent of institutional bargains are now settled via INS-PA. All institutions wishing to become TACs are expected to join INS-PA before Taurus is introduced. In July 1991 the LSE also withdrew the facility whereby member firms could communicate details of bargains with it by the exchange of magnetic tape. Member firms must now communicate with the LSE via a computer network called Machine Readable Input/Output (MRIO).

In February 1992 the LSE implemented its Market Settlement changes. This replaced the UK's existing domestic securities number (SEDOL) codes with standardised securities coding, ISIN codes, bringing the UK more into compliance with the second part of Recommendation 9: ISO message standards and ISIN numbering. The LSE is now firmly committed to seeing this aspect of the recommendations adopted on a global basis as a means of increasing the efficiency of cross-border settlement. The LSE sponsored the inaugural official meeting of the Association of National Numbering Agencies (ANNA), which was set up with this aim, in London in February 1992.

### D. Company Action

Companies that wish to join Taurus must first secure the passage of a resolution at their Annual General Meeting (AGM) allowing their shares and other corporate securities to be dematerialised. A number of companies have already voted to join Taurus and others are following suit. It is hoped that many companies will put resolutions to their 1992 and 1993 AGMs so that they may join once Taurus has begun live operation. The LSE is also engaged in an educational campaign aimed at informing the UK's ten million private investors about the new methods of holding and transferring shares.

## II. STATUS IN AUTUMN 1992

### A. The Context for Taurus

One of the services Taurus will provide is that of a "depository" for UK equities and other quoted corporate securities. The UK already has a central securities depository (CSD) for each of the other major types of instrument: the Central Gilts Office (CGO) and the Central Moneymarkets Office (CMO) are the CSDs for UK Government stock ("gilt-edged stock" or "gilts") and for sterling money market bearer instruments respectively. The UK also has a central clearing system, the London Clearing House (LCH), for futures and options contracts traded on the four main London derivatives exchanges.

CGO was set up jointly by the Bank of England and the LSE in the context of the 1986 reforms of the gilts market and is operated by the Bank. It currently holds 80 percent of gilts by value in dematerialised form; the remaining 20 percent of gilts in issue are in paper form and generally held by individuals. CGO provides a book entry transfer system, rolling settlement usually on a one-day cycle (T+1), and a form of delivery versus payment called the "assured payments arrangement." This arrangement ensures that gilts are delivered only against an unconditional guarantee of same day funds from a major settlement bank acting, on a contractual basis, for the buyer.

The Bank of England introduced CMO in 1990 to facilitate the same day settlement of transactions in immobilised sterling money market bearer instruments by book entry transfer. CMO currently accepts a wide range of such instruments: Treasury and local authority bills, bank bills, trade bills, bank and building society certificates of deposit, and commercial paper. The payments arrangements for CMO provide same-day funds but, because of certain features of the market such as the availability and quality of collateral, also provide for payments to be unwound in exceptional circumstances.

LCH, the futures and options clearing house, is a subsidiary of the International Commodities Clearing House (ICCH) which is owned by six of the UK's largest clearing banks. It clears derivatives contracts traded on the London International Financial Futures and Options Exchange, the London Futures and Options Exchange (soft commodities), the London Metal Exchange, and the International Petroleum Exchange. By a process of contract novation, LCH becomes the central counterparty to, and guarantor of the performance of, all contracts registered with it by its clearing members. This guarantee extends through to the delivery of contracts which run to maturity. In operating a central counterparty clearing system, LCH is unlike the clearing systems for cash instruments in the UK.

### B. The Status of the G30 Recommendations in UK Equity Settlement in Autumn 1992

Until Taurus is introduced, UK equities will continue to be settled by the LSE's existing Talisman settlement system which has served the UK market since 1979. UK equity settlement nevertheless already benefits from a number of enhancements which are designed to pave the way for the introduction of Taurus and, therefore, for the implementation of most of the G30's recommendations.

#### Recommendation 1: Trade comparison by T + 1 for direct market participants

Already achieved. Trade confirmation and matching of trades for direct market participants are carried out through the LSE's Checking system, which has been in place since 1974. Checking is an overnight batch processing system in which participants input bargain details at the end of trade day and receive next-day (T+1) confirmation that the two sides of the trade have matched. Approximately 95 percent of bargains are presently matched by T+1. Checking also acts as a transaction-reporting mechanism from brokers to the regulatory authorities. Following the introduction of Taurus, the LSE



will develop a Rapid Trade Agreement (RTA) service which will provide same day trade matching and comparison.

**Recommendation 2: Trade comparison for indirect market participants**

Already achieved. Those institutions that are members of the Institutional Net Settlement (INS) service, covering 90 percent of all institutional equity transactions, have enjoyed positive affirmation since 1990. This service will be further enhanced by the RTA service.

**Recommendation 3: Central securities depository**

Partially achieved. Investors in the UK hold their stock in certificated form. Since 1979, however, Talisman has provided a dematerialised depository, called SEPON, for listed corporate securities held by market principals. This means that trades between market principals, which account for approximately 25 percent of the value of market turnover, can be settled by book entry transfer. Taurus will provide the UK with a CSD for a broad range of market participants.

**Recommendation 4: Netting**

Payments to and from the LSE, which acts as an intermediary in the settlement process, are netted for operational purposes. On similar operational grounds, institutional investors, who may have dealt through a number of brokers, are permitted to settle all their trades by making a single netted payment to the LSE. It has not been considered appropriate for the UK market to settle stock movements on a net basis. Settle-as-dealt (trade-for-trade) will continue to be the basis on which Taurus will operate.

**Recommendation 5: Delivery versus payment**

The UK cannot presently claim to have DVP in the sense of guaranteed settlement, although in Talisman stock and money both move on the same day and payment is in cleared funds. A DVP facility, in the form of an "assured payments system" guaranteeing settlement, will be introduced in the latter half of 1994 when Taurus is firmly established.

**Recommendation 6: Same day funds**

Already achieved. Since 1979 payments to and from the LSE in respect of settlement have been in same day funds. Today, payments may be made through CHAPS, an electronic inter-bank payment system, or by inter-branch transfers. Both methods utilise same day funds.

**Recommendation 7: Rolling settlement on T + 3**

This recommendation has not yet been met. For equities Talisman operates on what is normally a two-week account settlement cycle. Bargains struck during the ten-day account are all settled on a single day, which is typically the sixth business day after the end of the account, that is, a minimum of six (T+6) and a maximum of fifteen (T+15) business days after the date of the trade. However, Talisman is capable of settling on every business day, and the minority of "failed" settlements can take place as soon as stock is available after the due settlement day. For corporate loan stocks, Talisman operates on a T+5 rolling settlement cycle. The LSE plans to introduce T+10 rolling settlement approximately nine months after the introduction of Taurus. After a further six months it expects to move to T+3.

### **Recommendation 8: Securities lending and borrowing**

Already achieved. Stock lending is encouraged in the UK as a means of increasing market liquidity. The lending and borrowing of UK equities, which started in the middle 1960s, must take place through authorised money brokers who act as intermediary ("matching") principals between lenders and borrowers of stock. Institutions that wish to become stock lenders must first have obtained approval from the UK tax authorities who need to ensure, inter alia, that the tax due on manufactured dividends paid to the lender will be properly accounted for. In the cash market, borrowing of UK equities is restricted to registered market makers as one of the privileges allowed to them in return for operating a continuous market. Brokers, therefore, are not permitted to borrow stock to short the market or to cover a client's settlement fail, nor are clients able to borrow. At the London International Financial Futures and Options Exchange, borrowing is restricted to equity option market makers and to other exchange members undertaking specified transactions for their own accounts which contribute to the liquidity of the market. Taurus, in its initial implementation, has been designed to replicate the existing stock borrowing and lending arrangements, although the move to a short rolling settlement cycle will mean that procedures will need to be in place to speed up the settlement of stock loans. A market-wide committee, the Stock Borrowing and Lending Committee, has been set up to try to identify and remove unnecessary constraints on the activity in both the domestic and international markets. Significant progress has been made.

### **Recommendation 9: ISO message standards and ISIN numbering**

ISIN already achieved. ISIN codes were adopted as standard in the UK settlement systems in February 1992.

ISO standards for the transmission of settlement transactions internationally (MT500 series) will be introduced in the first half of 1993 with the LSE's active participation in the SWIFT network on behalf of its participants.

## **III. DEVELOPMENTS AFTER 1992**

### **A. Implementing G30 Recommendations**

Taurus will bring equity settlement in the UK into line with Recommendation 3: central securities depository. It will dematerialise UK equities and other quoted corporate securities, which means that the share certificates of companies admitted to Taurus will cease to be valid as evidence of holdings and will be replaced by records of entitlement held in dematerialised form. The transfer of securities in Taurus will be by book entry transfer, and a wide range of participants will have direct access to the settlement system as recommended by the G30. The entry of companies' securities into the Taurus book entry transfer service will be phased in. The LSE anticipates that there will be about six stocks in Taurus at its inception in 1993 and that there will be rapid loading of companies thereafter. The LSE's target is to achieve inclusion of all quoted companies over a period of two years.

Taurus will be the basis on which the UK builds towards implementing Recommendation 7: rolling settlement on T+3. The LSE plans to replace the existing two-week account period of settlement with a rolling settlement cycle for UK equities once 60 percent of the volume of UK equity trades is settled in Taurus. The LSE expects this to occur in 1994, approximately nine months after the launch of Taurus. The introduction of rolling settlement will initially be on a ten-day cycle, since it is thought to be impracticable to move directly to a shorter settlement period. However, once 90 percent of the volume of trades is settled through Taurus, it is

planned that the standard cycle for the settlement of Taurus securities will be reduced to three days as recommended by the G30. The LSE expects this to occur six months after ten-day rolling settlement has been introduced.

The LSE recognises that the introduction of rolling settlement will constitute a significant change for the UK market and that it will have a different impact on the various sectors of the securities industry. In particular, short-cycle rolling settlement may pose problems for some non-bank participants in the retail market who may find it difficult to obtain cleared funds from their clients by settlement day in respect of agency purchases. While it is expected that consultations between the various interested parties will find a solution to this problem and that the whole market will eventually be able to move to a three-day cycle, a degree of flexibility is being built into the introduction of rolling settlement to take account of the particular needs of part of the retail sector. It is also recognised that some participants may be prepared for, and may wish to move to, a three-day cycle at an earlier stage than is envisaged for the market as a whole. Therefore, while the LSE proposes that the initial standard for rolling settlement be ten days, Taurus may be able to offer three-day settlement to those participants who require it. Similarly, when the standard cycle is reduced to three days, the LSE expects to have a settlement system permitting any settlement cycle, longer or shorter than the three-day standard.

The LSE's Checking and INS-PA systems largely satisfy Recommendation 1: trade comparison by T+1 for direct market participants and Recommendation 2: Trade comparison for indirect market participants. Checking provides a next-day confirmation service, as the G30 recommends. While this is compatible with both the continuation of the present account settlement arrangements in Taurus and the subsequent introduction of ten-day rolling settlement, it is thought that same-day confirmation will be necessary to facilitate the move to a cycle of three days or less. The LSE therefore plans to introduce a Rapid Trade Agreement (RTA) system prior to the move to three-day rolling settlement. The RTA system will incorporate certain functions of Checking and will be based on SEQUAL (the LSE's real-time agreement service for equities). The introduction of the RTA system is also intrinsically a worthy aim. It will shorten the period of uncertainty about whether a trade has been agreed and reduce the consequent price risk should it need to be replaced.

The RTA system will also incorporate the requirements for same day trade comparison with the market by institutions. As a next step towards an integrated RTA system, the LSE is offering an enhanced version of its SEQUAL system to institutions in autumn 1992. This early upgrade has been offered in response to a statement of requirements from a user group of brokers and investing institutions. Similar proposals have been made by ISMA's Trax and Thomsons' OASYS systems. SEQUAL will provide links to each of these alternative matching systems.

At the same time that it introduces rolling settlement for Taurus stocks in 1994, the LSE plans to introduce a DVP facility into Taurus that will satisfy Recommendation 5: delivery versus payment. In Talisman, stock and money both move on the same day, and payment is in cleared funds. The Taurus DVP mechanism will add certainty to the exchange process by ensuring that, on settlement day, entitlement to stock can be transferred only against guaranteed payment in same-day funds, and vice versa.

The Taurus DVP mechanism will be an assured payment system that relies on settlement banks giving an assurance of payment on behalf of market participants in respect of their settlement obligations. The LSE will act as an intermediary in the process. The day before settlement, the LSE will check with the TACs whose clients have struck bargains that they are ready to receive or deliver stock as required. It will then calculate an amount, termed the "liquidity guarantee amount," separately for each direct participant's principal and agency bargains. Each participant's settlement bank will be asked to guarantee payment of this amount to the LSE in the event of the participant's default. The principal guarantee amount will simply be the net amount resulting from the participant's sales and purchases for his own account due to the LSE in the next day's settlement. However, the amount of the guarantee for transactions undertaken as agent for clients will be calculated as a percentage of gross purchases, reflecting the different procedures under English law for

resolving a default in the case of agency transactions. The percentage required will vary, depending on the concentration and liquidity characteristics of the securities purchased. The LSE will provide banks with timely and detailed information so that they can measure and manage their potential exposure to their customers.

On settlement day the LSE will seek confirmation that payment of the net settlement amount will be made by each participant's bank on his behalf. (The net settlement amount is the net of all sales and purchases with no differentiation between agency and principal bargains.) Under normal circumstances, the guarantee will not need to be called, and settlement will proceed on the basis of each participant's bank making payment on its customer's behalf. A bank may, however, choose not to make the payment if, for example, the participant were to become insolvent. In such cases, the guarantee becomes payable. The LSE will then assume the defaulter's obligations in the settlement process, drawing on the guarantee as necessary to complete purchases and sales. The stock acquired by the LSE can be resold to finance this function. The bank guarantee will provide protection against loss arising from price movements between trade date and settlement date, up to the guaranteed amount. As a result, participants in the system will be guaranteed a form of DVP and also be assured that settlement will take place as expected even if a participant fails overnight.

The implementation of the first part of Recommendation 9: ISO message standards and ISIN numbering will be achieved largely as part of the LSE's enhancements to its SEQUAL system. As a participant in SWIFT, all settlement-related messages resulting from matched trades in SEQUAL will be transmitted to settlement agents using the SWIFT message formats (ISO7775). This service will be available in 1993. What is now known as the Technical Standards Committee was established with industry-wide support to overcome the obstacles to implementation. The Committee has also become a useful forum for the facilitation of work on technical standards development in the industry more generally, for example in promoting the establishment of a new ISO work item as a standard for electronic contract notes.

## **B. Further Ahead**

The introduction of Taurus and the developments outlined above will build on the achievements of the existing Checking, SEQUAL and Talisman systems. Equity settlement in the UK will then meet the criteria of the G30 concerning book entry transfer in a central securities depository, a short rolling settlement cycle, and delivery versus payment in same day funds. The LSE expects to develop further enhancements to Taurus after it has implemented the G30 recommendations. In particular, it has plans to go beyond the current G30 recommendation of three-day rolling settlement by introducing an optional rapid settlement facility with same day settlement as the ultimate aim. This will require an upgrading of the processing capacity of Taurus which, during its initial phase, will only allow stock to be moved once each day. When Taurus is upgraded to allow increased processing within the same day it will be possible to settle market trades intra-day for further onward delivery of stock on the same day. This facility could also replace the current paper-based Short Term Collateral service with an automated book entry transfer service for the movement of collateral. These enhancements to Taurus will allow stock loans to be settled more rapidly.



## ANNEX: Bibliography of Current Taurus Literature

The following publications are produced by the LSE and are available free of charge from:

Philip Collins  
The London Stock Exchange  
Settlement Services Division (65 WS/G)  
Old Broad Street  
London EC2N 1HP

Telephone: (071) 797-4022

### Promotional Literature

Prospectus II - Settlement for the 1990s, 1991

INS code of good practice, 1991

Options in Taurus for institutional investors, 1992

Designated and undesignated institutional investors, 1992

Taurus action for companies pack, 1992

Important information for all shareholders, 1992  
(A leaflet for private investors)

### Newsletters

Taurus industry plan, 1991

Taurus bulletins, ongoing

Taurus briefings, 1992





DIVISION OF  
MARKET REGULATION

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

R E C U

04 MAI 1993

April 29, 1993

O I C V

Paul Guy  
Secretary General  
International Organization of Securities Commissions  
C.P. 171, Tour de la Bourse - 800  
square Victoria  
45 étage  
Montréal (Quebec)  
H4Z 1C8 Canada

Re: Implementation of the Group of Thirty Recommendations  
in the United States

Dear Mr. Guy:

Thank you for your letter, dated March 1, 1993, concerning the status of the Group of Thirty ("G-30") recommendations in the United States ("U.S."). I am pleased to respond to your inquiry and apologize for any inconvenience our delay may have caused.

We have reviewed the information collected by the Secretariat and can validate that the evaluation made in the summary table on the present state of implementation of the G-30 clearance and settlement recommendations remains accurate. Obviously, the recommendations with which the U.S. is not in compliance, i.e., settlement on the third business day after the trade date ("T+3") and settlement in same-day funds, will not be implemented by the target dates set forth by G-30. As discussed below, however, the U.S. has made notable progress toward implementing the recommendations.

The U.S. Securities and Exchange Commission ("Commission") recently issued a proposed rule that would require settlement of broker-dealer transactions by T+3, effective January 1, 1996.<sup>1</sup> The proposed rule, if adopted, will implement the G-30 recommendation as well as the primary recommendation of the Bachmann Task Force, which, as you know, was formed in 1991 as a follow-up to the work of the U.S. Working Committee.

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<sup>1</sup> Among other things, the Commission requested comment on whether the proposed rule could be implemented by January or July of 1995. The comment period closes on June 30, 1993.

Mr. Paul Guy  
Secretary General  
Page 2

We agree that significant risk reduction benefits can be gained from shortening the settlement cycle. Nevertheless, recognizing that broker-dealers may need to make operational and procedural changes to settle transactions in a shorter timeframe, we proposed a deferred effective date to allow affected parties to make the necessary operational and procedural changes in the most efficient way. If the comments indicate that the necessary changes can be accomplished in an earlier timeframe, we will reconsider the proposed effective date.

Significant progress also has been made on the related issue of same-day funds settlement. In consultation with Commission staff, The Depository Trust Company ("DTC") and the National Securities Clearing Corporation ("NSCC") have designed a same-day funds system that has been presented to their participants for comment. DTC and NSCC expect to release their response to industry comments in April 1993.

We will continue to encourage implementation of these important initiatives. If I can be of further assistance, please do not hesitate to contact me or Jonathan Kallman, Associate Director, at 202/272-2866 and 202/272-2874, respectively.

Sincerely,



Brandon Becker  
Deputy Director

Enclosures:

1. Notice of Proposed Rulemaking and Request for Comments concerning Securities Transactions Settlement
2. Comparative Summary Table



SECURITIES AND EXCHANGE COMMISSION

17 CFR Part 240

[Release Nos. 33-6976; 34-31904; IC-19282; File No. S7-5-93]

RIN: 3235-AF85

SECURITIES TRANSACTIONS SETTLEMENT

AGENCY: Securities and Exchange Commission

ACTION: Notice of Proposed Rulemaking and Request for Comments

SUMMARY: The Securities and Exchange Commission is publishing notice of its intention to adopt a new rule under the Securities Exchange Act of 1934 that would establish three business days, instead of five business days, as the standard settlement timeframe for broker-dealer transactions. The proposed rule is designed to reduce the risk to clearing corporations, their members, and public investors inherent in settling securities transactions by reducing the total number of unsettled trades at any given time. The rule also will facilitate additional risk reduction procedures by achieving closer conformity between the government securities and derivatives markets and the markets for other securities. The Commission is proposing an effective date of January 1, 1996, in order to allow market participants time to implement the necessary changes to allow three-business-day settlement in an efficient manner. The Commission requests comments on the proposed rule and, in particular, the costs associated with such a rule and whether the proposed implementation timetable should be adopted or modified.

DATES: Comments should be received on or before June 30, 1993.

ADDRESSES: Interested parties should submit three copies of

comment letters to Jonathan G. Katz, Secretary, Securities and Exchange Commission ("Commission"), 450 Fifth Street, N.W., Mail Stop 6-1, Washington, D.C. 20549. Comments should refer to File No. S7-5-93. The Commission will make all comments available for public inspection and copying at its Public Reference Section, 450 Fifth Street, N.W., Washington, D.C. 20549.

FOR FURTHER INFORMATION CONTACT: Sonia G. Burnett, Attorney, Office of Securities Processing Regulation, Branch of Transfer Agent Regulation, at 202/272-2855, or Richard C. Strasser, Attorney, Office of Securities Processing Regulation, Branch of Clearing Agency Regulation, at 202/272-2415, Division of Market Regulation, Commission, 450 Fifth Street, N.W., Mail Stop 5-1, Washington, D.C. 20549.

SUPPLEMENTARY INFORMATION: The market crash of October 1987 highlighted both the strengths and weaknesses in the U.S. clearance and settlement system ("system"). On the one hand, the system survived great stress without a material failure. On the other hand, the stress within the system showed the need for improvements. Since that time, the Commission, other federal regulators and industry organizations have spent considerable time studying clearance and settlement reform.<sup>1</sup> Numerous

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<sup>1</sup> See e.g., Division of Market Regulation, The October 1987 Market Break (February 1988) ("Market Break Report"); Working Group on Financial Markets, Interim Report to the President of the United States (May 1988) (Appendix D) (the Working Group is chaired by the Secretary of the Treasury and its members include the Chairmen of the SEC, the Commodity Futures Trading Commission, and the Board of Governors of the Federal Reserve System); Presidential Task  
(continued...)

studies, culminating in the Bachmann Task Force Report, have recommended, among other things, shortening the settlement cycle in order to increase the safety and soundness of the system.<sup>2</sup>

Today the Commission proposes for comment Rule 15c6-1<sup>3</sup> under the Securities Exchange Act of 1934 ("Exchange Act")<sup>4</sup> that, if adopted, would establish three business days ("T+3"), instead of five business days ("T+5"), as the standard settlement timeframe for broker-dealer trades.

The Commission believes that significant risk reduction benefits can be gained from shortening the settlement cycle. The Commission, nevertheless, recognizes that broker-dealers may need to make operational and procedural changes to settle transactions in a shorter timeframe. The Commission therefore proposes a deferred effective date and invites comment on the cost of implementing such a rule and whether the proposed timetable for implementation should be adopted or modified.

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<sup>1</sup> (...continued)

Force on Market Mechanisms, Report to the President of the United States (January 1988) (the so-called "Brady Report"); and General Accounting Office, Preliminary Observations on the October 1987 Crash (January 1988).

<sup>2</sup> Group of Thirty, Clearance and Settlement Systems in the World's Securities Markets (March 1989) ("Group of Thirty Report"); U.S. Working Committee, Group of Thirty Clearance and Settlement Project, Implementing the Group of Thirty Recommendations in the United States (November 1990); and the Bachmann Task Force on Clearance and Settlement Reform in U.S. Securities Markets, Report Submitted to the Chairman of the U.S. Securities and Exchange Commission (May 1992) ("Bachmann Task Force Report").

<sup>3</sup> 17 CFR 240.15c6-1.

<sup>4</sup> 15 U.S.C. § 78s(b)(1).

## I. Background

Although the U.S. clearance and settlement system<sup>5</sup> is one of the safest in the world, recent events have demonstrated that the system can be improved. The Market Breaks of October 1987 and October 1989 and the events surrounding the demise of Drexel Burnham Lambert Group, the holding company parent of Drexel Burnham Lambert, Inc. ("Drexel"), demonstrated that vulnerabilities exist in the clearance and settlement system.

Record volume and volatility during October 1987 proved detrimental to broker-dealers who were unable to resolve processing errors before settlement with their customers on T+5. Moreover, the steep decline in stock prices during that period, as well as the decline on October 16, 1989, left some broker-dealers vulnerable to loss from the positions of customers who were unable or unwilling to meet either margin calls or transaction settlement requirements. This in turn called into question the ability of those broker-dealers to meet their obligations to the clearing corporations. Indeed, turbulent

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<sup>5</sup> The term "clearance" includes the comparison of data regarding the terms of settlement of securities transactions and the allocation of securities settlement responsibilities. After trade comparison, most trades clear through a continuous net settlement system ("CNS") operated by a clearing corporation registered with the Commission under Section 17A of the Exchange Act. Under CNS, the clearing corporation nets each clearing member's purchases and sales to arrive at a daily net receive or deliver obligation for each security and a daily net settlement payment obligation. The term "settlement" includes the delivery of securities in exchange for funds, pursuant to the terms of the original transaction, and the custody of securities. See § 3(a)(23)(A) of the Exchange Act, 15 U.S.C. § 78c(a)(23)(A).



market conditions in 1987 contributed to the demise of three clearing member firms, Metropolitan Securities, H.B. Shaine & Co., and American Investors Group. Clearing firms stand between the clearing corporation, on the one side, and market professionals, introducing firms, and public investors on the other.

Financial difficulties were not limited to clearing firms, however. During and after the week of October 19, 1987, more than 50 introducing firms failed, many as a result of the inability of their customers to meet margin calls and pay settlement obligations.<sup>6</sup> Further, because the markets are interwoven through common members, default at one clearing corporation could have triggered additional failures, resulting in risk to the entire system.

After the October 1987 Market Break, several groups sought to identify causes of the market decline and changes that could be made to shield market participants from the impact of sudden steep declines in the market.<sup>7</sup> All these studies identified

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<sup>6</sup> See Market Break Report, Chapter 10 at 20-21. Many customers, institutional and otherwise, open their accounts with an introducing broker. Introducing brokers use executing brokers (which are usually members of a clearing agency) to execute and clear customer trades. If the customer fails to meet margin calls made by the executing firm or fails to pay on T+5 the settlement amount for securities it has purchased, the introducing or executing broker must pay that debt. If the amount exceeds the introducing broker's ability to pay and it fails, the clearing member executing firm will be responsible for the customer's debt.

<sup>7</sup> See note 1 supra.

clearance and settlement as an area which needed further attention.<sup>8</sup> As noted by Alan Greenspan, Chairman of the Federal Reserve Board, "The importance of strong clearing and settlement systems cannot be overemphasized. This area was identified by the Brady Commission<sup>9</sup> and others after the market break last year as a potential point of vulnerability in the U.S. financial system. The overloading of the . . . clearing systems last October induced breakdowns that dramatically increased uncertainty among investors and likely contributed to additional downward pressures on prices."<sup>10</sup>

At the same time, in March 1988, the Group of Thirty<sup>11</sup> organized a symposium in London to discuss the state of clearance and settlement in the world's principal securities markets. The symposium participants concluded that there was a need for international agreement on a uniform set of practices and

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<sup>8</sup> Since 1987, considerable progress has been made toward increasing clearing corporations' capabilities to handle large volumes of trades and manage financial risk. Examples include increases in the number of cross-margining facilities sponsored by The Options Clearing Corporation and commodity clearing organizations, expansion of the depository system to include new financial products such as commercial paper, and development of extensive lines of communication between banking, securities, and commodities organizations.

<sup>9</sup> See Brady Report, note 1 *supra*.

<sup>10</sup> See Remarks by Alan Greenspan before the Annual Convention of the Securities Industry Association (November 30, 1988).

<sup>11</sup> The Group of Thirty, established in 1978, is an independent, non-partisan, non-profit organization composed of international financial leaders whose focus is on international economic and financial issues.

standards for the clearance and settlement of securities transactions in order to improve the process. In light of this conclusion, the Group of Thirty organized a Steering Committee to work with a professional and broad-based Working Committee in order to produce a set of operational proposals for practices and standards in the area of clearance and settlement. The Working Committee was composed of clearance and settlement professionals from different countries.

In March 1989, the Group of Thirty issued a report by the Steering Committee setting forth nine recommendations ("Group of Thirty recommendations"),<sup>12</sup> including implementation of T+3 settlement, to modernize and improve clearance and settlement systems at a local level and to make them compatible with each other. These recommendations were:

- by 1990, trade comparison between direct market participants should occur by the day following the date of trade execution;
- by 1992, indirect market participants should be members of a trade comparison system which achieves positive affirmation of trade details;
- by 1992, each country should have an effective and fully developed central securities depository;
- by 1992, if appropriate, each country should implement a netting system;
- by 1992, a delivery versus payment system should be

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<sup>12</sup> See Group of Thirty Report, note 2 supra.

employed as the method for settling all securities transactions;

- countries should adopt a same-day funds payment method for settlement of securities transactions;
- a rolling settlement system should be adopted by all markets as follows: (a) by 1990, final settlement should occur on the fifth day after the date of trade execution, (b) by 1992, final settlement should occur on the third day after the date of execution;
- securities lending and borrowing should be encouraged as a method of expediting the settlement of securities transactions; and
- by 1992, each country should adopt the standards for securities numbering and messages developed by the International Standards Organization.

Following the release of the Group of Thirty Report, several countries initiated separate efforts to study how their clearance and settlement systems compared with the Group of Thirty recommendations. In the U.S., a Working Group was created for this purpose. The U.S. Working Group concluded that, while the U.S. was in compliance with seven of the Group of Thirty recommendations, continued consideration should be given to the implementation of the two remaining recommendations, T+3 settlement and settlement in same-day funds.<sup>13</sup>

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<sup>13</sup> "Same-day funds" refers to payment in funds that are available on payment date and generally are transferred by electronic means.



Two subcommittees, the U.S. Steering Committee and a U.S. Working Committee of the Group of Thirty ("the U.S. committees") were formed to evaluate the benefits of shortening the settlement cycle and converting to the use of same-day funds. The U.S. committees urged adoption of the two recommendations and, in order to support a move to T+3 settlement, also recommended that: (1) book-entry settlement be mandatory for transactions between financial intermediaries and between financial intermediaries and their institutional customers; and (2) all new securities issues should be made eligible for depository services.

In November 1990, the Commission held a Roundtable to discuss the recommendations of the U.S. committees. Roundtable participants generally agreed that the two recommendations should be adopted, but urged that the timetables for implementation be sufficiently flexible so that obstacles to implementation could be fully explored and practical solutions found and implemented. Roundtable participants expressed concern that broker-dealers conducting a predominantly retail business might have difficulty operating in a three-business-day settlement timeframe in the national clearance and settlement system because of the need, among other things, to obtain payment from retail clients for purchase transactions.

Subsequently, Chairman Breeden asked the U.S. Steering Committee to form a task force to evaluate independently whether and what changes to the clearance and settlement system should be pursued, and to determine a timetable for implementation of the

changes.<sup>14</sup> An industry task force, headed by John W. Bachmann ("Bachmann Task Force" or "Task Force") took up that challenge.<sup>15</sup>

In May 1992, the Bachmann Task Force presented its findings and recommendations to the Commission. Among other things, the Task Force concluded that "time equals risk"<sup>16</sup> and that the settlement cycle for corporate and municipal securities should be compressed to T+3. The Task Force recommended that this be accomplished by July 1994.<sup>17</sup> On June 22, 1992, the Commission

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<sup>14</sup> Letter from Richard C. Breeden, Chairman, Commission, to Lewis W. Bernard, Chairman, U.S. Steering Committee, Group of Thirty, dated July 11, 1991.

<sup>15</sup> John W. Bachmann is the Managing Principal of Edward D. Jones & Co. of St. Louis, Missouri. In addition to Mr. Bachmann, the members of the Bachmann Task Force included: David M. Kelly, President and Chief Executive Officer, National Securities Clearing Corporation ("NSCC"); Richard G. Ketchum, Executive Vice President and Chief Operating Officer, National Association of Securities Dealers ("NASD"); John F. Lee, President, New York Clearing House; Gerard P. Lynch, Managing Director, Morgan Stanley and Company Inc.; James J. Mitchell, Senior Executive Vice President, Northern Trust Company; Richard J. Stream, Managing Director, Piper Jaffray and Hopwood and Company; and Arthur L. Thomas, Senior Vice President, Merrill Lynch and Co., Inc.

<sup>16</sup> See Bachmann Task Force Report for a discussion of the Task Force risk analysis.

<sup>17</sup> The Task Force made eight other recommendations that would facilitate settling securities transactions on T+3: revising the Automated Clearing House System; requiring an interactive institutional delivery process; settling all transactions among financial intermediaries and their institutional customers in book-entry form only and in same-day funds; depository eligibility for new issues; monitoring flipping (i.e., the sale of stock back to the underwriting syndicate during the new issue stabilization period); expanding cross margining; streamlining the handling of physical certificates; and monitoring all market activity.

published the Task Force Report in the Federal Register for public comment.<sup>18</sup>

The Task Force recommendations generated substantial comment. The Commission received 1,000 comment letters from banks, broker-dealers, investment advisors, trade associations, clearing agencies, exchanges, transfer agents, and individual investors. Although many of these commentators expressed concern about the potential loss of access to physical certificates,<sup>19</sup> in large part they were supportive. Some of the commentators raised concerns about the specifics of implementation and about progress on industry initiatives that would facilitate a move to T+3 settlement. Indeed, the Commission considered these comments in formulating this proposal. Many of the issues noted by the commentators were identified by the Task Force and, as discussed in more detail below, efforts to address them are nearing completion.<sup>20</sup>

## II. T+3 Settlement: Need for the Proposed Rule

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<sup>18</sup> See Securities Exchange Act Release No. 30802 (June 15, 1992), 57 FR 27812.

<sup>19</sup> Over 800 of the comment letters were from individual investors responding to the recommendation to streamline the handling of physical certificates. The letters indicate a belief that the Task Force recommendation to streamline the handling of physical certificates would result in the elimination of physical certificates and force investors to hold securities in street name. The Task Force did not propose eliminating physical certificates for those retail investors who choose to maintain their record of ownership in that form.

<sup>20</sup> The Commission will consider comments filed in response to publication of the Bachmann Task Force Report, note 2 supra, in connection with this proposal.

In the U.S., the settlement cycle varies among markets. Settlement in the futures, options, and government securities markets occurs on the day after trade date ("T+1") using same-day funds. Settlement of most trades in corporate and municipal securities, on the other hand, takes place on the fifth business day after the trade date ("T+5") with money payments among financial intermediaries made in next-day funds<sup>21</sup> through the exchange of certified checks between clearing corporations and their participants (thus, financial intermediaries have good funds on "T+6").

Settlement of securities transactions on T+5 is largely a function of market custom and industry practice.<sup>22</sup> There is no federal rule that mandates a specific settlement cycle for securities.<sup>23</sup> Self-regulatory organization ("SRO") rules,

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<sup>21</sup> The term "next-day funds" refers to payment by means of certified checks passing between the clearing corporation and its members.

<sup>22</sup> Indeed, prior to 1968, equity transactions in the U.S. were settled on the fourth day after the trade date ("T+4"), without causing undue harm to retail customers. Remarks of Commissioner Mary L. Schapiro before the Securities Industry Association Regional Conference (March 20, 1991).

<sup>23</sup> Regulation T imposes, among other things, initial margin requirements and payment rules on securities transactions. Specifically, Regulation T requires a margin call to be satisfied within seven business days after the margin deficiency was created or increased, and requires a broker or dealer to obtain full cash payment for customer purchases within seven business days of the date of the transaction. Regulation T is issued by the Board of Governors of the Federal Reserve System pursuant to the Exchange Act and its principal purpose is to regulate extensions of credit by and to brokers and dealers. See 15 U.S.C. § 78a et seq., Part 220. In addition, Section 22(e) of the Investment Company  
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however, define "regular way" settlement as settlement on T+5.<sup>24</sup>

In today's market environment, the value of securities positions can change suddenly and drastically causing a market participant to default on unsettled positions. Clearing corporations function as, among other things, post-trade processing facilities and guarantors of post-trade settlements.<sup>25</sup> To protect against the credit risk<sup>26</sup> and market risk<sup>27</sup> presented by unsettled positions, clearing corporations obtain contributions from their members to a pool of funds designed to provide a ready source of liquidity in case of a member

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<sup>23</sup> (...continued)

Act of 1940 provides that no registered investment company shall suspend the right of redemption, or postpone the date of payment or satisfaction upon redemption of any redeemable security for more than seven days after tender of the security to the company, except under specified circumstances.

<sup>24</sup> See e.g., National Association of Securities Dealers, Inc. Uniform Practice Code ¶ 3512, § 12 and New York Stock Exchange Rule 64. If Rule 15c6-1 is adopted, SROs will conform their rules to the timeframe established in Rule 15c6-1.

<sup>25</sup> Upon reporting matched trade information to its members, the clearing corporation becomes the counterparty to every trade and guarantees payment and delivery. See Securities Exchange Act Release No. 20221 (September 23, 1983), 48 FR 45167 ("Full Registration Order").

<sup>26</sup> "Credit risk" is the risk that the credit quality of one party to a transaction will deteriorate to the extent that it is unable to fulfill its obligations on settlement date. See Securities Exchange Act Release No. 30986 (July 31, 1992), 57 FR 35856.

<sup>27</sup> "Market risk" is the risk that the value of securities bought or sold will change between trade execution and settlement so that the purchase or sale will result in a financial loss.

default.<sup>28</sup> Any sizable loss in liquidating the open commitments of a defaulting member, however, would be assessed pro rata against all clearing members.<sup>29</sup>

The Bachmann Task Force Report argues persuasively that a shorter settlement period will reduce market risk to a clearing corporation, and thus to all members of the clearing corporation and to the market as a whole. The Task Force collected data indicating that moving settlement from T+5 to T+3 reduced the risk to National Securities Clearing Corporation ("NSCC")<sup>30</sup> by 58% in the event of the failure of an average large member during normal market conditions. Based on this quantitative risk assessment, the Task Force concluded that reducing the time between trade execution and settlement would reduce risk in the system and that the U.S. securities markets can be made safer by shortening the settlement cycle to T+3.

In view of this analysis and for the reasons set out below,

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<sup>28</sup> See Securities Exchange Act Release Nos. 16900 (June 17, 1980), 45 FR 4192 (announcing the Division of Market Regulation's standards for the registration of clearing agencies); 20221 (September 23, 1983), 48 FR 45167 ("Full Registration Order"); and 30879 (July 1, 1992), 57 FR 30279 (order approving modifications to the CNS portions of the National Securities Clearing Corporation ("NSCC"), Midwest Clearing Corporation, and Securities Clearing Corporation of Philadelphia clearing fund formulas).

<sup>29</sup> See, e.g., NSCC Rule 4. See also, Market Break Report, Chapter 10.

<sup>30</sup> NSCC is one of the largest U.S. clearing corporations and is registered as a clearing agency under Section 17A of the Act. NSCC has 350 netting members. As of April 30, 1992, total required deposits to NSCC's clearing fund were \$368 million. Because members do not always withdraw excess funds, NSCC had on deposit \$502 million.

the Commission believes that T+3 settlement represents an important and feasible near-term goal. First, at any given point in time, fewer unsettled trades will be subject to credit and market risk, and there will be less time between trade execution and settlement for the value of those trades to deteriorate.<sup>31</sup> Second, the proposed rule will reduce the liquidity risk among the derivative and cash markets and reduce financing costs by allowing investors that participate in both markets to obtain the proceeds of securities transactions sooner. Finally, a shorter settlement timeframe could encourage greater efficiency in clearing agency and broker-dealer operations.

### III. Description of Proposed Rule 15c6-1

Proposed Rule 15c6-1 would provide that, unless otherwise expressly agreed by the parties at the time of the transaction, a broker or dealer is prohibited from entering into a contract for the purchase or sale of a security (other than an exempted security, government security,<sup>32</sup> municipal security, commercial

<sup>31</sup> As noted by Commissioner Mary L. Schapiro, "A shorter settlement time period will reduce the number of outstanding trades, thereby reducing the counterparty risk and market exposure associated with unsettled securities transactions." See Remarks of Mary L. Schapiro to The Group of Thirty U.S. Steering Committee (March 1, 1990); See also Remarks of Mary L. Schapiro before the Securities Industry Association's Annual Operations Conference (May 17, 1990).

<sup>32</sup> The Commission notes that issuers (or guarantors) of mortgage-backed securities include government agencies or government sponsored enterprises ("GSEs") such as the Government National Mortgage Association, the Federal National Mortgage Association, and the Federal Home Loan Mortgage Corporation, as well as private entities. Mortgage-backed securities include pass-through

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paper, bankers' acceptances, or commercial bills)<sup>33</sup> that provides

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<sup>32</sup>(...continued)

certificates, representing an undivided interest in a pool of mortgages, and collateralized mortgage obligations ("CMOs"), representing an interest in part of the cash flow generated by a pool of mortgages or collection of pass-through certificates.

Mortgage-backed securities issued or guaranteed by U.S. government agencies or GSEs generally fall within the definition of government security in Section 3(a)(42) of the Exchange Act and would be treated as such under proposed Rule 15c6-1. Transactions in mortgage-backed securities issued by others (e.g., CMOs) would fall within the scope of proposed Rule 15c6-1. Accordingly, the Commission invites comment on whether inclusion in a T+3 settlement timeframe would create difficulties for issuers or investors in the mortgage-backed securities market. The Commission also invites commentators to address whether additional safeguards related to clearance and settlement of mortgage-backed securities, particularly mortgage-backed securities that qualify as government securities, would be appropriate or desirable to address concerns identified during the 1989 demise of Drexel. See Testimony of Richard C. Breeden, Chairman, U.S. Securities and Exchange Commission, before the Committee on Banking, Housing, and Urban Affairs, United States Senate, Concerning the Bankruptcy of Drexel Burnham Lambert Group, Inc. (March 2, 1990). (Delivery and payment practices for mortgage-backed securities transactions led to gridlock during the demise of a holding company of a registered broker-dealer.)

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As noted above, because exchange-traded options routinely settle on T+1, transactions in such securities should be essentially unchanged. Transactions in corporate debt and equity, as well as limited partnership interests and securities issued by investment companies, would be covered by the rule. The Commission invites comment on whether the scope of the rule is appropriate and whether any particular characteristics of different types of securities (e.g., mutual fund shares and limited partnership interests) will create difficulties for broker-dealers and investors if included in or excluded from the rule. For example, the Commission notes that mutual funds often permit investors to purchase shares by telephone. In that context, it may be necessary for mutual funds and broker-dealers to implement operational changes to confirm the sale to the investor, to receive the proceeds and settle the transaction, all within T+3.



for payment of funds and delivery of securities later than the third business day after the date of the contract. The proposed rule would allow a broker or dealer to agree that settlement will take place in more or less than three business days. The agreement, however, must be express and reached at the time of the transaction.<sup>34</sup>

Most broker-dealers do not specify all of the terms of a trade before execution, but rely on industry custom and SRO rules for those terms. The Commission does not intend to change industry custom to require broker-dealers to specify contract terms. Accordingly, if adopted, Rule 15c6-1 is designed to establish T+3 as a new "default" contract term.<sup>35</sup>

Failure to meet contractual obligations to deliver by T+3 would result in a failure to settle at the clearing corporation. Open trades that fail to settle on settlement date typically are marked-to-the-market on a daily basis and carried forward to net against other open positions. Failure to settle a payment obligation to the clearing corporation generally could result in the suspension of the clearing member and the liquidation of all the clearing member's open positions.

The Commission notes that the proposed rule should not

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<sup>34</sup> Thus, the proposed rule would permit broker-dealers to enter into trades, such as seller's option trades, that typically settle as many as sixty days after execution as specified by the parties to the trade at execution. It is not intended to permit broker-dealers to specify before execution of specific trades that a group of trades will be settled in a timeframe different from Rule 15c6-1.

<sup>35</sup> See note 24 supra and accompanying text.

affect the ability of individual investors to obtain a physical certificate. Individual investors who desire to maintain record ownership in certificated form still will be able to do so.

Rule 15c6-1 would not apply to municipal securities. Differences between the corporate and municipal securities markets may justify a different timetable for including municipal securities within a T+3 settlement cycle.<sup>36</sup> Nevertheless, the Commission remains interested in how to achieve the safety and

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<sup>36</sup> The Commission recognizes that to date moving municipal securities to a T+3 settlement timeframe has not gained the same consensus as shortening the settlement cycle for publicly-traded corporate securities. The Municipal Securities Rulemaking Board ("MSRB") has noted a number of differences between the corporate and municipal securities markets that may make a move to T+3 settlement problematic. For example, while corporate issues number in the thousands, there are over a million municipal securities "maturities," each of which is a separate security for purposes of trading and clearance and settlement. Another difference involves issuers. Approximately 80,000 entities issue municipal securities. Municipal securities are not subject to provisions of the Securities Act of 1933 ("1933 Act") and are exempted from many provisions of the Exchange Act. The municipal securities industry also has not yet reached parity with the corporate securities industry with regard to the use of automated clearance systems. Automated clearance systems for municipal securities transactions depend on a nine-digit CUSIP number. "CUSIP" is an acronym for the Committee on Uniform Securities Identification Procedures. Although most outstanding municipal securities maturities have assigned CUSIP numbers, there probably are several thousand outstanding maturities that do not. Finally, trade data for municipal securities transactions is not captured on a central electronic trade execution or trade reporting system, making acceleration of the comparison cycle for municipal securities particularly difficult. The initial comparison rate for municipal securities inter-dealer trades, which require submission to NSCC on T+1, is 76% for regular-way trades and only about 45% for non-syndicate, when-issued trades. Letter from Hal Johnson, Deputy General Counsel, MSRB, to Dennis M. Earle, Executive Director, U.S. Working Committee, Group of Thirty Clearance and Settlement Project (March 18, 1991).

efficiency benefits of T+3 settlement for municipal securities. Accordingly, the Commission seeks public comment on the most appropriate way and a reasonable timeframe for bringing municipal securities within the scope of the rule.

#### IV. The Proposed Timetable for Commission Action

The Commission recognizes that certain building blocks must be in place prior to compressing the settlement cycle.<sup>37</sup> Many of those building blocks, as discussed in more detail below, currently are being addressed by the SROs. In addition, the Commission recognizes that some brokers and dealers may need to make operational and procedural changes to comply with a three-day settlement period. In view of the need for more work at the SRO level and the Commission's desire to minimize the potential

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<sup>37</sup> In recognition of the importance of broker-dealer settlement practices to the clearance and settlement process, the Securities Acts Amendments of 1975 ("1975 Amendments") provided for federal regulation of the time and method by which broker-dealers settle securities transactions. In adopting the 1975 Amendments, Congress directed the Commission to act in the national interest to achieve safety and efficiency in clearance and settlement. Section 17A of the Exchange Act directs the Commission "to facilitate the establishment of a national system for the prompt and accurate clearance and settlement of transactions in securities (other than exempt securities)." See 15 U.S.C. §§ 78o, 78q-1, and 78w. That directive was revised by the Market Reform Act of 1990 to reflect the interdependence of options, futures, and equity markets that trade products involving securities or stock indexes. As noted above, recent events underscore that safety and efficiency necessitate changes in industry practice and the Commission has an obligation to lead and direct those changes. Nevertheless, the Commission recognizes that changes in industry practice and custom such as earlier settlement timeframes must involve marketplaces, marketplace regulators, and participants in those markets acting cooperatively.

cost of complying with the proposed rule, the Commission is proposing an extended transition period to allow affected parties to implement necessary changes gradually.

Since 1987, the SROs have made significant progress on recommendations critical to achieving T+3 settlement. Specifically, the Depository Trust Company ("DTC")<sup>38</sup> is designing a system to convert from batch to interactive processing for the Institutional Delivery System.<sup>39</sup> In the current batch processing environment, participants receive the reports on T+1 with the goal of receiving affirmation on T+2. To move to T+3 settlement, the affirmation process must be completed on T+1. This can be accomplished through an interactive system whereby information is processed on receipt with reports distributed on request. DTC expects to implement the system on a voluntary basis during the third quarter of 1993.

Additionally, under the auspices of the Legal and Regulatory Subgroup ("Subgroup") of the U.S. Working Committee of the Group

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<sup>38</sup> DTC is the largest U.S. securities depository and is registered with the Commission as a clearing agency under Section 17A of the Act. DTC is a New York State limited purpose trust company and member of the Federal Reserve System. DTC has over 500 participants including broker-dealers and banks. In 1992, DTC held on deposit corporate equity and debt securities, municipal securities, and commercial paper valued at over \$5.5 trillion.

<sup>39</sup> In the Institutional Delivery System, brokers notify the depository of trades made by an investment manager on behalf of an institutional client. The investment manager and the client's custodian banks are notified of the trade and asked to affirm that the information is correct. Trades affirmed by T+3 settle automatically by book-entry at the depository on T+5.



of Thirty, the SROs have drafted a uniform rule that would require book-entry settlement among financial intermediaries. The SROs are in the process of adopting the rule and expect to submit rule changes to the Commission for consideration in the first quarter of 1993.

The Subgroup also has considered the need for a uniform SRO rule requiring depository eligibility for all new issues and, in connection with this, requested the Division of Corporation Finance to consider recommending that the Commission promulgate a new disclosure requirement under the 1933 Act for initial public offerings ("IPOs").<sup>40</sup> In brief, the Subgroup has urged that the Commission require disclosure of whether the securities being offered in an IPO are depository-eligible and if not, why not. The Subgroup also has suggested that the registration statement include, as an exhibit, a letter from a securities depository registered with the Commission as a clearing agency confirming that the securities to be offered are, or will be (by the time of the public sale or following completion of an underwritten distribution), eligible for deposit with that clearing agency.

Finally, NSCC and DTC, in consultation with Commission staff, have designed a same-day funds system which has been presented to their participants for comment. DTC has assembled a task force under the auspices of the U.S. Working Committee to

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<sup>40</sup> Letter from Richard B. Smith and Robert J. Woldow, Co-chairmen, Legal and Regulatory Subgroup, U.S. Working Committee for the Group of Thirty, to Mary E.T. Beach, Senior Associate Director, Division of Corporation Finance, dated December 17, 1992.

examine issues that were identified in the comment process, such as how and when dividends and interest will be paid in a same-day funds system (e.g., paid in same-day funds on the date of receipt or in next-day funds on payable date). The Commission recognizes the importance of these initiatives in achieving a shorter settlement cycle and expects to work diligently with the SROs to complete these objectives over the next three years.

The Commission realizes that the proposed rule could entail costs for investors, broker-dealers, banks and other market participants. Assuming the goal of earlier settlement is appropriate, however, the proposed schedule for implementation will allow broker-dealers a three-year period to make the necessary transitional changes. The Commission believes the substantial lead time will allow market participants to make the necessary changes in the most efficient way.

The Commission believes the benefits to be gained from implementing the proposed rule are important to the broker-dealer community and for the protection of investors. The Commission believes, therefore, that the cost impact for broker-dealers resulting from the shorter settlement timeframe will be significantly offset by the benefits to the national clearance and settlement system.

#### V. Solicitation of Comments

The Commission believes that adoption of this rule would reduce substantially many of the risks that exist within the current clearance and settlement system. Risk to the clearance

and settlement system will be reduced because there will be fewer unsettled trades in the system at any given point in time.

The Commission invites commentators to address the merits of the proposed rule. Specifically, the Commission invites comment on the specific costs and benefits of the proposed rule. Interested persons may comment on broker-dealer costs to develop and employ procedures to comply with the proposed rule. Interested persons may also comment on any risk reduction benefits and costs savings that may result from the proposed rule.

Interested persons are invited to comment on the desirability of applying the shorter settlement cycle to limited partnership interests, mutual funds, or municipal securities. The Commission invites comment on whether the scope of the rule is appropriate and whether any particular characteristics of securities affected by the rule will create difficulties for broker-dealers and investors if included in or excluded from the rule. In addition, interested persons are invited to comment on whether the proposed implementation date of January 1, 1996 is sufficient for broker-dealers to make the necessary operational and procedural changes in an effective manner, or whether an implementation date of January 1, 1995 or July 5, 1995 would be equally sufficient.

The Commission also solicits comment on the desirability of adopting a disclosure requirement under the 1933 Act concerning depository eligibility of IPOs. Specifically, commentators

should address whether such information would be material to investors in initial public offerings.

In addition to the specific requests for comment set forth above, the Commission requests comment on whether the proposed rule, if adopted, would have an adverse effect on competition or would impose a burden on competition that is neither necessary nor appropriate in furthering the purposes of the Exchange Act. Comments on this inquiry will be considered by the Commission in complying with its responsibilities under Section 23(a)(2) of the Exchange Act.

#### VI. Initial Regulatory Flexibility Analysis

The Commission has prepared an Initial Regulatory Flexibility Analysis ("IRFA") in accordance with 5 U.S.C. § 603 regarding proposed Rule 15c6-1. The IRFA notes the potential costs of operational and procedural changes that may be necessary to comply with the proposed rule. In addition, the IRFA notes the importance of the risk reduction that will result from a shorter settlement cycle. The Commission believes that the benefits of proposed Rule 15c6-1 would outweigh the costs incurred by broker-dealers in complying with the rule.

A copy of the IRFA may be obtained by contacting Richard C. Strasser, Attorney, Branch of Clearing Agency Regulation, Office of Securities Processing Regulation, Division of Market Regulation, Commission, 450 Fifth Street, N.W., Mail Stop 5-1, Washington, D.C. 20549.

List of Subjects in 17 CFR Part 240

Registration and regulation of brokers and dealers.

Text of the Proposed Amendment

In accordance with the foregoing, Part 240 of Chapter II of Title 17 of the Code of Federal Regulations is proposed to be amended as follows:

PART 240--GENERAL RULES AND REGULATIONS, SECURITIES EXCHANGE ACT OF 1934

1. The authority citation for Part 240 continues to read as follows:

Authority: 15 U.S.C. 77c, 77d, 77g, 77j, 77s, 77eee, 77ggg, 77nnn, 77sss, 77ttt, 78c, 78d, 78i, 78j, 78l, 78m, 78n, 78o, 78p, 78s, 78w, 78x, 78ll(d), 79g, 79t, 80a-20, 80a-23, 80a-29, 80a-37, 80b-3, 80b-4, and 80b-11, unless otherwise noted.



2. By adding §240.15c6-1 to read as follows:

**§ 240.15c6-1 Settlement Cycle**

A broker or dealer shall not effect or enter into a contract for the purchase or sale of a security (other than an exempted security, government security, municipal security, commercial paper, bankers' acceptances, or commercial bills) that provides for payment of funds and delivery of securities later than the third business day after the date of the contract unless otherwise expressly agreed to by the parties at the time of the transaction.

By the Commission.

Jonathan G. Katz  
Secretary

Dated: February 23, 1993



**Comparative Summary Table on the Present Implementation of  
G30 Recommendations on Clearance and Settlement in all  
the Countries of the Technical Committee Members**

COUNTRIES	GROUP OF THIRTY RECOMMENDATIONS ON CLEARANCE AND SETTLEMENT								
	1	2	3	4	5	6	7	8	9
Australia	Yes	No	No	Yes	No	No	No	Yes	P
Canada	Yes	Yes	Yes	Yes	P	No	No	Yes	P
France	Yes	Yes	Yes	Yes	Yes	Yes	P	P	P
Germany	Yes	No	Yes	No	Yes	Yes	Yes	Yes	P
Hong Kong	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No
Italy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Japan	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No
Netherlands (The)	Yes	No	Yes	Yes	Yes	Yes	No	Yes	U
Spain	Yes	U	U	U	U	U	No	U	U
Sweden	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	P
Switzerland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
United Kingdom	Yes	Yes	P	No	No	Yes	No	Yes	P
United States	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No

Codes:

- Yes = The G30 recommendation has been implemented.
- No = The G30 recommendation has not presently been implemented.
- P = The G30 recommendation has, at the present time, only been partially implemented.
- U = From the information provided, it is uncertain as to whether or not the G30 recommendation has presently been implemented.



# STATUS REPORT FOR THE UNITED STATES

## I. DEVELOPMENTS TO 1992

How close is the U.S. to implementing the Group of Thirty recommendations? Specifically, how close is the U.S. to a T+3 settlement period and a same day funds payment convention, the two recommendations with which the U.S. market system is not in compliance? Neither of the recommendations will be implemented in 1992, the year targeted by the Group of Thirty for implementation of most of the nine recommendations, including settlement on T+3. However, the U.S. Working Committee has identified the specific issues involved in implementing the recommendations and has made progress in addressing those issues.

### A. Overview of the U.S. Clearance and Settlement Project

The U.S. securities industry initially viewed the goal of the Group of Thirty recommendations to harmonize clearance and settlement practices among developed securities markets as worthwhile. However, complete, unquestioned acceptance of any change is rare. As the U.S. securities industry evaluated the two recommendations applicable to the U.S. in terms of existing operations, systems and business practices, and the possible changes their implementation represented, overtime the recommendations came to mean different things to industry participants.

By 1990 both the T+3 settlement and same day funds recommendations were thought by some to represent significant operational and technological changes as well as change to long-standing, well-established business practices in the U.S. corporate and municipal securities markets. Therefore, throughout 1990 and 1991, the U.S. Working Committee focused on identifying and evaluating the specific issues involved in shortening the settlement cycle and adopting a same day funds payment mechanism. Early on in this evaluation, the Working Committee recognized that the T+3 settlement recommendation provided an opportunity to accelerate the current trend toward book entry settlement and, therefore, expanded the scope of the clearance and settlement project to include recommendations for street-side book entry only settlement and depository eligibility for new issues (see the section on The Group of Thirty Recommendations in the U.S. for the specific wording of these recommendations).

The Working Committee, after extensive review of the specific issues and concerns raised by the book entry only settlement, depository eligibility, and same day funds recommendations, concluded in 1992 that all of these issues are solvable by modifying systems, changing settlement practices, and educating investors and are not impediments to implementing the recommendations.

The Working Committee's evaluation of the T+3 settlement recommendation, however, was more complicated because of the retail component of the securities markets and the potential impact this recommendation might have on that segment of the market. As a result, this recommendation was the source of considerable discussion. Some participants viewed shortening the settlement period as an opportunity for substantial benefit at a small cost while others viewed it as representing a major change to existing systems and practices requiring great sacrifice with little to gain. In light of the complex economic and operational issues affecting retail firms, the chairman of the U.S. Securities and Exchange Commission formed a small, independent task force to facilitate the discussion and evaluation of changes to the U.S. securities clearance and settlement system. Following the formation in November 1991 of the Task Force, chaired by John W. Bachmann, Managing Principal of Edward D. Jones & Co., the U.S. Working Committee suspended its evaluation of T+3 settlement pending the release of the Task Force's findings.



The U.S. Working Committee reviewed the recommendation and built its discussions around global competitiveness and efficiency. The Bachmann Task Force, whose specific charter was to evaluate the safety and soundness of the clearance and settlement system in the U.S. securities markets and to determine changes necessary to achieve a safer and more efficient system, analyzed the recommendation from a risk perspective. The Task Force's quantitative risk analysis of shortening the settlement cycle supported, from the standpoint of reducing risk, the original Group of Thirty recommendation to adopt a T+3 settlement cycle. In addition, the Task Force's review of the practicality and potential obstacles to shortening the settlement period confirmed the Working Committee's conclusion that the lack of an electronic retail payment mechanism and the existing affirmation process for institutional transactions are solvable problems rather than obstacles to moving to settlement on T+3. The Working Committee fully supports the findings of the Task Force, including its recommendation to move quickly to shorten the settlement period to T+3 in the interest of increasing the safety and soundness of the clearance and settlement system. The Task Force's findings were formally presented in a report to the chairman of the U.S. Securities and Exchange Commission in May 1992.

#### **B. The Group of Thirty Recommendations in the U.S. - The Final Form**

The U.S. Working Committee, as a result of preliminary fact gathering and analysis of the recommendations, further defined the same day funds and T+3 settlement recommendations for the U.S. corporate and municipal securities markets. As stated earlier, the Working Committee also expanded the scope of the clearance and settlement project to include recommendations for book entry settlement among financial intermediaries and their institutional customers and depository eligibility for all new issues. The Committee believes the recommendations, as follows, are the most effective and practical method for reducing risk in the national market system:

- Settlements and other movements of corporate and municipal securities must be effected only by book entry movements within a depository for transactions among financial intermediaries (brokers, dealers, and banks) and between financial intermediaries and their institutional clients.
- All new corporate or municipal securities issued must be eligible for depository processing, and procedures have to be developed to monitor inappropriate sale transactions during new issue stabilization periods.
- Payments for settlements among financial intermediaries, and between financial intermediaries and their institutional customers, should be made using same day funds. This recommendation would also apply to payments associated with dividends, interest, redemptions, and reorganizations. The Committee does not recommend, at this time, the use of same day funds for settlement payments between financial intermediaries and their retail customers.

While the Working Committee set 1992 as the target date for implementing these recommendations, its primary focus was on achieving implementation at the earliest possible date with minimal disruption to the industry; therefore, the Working Committee recognized that the goal of implementing the recommendations in 1992 was optimistic.

The Working Committee, as noted before, put aside its discussions of the recommendation to shorten the settlement cycle to T+3 when the chairman of the U.S. Securities and Exchange Commission chartered the Bachmann Task Force to explore that recommendation as part of its study of improving the safety and soundness of the U.S. securities clearance and settlement system.

### C. Book Entry Settlement

The Working Committee believes that the book entry only settlement recommendation will reduce risk with minimal impact on current firm operations. Although much has already been accomplished in the immobilization of assets in book entry form in U.S. securities markets, full implementation of this recommendation throughout the corporate and municipal securities markets will require legal and regulatory changes.

The Legal and Regulatory Subgroup of the U.S. Working Committee initially identified four principal methods to achieve book entry settlement by 1992 for financial intermediaries:

- the adoption of amendments to existing rules of the registered securities exchanges, National Association of Securities Dealers, Inc. (NASD), and Municipal Securities Rulemaking Board (MSRB),
- the adoption of a new rule by each of the exchanges, NASD, and MSRB,
- the adoption by the Securities and Exchange Commission (SEC) of a rule requiring book entry settlement, and
- legislation that would amend the Securities Exchange Act of 1934.

In April 1991 the Working Committee, believing that the book entry recommendation could best be achieved in terms of timeliness through rulemaking at the marketplace level, requested that each of the major registered national securities exchanges, the NASD, and MSRB review in detail the first two alternatives. These alternatives were presented in a document prepared by the Legal and Regulatory Subgroup, *Legal and Regulatory Changes Required to Achieve Book Entry Settlement of Transactions Among Financial Intermediaries and Between Financial Intermediaries and Institutional Customers*, which described the legal issues raised by the alternatives and provided an assessment of the advantages and disadvantages of each.

The responses from the self-regulatory organizations (SROs) to the book entry recommendation were favorable. The Legal and Regulatory Subgroup, after reviewing the responses and after extensive discussion of the various legal and regulatory issues relating to the two alternatives, recommended to the Working Committee that the book entry recommendation be implemented through the adoption of a uniform rule by each of the SROs rather than the amendment of existing rules. The Subgroup believes that the development of such a rule, which would be adopted in substantially the same form by each SRO, will result in a more uniform book entry settlement requirement and would avoid the complexity of revising existing rules.

The Legal and Regulatory Subgroup drafted and submitted a proposed uniform book entry rule to the SROs in June 1992 for their consideration in developing a uniform rule for regulatory approval. The SROs modified the proposed rule drafted by the Legal and Regulatory Subgroup and agreed to submit the rule to their respective members for comment. The rule would require book entry settlement among financial intermediaries and between financial intermediaries and their institutional clients for depository eligible securities. Widespread distribution of the proposed book entry rule for comment to the membership of each SRO is expected by year end 1992.

For various reasons, some exceptions to the book entry settlement requirement will be necessary. The SROs expect to further define these exceptions based on membership feedback during the proposed book entry rule comment period.

The SROs are currently considering modifying the financial reports (Focus Reports) filed by broker/dealers with their respective SROs to record information about physical deliveries as one way to monitor compliance with the book entry settlement requirement. In addition, the SROs are also exploring the possibility of requiring that broker/dealers maintain internal records, subject to inspection by the SROs, relating to physical deliveries and the reasons for those deliveries.

Because of the unique attributes of the municipal securities market, the MSRB believes that amending its existing automated clearance and settlement rules is the preferred route for implementing the book entry settlement requirement. In September 1991 the MSRB distributed draft amendments for industry comment. These amendments would require that all inter-dealer transactions and customer transactions settled on a Delivery Versus Payment (DVP) or Receipt Versus Payment (RVP) basis be settled in a book entry environment. As a result of the comment period, the MSRB decided to adopt the amendments and subsequently distributed a proposed implementation schedule for these amendments for comment. The comment period ended June 1, 1992.

The MSRB met in July 1992 to vote on the implementation schedule for the amendments which would require that essentially all inter-dealer and institutional customer transactions eligible for processing in automated clearance and settlement systems be processed within those systems. The MSRB approved the schedule and authorized the filing of the amendment to achieve book entry settlement for inter-dealer transactions (the first phase in the implementation of the book entry settlement requirement) with the U.S. Securities and Exchange Commission. If the amendments are approved by the U.S. Securities and Exchange Commission, book entry settlement for inter-dealer transactions would become effective January 1, 1993, with book entry settlement for DVP/RVP customer transactions becoming effective July 1, 1993.

#### **D. Depository Eligibility**

In addition to book entry settlement, the Working Committee believes that depository eligibility is in the best interest of the system. Therefore, the Working Committee asked the Legal and Regulatory Subgroup to identify alternatives to achieving the depository eligibility recommendation. As with the book entry recommendation, the Legal and Regulatory Subgroup determined that the depository eligibility recommendation could best be achieved either through adoption of amendments to the existing rules of the exchanges, NASD, and MSRB or through the adoption of a new rule requiring depository eligibility. After further discussion of the alternatives, the Subgroup concluded and recommended to the Working Committee that the adoption of new SRO rules is the most effective way to accomplish depository eligibility. The Subgroup recommended that the exchanges, NASD, and MSRB each adopt a new rule requiring depository eligibility for all new issues listed after a specified future date.

In conjunction with the adoption of SRO rules requiring new issues to be depository eligible, the Subgroup also recommended that the U.S. Securities and Exchange Commission adopt a disclosure requirement under the Securities Act of 1933. This requirement would compel issuers in registered offerings to indicate in the prospectus if the securities are depository eligible, and if not, to indicate the reasons why eligibility was not obtained and the potential impact on the liquidity of the securities.

The Legal and Regulatory Subgroup is drafting a proposed uniform rule requiring depository eligibility for new issues for consideration by the SROs in developing a uniform rule for regulatory approval. The SROs will meet in the fall to review the draft rule.

One industry practice that appears to stand in the way of achieving depository eligibility is the current use of physical certificates within the institutional securities markets during the new issue stabilization periods as a control mechanism to track inappropriate trading during that period, a practice commonly known as "flipping." Flipping occurs when a member of the syndicate, a member of the selling group, or a customer buying the new

issue resells it back to the syndicate while the lead manager is still supporting the offering price. In 1991 the Working Committee established a focus group to deal specifically with the issue of flipping.

Over the past year, the Flipping Focus Group identified a number of alternatives to track flipping in a book entry environment. After evaluating these alternatives, the Focus Group recommended to the Working Committee the development of an automated initial public offering (IPO) sub-account tracking system that would eliminate the need for physical certificates. The Focus Group proposed two alternatives for such a system which it is exploring with the appropriate industry participants to determine the cost/benefit of each solution as well as the impact on current business practices and operations. Once the book entry tracking alternative has been selected, the Working Committee will turn this project over to the industry for implementation.

#### E. Same Day Funds

After considering the application of the same day funds recommendation, the U.S. Working Committee encouraged the Depository Trust Company (DTC) and National Securities Clearing Corporation (NSCC) to take a leadership role in defining a same day funds system for the settlement of U.S. trades in equity securities and corporate and municipal debt. The great bulk of such trades now clear and settle through the next-day funds systems of the NSCC and DTC whose operations are interlinked in terms of the flow of settlement payments. In January 1991 the DTC and NSCC, in conjunction with the U.S. Securities and Exchange Commission and the Federal Reserve Bank of New York, set out to develop a same day funds proposal for industry evaluation of its impact, costs, and benefits.

The DTC and NSCC prepared a memorandum on *A Same Day Funds Settlement System Proposal for Industry Evaluation* outlining the proposed same day funds settlement system which was distributed for industry comment in June 1992. The comment period ends on September 15, 1992. During the comment period, the DTC and NSCC held a series of presentations on the same day funds system across the U.S. to assist the industry in its evaluation of the proposal.

The DTC and NSCC propose to modify the basic architecture of the DTC's existing Same Day Funds System (SDFS) to embrace the deliveries that now occur in the DTC's Next-Day Funds System (NDFS) as well as the NSCC's deliveries made through the Continuous Net Settlement (CNS) system and Envelope Settlement Services. The overall system would embrace both the DTC's and NSCC's settlement systems.

In the closed system, all securities would remain in the system until paid for at settlement. The system would use a number of risk management tools to address credit risk and liquidity guidelines set forth by the Board of Governors of the Federal Reserve System's Policy Statement on Private Delivery-Against-Payment Systems. In the proposed system, participants receiving securities would not be able to move securities out freely. Closing the system reduces the credit risk to the DTC and NSCC.

#### F. T + 3 Settlement

In its discussions of shortening the settlement cycle, the Working Committee initially identified several issues that needed to be addressed to move T+3. These included the receipt of a written confirmation by the retail customer as a trigger for payment, the lack of an electronic payment system for retail transactions, and the current affirmation process for institutional trades. Of equal importance was the issue of changing customer behavior regarding long-standing business practices. Each of these issues was discussed at length by the Working Committee and later by the Bachmann Task Force.

- **Receipt of Confirmations**

The Legal and Regulatory Subgroup quickly dismissed the significance of the confirmation issue by determining that the receipt of the confirmation is not legally required for the settlement of an equities transaction, although there is a legal requirement to send a confirmation. However, since many customers are accustomed to receiving a confirmation before paying for their transactions, the confirmation issue becomes one of modifying customer behavior. The Working Committee concluded that modifying customer behavior can be achieved through industry-wide information and education efforts.

- **Electronic Retail Payment System**

Many firms rely on checks to send and receive customer funds. The current mail delivery time frames in many cases would not accommodate payment by check in a T+3 settlement period. Recognizing that collection of funds from customers was a major issue in moving to T+3, the Working Committee determined that some type of electronic retail payment system was necessary.

One such payment mechanism already in use by some in the securities industry is the Automated Clearing House (ACH), a domestic electronic payment system used by over 22,000 banks, thrifts, and other depository financial institutions on behalf of corporations and individuals. The diverse body of regulations governing ACH, however, do not mesh smoothly with the conventions in place in the securities industry to permit widespread use. Specifically, these regulations, which were designed to protect retail users of electronic funds transfer systems, allow retail users to rescind payment for unauthorized transactions for a lengthy period of time. After reviewing ACH as a payment alternative to checks, the Working Committee determined that the use of ACH is a step toward achieving safer and sounder markets and that the removal of these rescission rights for retail securities transactions would permit more widespread use of ACH as a payment mechanism, thereby further increasing the safety and soundness of the markets.

The National Automated Clearing House Association (NACHA), whose rules govern the use of ACH, initiated rule changes in 1992 that would eliminate the rescission rights for securities transactions. In May 1992 the Rules and Operations Committee of NACHA approved the proposed amendment to its Operating Rules and Guidelines which would add a new Standard Entry Class Code for the purchase of retail securities and commodities. The new Standard Entry Class Code would eliminate the current 60-day rescission rights for payments. In June NACHA's Executive Committee recommended approval of the rule change and put it out to the associations for vote. It is unfortunate that the member associations of NACHA voted against the proposed rule change. While this rule change is not critical to the adoption of the T+3 recommendation since ACH can be used without the rule change, it would make the use of ACH for retail securities transactions more practical. Because the Working Committee views this rule change as part of the drive toward safer and sounder markets, it will work with NACHA to develop a strategy to bring the issue to another vote.

Federal Reserve Regulation E, which was also designed to protect retail users of electronic funds transfer systems, must also be amended to exempt securities transactions from rescission rights. A formal request to amend Regulation E was drafted and presented to the Board of Governors of the Federal Reserve which has expressed an interest in amending Regulation E; however, the Board of Governors of the Federal Reserve has not indicated a time frame for doing so.

The Working Committee recognizes that changing customer behavior about payment practices is perhaps the most significant issue involved in moving to T+3. This represents a cultural



change for retail investors and may require broker/dealers to adjust well-established, settled customer relationships. The Working Committee believes that just as banking customers accepted Automated Teller Machines, retail investors will accept an electronic payment mechanism if properly educated and informed by the industry about the advantages of such a system.

- **Interactive ID**

The current affirmation process in the Institutional Delivery (ID) system cannot accommodate a shorter settlement period. To move to T+3 requires the timely affirmation of trades on T+1. In the current batch processing, affirmation occurs between T+1 and T+3.

To address the affirmation issue, the Working Committee established a focus group consisting of banks, broker/dealers, and institutional users of ID. The focus group worked closely with the DTC, which operates the ID system, to explore the issue of accelerating the trade input and affirmation process and determined that moving to an interactive system would accomplish this. The DTC proposed an interactive ID system which would process data upon receipt and distribute reports on request. The system would retain its batch capability while also allowing for interactive submission and receipt of data. The proposed system could eliminate specific time frames for trade input, confirmation, affirmation, and authorization and permit the sequence of confirmation, affirmation, and authorization to vary.

The DTC distributed its proposal for an interactive ID system for industry comment in January 1992. The comment period ended on March 1, 1992. As a result of the favorable responses received from the industry, the DTC and the Interactive ID Focus Group are meeting biweekly to refine and validate requirements for an interactive ID system. The DTC and the Interactive ID Focus Group expect to define fully the details of user requirements by the end of the third quarter of 1992 and to develop a systems design, including an implementation timetable, by year-end 1992.

Based on the DTC's current knowledge of system requirements, the DTC anticipates an initial system will be available by the end of 1993 with a full system with all the now-expected new features available in mid-1994. A more precise estimate of the implementation timetable will be available after the completion of the system design.

- **Findings of the Bachmann Task Force**

As discussed earlier, the Working Committee in 1991 suspended its discussion of T+3 pending the release of the Bachmann Task Force report. The Task Force, in its ten-point plan to improve the safety and soundness of the U.S. securities markets, singled out the need to shorten the settlement period to T+3 based on a risk analysis completed by the NSCC that indicated that this would reduce market risk at the clearinghouse by 58 percent in the event of the failure of an average large firm. In addition to commissioning this risk analysis study, the Task Force also evaluated the same issues identified by the Working Committee as potential obstacles to moving to T+3, specifically the lack of an electronic retail payment mechanism and the current institutional affirmation process. The Task Force concluded that these are solvable issues that can be addressed to permit the implementation of a T+3 settlement cycle in July 1994.

The Bachmann Task Force report was published by the U.S. Securities and Exchange Commission for public comment in the Federal Register in June 1992 with a 90-day comment period.

## G. Coordinated Payments

During its study of the institutional issues that needed to be addressed in the move to T+3 settlement and same day funds, the Working Committee came to realize that the Group of Thirty clearance and settlement project provided the industry with an opportunity to study other risk-reduction measures such as coordinating payments across markets. As a result, the Working Committee assembled a small group of industry experts to explore the feasibility of coordinating payments within equities markets with the possibility of netting payments across all markets at a later date.

The focus group concluded that netting payments across securities clearinghouses and depositories so that a participant in multiple securities markets would settle with one net payment is feasible. Such a netting arrangement would not only increase the safety and soundness of the clearance and settlement process but enable firms to put their capital to better use by eliminating the need for intra-day funding. The focus group developed a conceptual model for a coordinated payment mechanism and presented it to numerous industry organizations for comment. The response to the concept has been favorable; however, the Working Committee realizes that this will be a complex project to implement because of the different clearing agencies and memberships involved.

Recognizing that the implementation of a coordinated payments mechanism was beyond the scope of its efforts, the Working Committee turned this project over to the Securities Clearing Group (SCG) in June 1992 for implementation. The Working Committee believes the SCG, which grew out of the 1987 market break and was formalized in 1989 to provide a mechanism for sharing information among SEC-registered clearing agencies, is the appropriate organization to implement this project.

## II. STATUS IN AUTUMN 1992

The U.S. is basically in compliance with six of the nine recommendations including trade comparison by T+1 for market participants; trade comparison for indirect market participants; central securities depository; netting; delivery versus payment; and securities lending and borrowing. Since its formation in 1989, the U.S. Working Committee has concentrated its efforts on the same day funds and T+3 settlement recommendations. Because of the significant effort involved in evaluating and analyzing the issues involved in adopting these two recommendations, the Working Committee did not include the ISO message standards and ISIN numbering recommendation as part of its agenda even though the U.S. is not in complete compliance with this recommendation.

Some background material on the clearing and depository organizations that support the U.S. corporate securities markets is helpful for a better understanding of the status of the recommendations in the U.S. The securities clearing organizations that handle corporate securities are the NSCC, Midwest Clearing Corporation (MCC), Stock Clearing Corporation of Philadelphia (SCCP) and Boston Stock Exchange Clearing Corporation (BSECC). These clearing organizations are interconnected to allow participants to settle trades from various markets in one account. The DTC, Midwest Securities Trust Company (MSTC) and the Philadelphia Depository Trust Company (PDTC) are the central securities depositories handling the majority of corporate securities. As with the clearing organizations, the depositories are interconnected to allow the simultaneous delivery and payment of securities to settle transactions between participants of different depositories.

The two largest corporate securities marketplaces in the U.S. are the NYSE and over-the-counter market which is regulated by the NASD. OTC and exchange transactions (at the NYSE as well as Amex) for the most part are cleared and settled exclusively by the NSCC and DTC.

### **Recommendation 1: Trade comparison by T + 1 for direct market participants**

Broker-to-broker comparison by T+1 was very quickly resolved in the U.S. since at the time the G30 recommendations were released, the exchanges and over-the-counter market were already in the process of implementing on-line correction and comparison systems to bring trade comparison and reconciliation closer to the point of trade execution. Participants are required to submit all non-systematized trade input by 2:00 a.m. on T+1. The clearing organizations match the data immediately and report the matching results to participants early on T+1. Participants resolve uncomparing trades on T+1 through the exchanges' and OTC's correction facilities to achieve comparison by the end of T+1. Participants that do not submit trade data before 2:00 a.m. on T+1 resolve trades through the exchanges' correction facilities during the day on T+1.

In addition, there has been increasingly wide use of automated trading systems in the stock exchange and OTC markets, not only for buying and selling, but for recording additional data required for comparison. These transactions are reported to clearing agencies as "locked-in" for participants so that participants do not need to enter comparison data. Locked-in trades are reported on T+1.

For more information on the U.S. securities comparison and resolution processes, please refer to Section 4.3.2 of the *International Society of Securities Administrators (ISSA) Handbook*.

### **Recommendation 2: Trade comparison for indirect market participants**

In the U.S. indirect market participants are members of a trade comparison system which achieves positive affirmation of trade details through the Institutional Delivery (ID) system. The DTC provides the national ID system, which allows a broker to confirm to an institutional client and to the client's investment manager and custodian bank, the details of the agency trade executed on the client's behalf. The broker generally reports the transaction to the DTC by 2:00 a.m. on T+1. In turn, the DTC reports the transaction to the client, investment manager, and/or custodian. In the current T+5 settlement environment, if one of these affirms the trade by T+3, it is pending for automatic settlement on T+5.

The DTC also provides an International ID (IID) system which provides a similar confirmation/affirmation system for foreign securities traded on behalf of U.S. institutional investors. IID does not provide for automatic settlement, but notifies the U.S. client's U.S. global custodian so that settlement in the issue's home country can be arranged through sub-custodians.

### **Recommendation 3: Central securities depository**

The U.S. National Clearance and Settlement System is composed of clearing agencies and depositories including the DTC, MSTC and PDTC. These depositories are linked through interfaces that allow the simultaneous delivery and payment of securities and permit transactions to be settled between participants of different depositories.

As a result of these interfaces, a member of the DTC, for example, can arrange for a book entry movement to a member of one of the other depositories in the U.S. Therefore, while the U.S. does not have a single depository, it is basically in compliance with this recommendation through these interfaces in the national market system.

### **Recommendation 4: Netting**

The U.S. is also in compliance with this recommendation through the NSCC's Continuous Net Settlement (CNS) system. The NSCC's main settlement system for depository-eligible stocks and

bonds is CNS. CNS, through consolidation and offsetting long and short positions for each participant on a multilateral basis, accounts for 98 percent of clearance activity. Other forms of netting are also used. In addition in the NSCC's Balance Order Accounting, long and short balances in each CNS-ineligible issue traded by the participant are netted. Balance orders are then issued for net physical receipt or delivery of securities versus a corresponding receipt or payment of funds.

#### **Recommendation 5: Delivery versus payment**

In the U.S. all trades settled in CNS, as well as most book entry receives and deliveries at the depositories, are done on a versus-payment debit/credit basis. At both the clearing agencies and depositories, net settlement of cash is accomplished by the end of the same day that securities are delivered. While cash movement in the U.S. is not technically simultaneous with the securities movement, clearing fund collateral supports the temporary lag in payment settlement and the use of certified checks for the net end-of-day amount has proven effective.

#### **Recommendation 6: Same day funds**

The DTC distributed a same day funds proposal for industry comment in June 1992. The comment period ended on September 15, 1992. If there is positive response to the proposed system, the DTC anticipates that it may have a pilot same day funds system available in 1993 with substantial conversion in 1994 and complete conversion in 1995. See Section I.E. for a more detailed discussion of the status of this recommendation.

#### **Recommendation 7: Rolling settlement on T + 3**

While the U.S. has a rolling settlement system, transactions are currently settled on T+5. The Working Committee has suspended its discussion of this recommendation pending the outcome of the public comment period on the Bachmann Task Force report which ends on September 21, 1992. The Task Force had recommended implementation of T+3 settlement by July 1, 1994; however, specific implementation plans will not be available until the public comment period is over. See Section I.F. for a more detailed discussion of the status of this recommendation.

#### **Recommendation 8: Securities lending and borrowing**

Securities brokers and commercial banks are the primary borrowers of securities to cover delivery fails for securities that have been sold but are not available for delivery, short sales, option, and arbitrage positions. Securities are lent through open-ended loan agreements which can be terminated on short notice by the lender or borrower.

Although the clearing agencies and depositories do not play a direct role in most securities lending, securities which are borrowed between participants generally move by book entry, versus payment, at the depositories. The NSCC, for example, provides funds-only settlement systems which participants use to collect marks to the market on stock loans and also offers methods of collecting rebates on the securities borrowed.

#### **Recommendation 9: ISO message standards and ISIN numbering**

The Working Committee, while it did not include an in-depth evaluation of this recommendation as part of its agenda, has discussed this recommendation and believes that it will be a non-event for the U.S. securities industry. Awareness of the ISIN Standard has continued to grow in the U.S. and most firms involved in cross-border transactions are in the process of evaluating ISINs.

Internationally-oriented brokers, banks and custodians are all at least accommodating ISINs and in some cases, advocating them.

### III. DEVELOPMENTS AFTER 1992

The Working Committee has finished its evaluation and analysis of the issues involved in implementing the two recommendations that affect the U.S. The exploratory phase of the clearance and settlement project has been completed. What remains is the development of the systems that are required to address the issues raised during the analysis of the recommendations and finally, the implementation of those systems.

In the next year, the SROs will distribute the proposed uniform book entry rule to their individual memberships for comment. While some changes to the rule may be necessary to accommodate exceptions to the book entry settlement requirement, the Working Committee envisions that the implementation of book entry settlement among financial intermediaries and their institutional customers will occur in 1993 following membership approval of the rule. The Working Committee also anticipates that depository eligibility for new issues will occur in 1993 through the adoption of a uniform rule by the membership of the SROs.

As stated earlier, the DTC already anticipates the implementation of an initial interactive ID system by the end of 1993 with full implementation in 1994.

The recent defeat of the proposed rule change to eliminate rescission rights for ACH payments for securities transactions will delay the use of ACH as a practical electronic payment alternative to checks. NACHA expects to revise the rule further to address the concerns expressed in the recently completed voting process and distribute the rule change to the NACHA associations for vote in 1993. However, NACHA generally implements new rules once a year in April. Therefore, if accepted, this rule would most likely not become effective until April 1994.

While both the T+3 and same day funds have targeted implementation dates of 1994, these dates are dependent on favorable responses to their respective public comment periods.

What is the role of the Working Committee over the next two years? Now that the project is in the systems development phase, the Working Committee believes these efforts are best left to the focus groups and other organizations that participated in the detailed analyses of the recommendations. The actual implementation of the recommendations is best left to the appropriate industry organizations and regulatory agencies. The Working Committee will continue to meet to review the development efforts and to provide ongoing oversight of the implementation of the recommendations.

The Working Committee acknowledges that there is a limit to what private-sector initiatives such as this one can accomplish, particularly in terms of timing. However, the Working Committee is optimistic that, working with the regulatory organizations, it can effectively oversee the implementation of the recommendations in a timely manner.

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