








Recommendations 2000

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ISSA RECOMMENDATIONS 2000

Published by the International Securities Services Association ISSA, June 2000. Printed in Switzerland by NZZ Fretz AG, Zurich.

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Acknowledgements

This document is the result of a project that was launched in spring of 1999 and took one year to completion. Progress was driven by a core team recruited from members of the ISSA board under the leadership of John Gubert (HSBC) and included Raymond Parodi (Citigroup) and Judith Smith (Morgan Stanley Dean Witter) which drafted outline recommendations and key issues. The full ISSA board was involved in validating the issues and in revising and finalising the recommendations.

The draft recommendations were further discussed by the ISSA secretariat with the BIS Committee on Payment and Settlement Systems, the European Central Bank, the International Federation of Stock Exchanges FIBV, the International Securities Market Association ISMA and by the regional ISSA Chairpersons with some of their respective constituencies.

I would like to thank every individual and organisation that was involved in the creation of this document for having contributed their valuable time and experience. It is hoped that these recommendations will become an industry benchmark, relevant to the global markets in the next decade.

Josef Landolt
Chairman

Introduction

It is now over a decade since the Group of Thirty (G30) published its original recommendations on Securities Clearance and Settlement systems. The recommendations targeted “reducing risk, improving efficiency and promoting greater standardisation in international settlement.” The recommendations covered a series of functions including trade matching, trade settlement and central depository activity. The nine G30 recommendations stated:

1. By 1990, all comparisons of trades between direct market participants (i.e. 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, organised 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 of 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 convention.
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 Organisation 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.

In 1990, the Report of the Committee on Interbank Netting Schemes of the Central Banks of the Group of Ten Countries ruled on netting schemes (Recommendation 4). They stated:

1. Netting schemes should have a well-founded legal basis under all relevant jurisdictions.
2. Netting scheme participants should have a clear understanding of the impact of the particular scheme on each of the financial risks affected by the netting process.
3. Multilateral netting systems should have clearly defined procedures for the management of credit risks and liquidity risks, which specify the respective responsibilities of the netting provider and the participants. These procedures should also ensure that all parties have both the incentives and the capabilities to manage and contain each of the risks they bear; and that limits are placed on the maximum level of credit exposure that can be produced by each participant.
4. Multilateral netting systems should, at a minimum, be capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participant with the largest single net-debit position.
5. Multilateral netting systems should have objective and publicly disclosed criteria for admission, which permit fair and open access.
6. Multilateral netting systems should ensure the operational reliability of technical systems and the availability of back-up facilities capable of completing daily processing requirements.

ISSA has had a major role in the original G30 recommendations, both as a contributor and a review body:

- 1988:** Publication of the ISSA 4 recommendations that helped pave the way for many of the G30 recommendations.
- 1995:** First ISSA review of the G30 recommendations in a series of regional meetings in New York, Hong Kong, London, Paris and Zurich. The review monitored progress since 1989. It clarified and updated some aspects of the original recommendations.
- 1996:** ISSA was mandated by its General Assembly to continue monitoring progress on G30.
- 1997:** ISSA led a participant driven status review of the recommendations in 42 markets.
- 1999:** The ISSA board, after consultations with the markets, agreed to a full revision of the G30 recommendations given the major market changes over the decade since publication of the original document.

The 1995 updated G30/ISSA recommendations (changes in italics) stated:

1. All comparisons of trades between direct market participants (i.e. brokers, broker/dealers and other exchange members) should be accomplished by T+0. *Matched trade details should be linked to the settlement system.*
2. Indirect market participants (such as institutional *investors and other indirect trading* counterparties) should achieve positive affirmation of trade details by T+1.
3. Each country should have in place an effective and fully developed central securities depository, organised and managed to encourage the broadest possible direct and indirect industry participation. *The range of depository eligible instruments should be as wide as possible. Immobilisation or dematerialization of financial instruments should be achieved to the utmost extent possible. If several CSDs exist in the same market, they should operate under compatible rules and practices, with the aim of reducing settlement risk and enabling efficient use of funds and available cross-collateral.*
4. *Each market is encouraged to reduce settlement risk by introducing either Real Time Gross Settlement or a trade netting system that fully meets the "Lamfalussy-recommendations".*
5. Delivery versus payment (DVP) should be employed as the method of settling all securities transactions. *DVP is defined as follows: Simultaneous, final, irrevocable and immediately available exchange of securities and cash on a continuous basis throughout the day.*
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 convention.
7. A "rolling settlement" system should be adopted by all markets. *Final settlement should occur no later than T+3.*
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 and borrowing securities should be removed.
9. Each country should adopt the standard for securities messages developed by the International Organisation of Standardisation (ISO Standard 7775). In particular, countries should adopt the ISIN numbering system for securities issues as defined in the ISO Standard 6166.

The new ISSA recommendations tackle key risks in today's world of settlement and clearance.

- In 1989, the governance of Securities Systems was not seen as a material issue. Markets were essentially domestic. Requirements tended to be fairly homogenous. Today, this is no longer the case. *Governance of infrastructure is paramount.*
- In 1989, depositories and book entry settlement were used in only a minority of markets. Today, almost all markets use such systems. *The appropriate use of technology and the management of technology risks are key.*
- In 1989, settlement, especially cross border, was highly inefficient. There has been a major improvement in operational performance in the intervening decade. But user requirements have changed. Values transacted have increased and settlement timeframes have shortened. Today's performance fails to fully meet the new user requirements. *Operational performance standards remain critical.*

In the text below, where we refer to "Securities Systems", these cover depositories, settlement and clearing systems. We also refer to "users" of settlement systems and this term encompasses customers and all other parties to whom the depository owes a duty of care.

The ISSA board and its members do not believe that it is appropriate, given the different stages of development of many world markets, to be prescriptive on timing for implementation of the recommendations. There are a few exceptions, where there is an unacceptable and unnecessary risk in markets (e.g. in respect of corporate actions).

The ISSA board and its members, however, do believe that markets should be able to meet most of the recommendations over the next five years. They propose to introduce an independent, ISSA member driven, process to monitor progress annually.

The ISSA Recommendations 2000 are:

1. Securities Systems have a primary responsibility to their users and other stakeholders. They must provide effective low cost processing. Services should be priced equitably.
2. Securities Systems must allow the option of network access on an interactive basis. They should cope with peak capacity without any service degradation, and have sufficient standby capabilities to recover operations in a reasonably short period within each processing day.
3. The industry world-wide must satisfy the need for efficient, fast settlement by full adherence to the International Securities Numbering process (ISO 6166) and uniform usage of ISO 15022 standards for all securities messages. The industry should seek to introduce a global client and counterpart identification methodology (BIC - ISO 9362) to further facilitate straight through processing. Applications and programmes should be structured in such a way as to facilitate open inter-action between all parties.
4. Each market must have clear rules assuring investor protection by safeguarding participants from the financial risks of failed settlement and ensuring that listed companies are required to follow sound policies on corporate governance, transfer of economic benefits and shareholder rights.
5. The major risks in Securities Systems should be mitigated by five key measures, namely:
 - the implementation of real delivery versus payment
 - the adoption of a trade date plus one settlement cycle in a form that does not increase operational risk.
 - the minimisation of funding and liquidity constraints by enabling stock lending and borrowing, broad based cross collateralisation, the use of repos and netting as appropriate
 - the enforcement of scrip-less settlement
 - the establishment of mandatory trade matching and settlement performance measures.
6. Convergence of Securities Systems, both within countries and across borders, should be encouraged where this eliminates operational risk, reduces cost and enhances market efficiency.

7. Investor compliance with the laws and regulations in the home countries of their investments should be part of their regulators' due diligence process. Investors, in turn, should be treated equitably in the home country of their investments especially in respect to their rights to shareholder benefits and concessionary arrangements under double tax agreements.
8. Local laws and regulations should ensure that there is segregation of client assets from the principal assets of their custodian; and no possible claim on client assets in the event of custodian bankruptcy or a similar event. Regulators and markets, to further improve investor protection, should work:
- to ensure clarity on the applicable law on cross border transactions
 - to seek international agreement on a legally enforceable definition of finality in a securities transaction
 - to ensure that local law fully protects the rights of beneficial owners
 - to strengthen securities laws both to secure the rights of the pledgee and the protection accorded to client assets held in Securities Systems.

The ISSA Recommendations 2000 explained

1. Governance

Recommendation 1:

Securities Systems have a primary responsibility to their users and other stakeholders. They must provide effective low cost processing. Services should be priced equitably.

The models for governance of the Securities Systems vary from country to country, but normally fall into one of the following models:

- An affiliate of a stock exchange.
- A quasi-governmental agency.
- A limited liability shareholder driven company.
- A limited liability user driven organisation.

The principles for governance can apply to all such structures and are:

- Governance should be transparent, treating all stakeholders in an appropriate fashion.
- Usage should be open to other securities systems on a non-discriminatory basis.
- No single entity, nor any single special interest group, should have majority control.

The model structure extracts the best features of a commercial and a co-operative entity. It will thus provide:

- Effective low cost processing, pricing its services equitably based on a general policy of "user pays."
- A low risk environment with sound controls and adequate capital backing.
- A policy of transparency, with full disclosure to its users.
- An infrastructure supporting its members' service needs, whether retail or institutional, local or international.

2. Technology: core processing

Recommendation 2

Securities Systems must allow the option of network access on an interactive basis. They should cope with peak capacity without any service degradation, and have sufficient standby capabilities to recover operations in a reasonably short period within each processing day.

The market infrastructure will need to accommodate:

- Increasing volumes of traffic and volatility in markets.
- Globalisation of investment.
- Emergence of Electronic Communications Networks as virtual stock exchanges.
- Demand for real time settlement of stock and cash with a move to real time or rapid multiple batch intra-day settlement.
- Demand for flexible processes allowing delivery versus delivery of stock, both internally and across depositories (e.g. to enable collateral substitution).
- Longer hours of operation for trading and the need to support 24 hour, seven day a week operations.

From a technology perspective, this gives rise to:

- Utilities that serve multiple trading markets or platforms.
- Systems that can accommodate surges of activity (in transaction processing and information transmission) without any degradation of service and response time.
- Real time processes enabling interactive communication to facilitate intraday traffic.
- Linkage to the appropriate real time cash settlement processes.
- Adequate contingency and back up, minimising the risk of outages that could prevent the timely completion of settlements on the contracted date.

This implies that the technology infrastructure must have:

- Open access to on and off exchange markets.
- Scaleable systems covering the maximum forecast daily volumes.
- Resilient and fault tolerant processes.
- Continuous processing capability with interactive user communication links.
- Adequate stand-by, allowing for recovery of operations without any loss of data in a reasonably short period within the working day.

3. Technology: messaging and standards

Recommendation 3

The industry worldwide must satisfy the need for efficient, fast settlement by full adherence to the International Securities Numbering process (ISO 6166) and uniform usage of ISO 15022 based standards for all securities messages. The industry should seek to introduce a global client and counterpart identification methodology (BIC - ISO 9362) to further facilitate straight through processing. Applications and programmes should be structured in such a way as to facilitate open interaction between all parties.

Market communication needs to be fast, accurate and reliable. Automated data capture enables straight through processing. There is demand for:

- Substantially improved compliance with global standards, including use of securities and counterpart identification codes.
- Secure and standard internet communication for those systems allowing direct access. Applications and programmes should also be structured in such a way as to facilitate open inter-action, integration with, or use of, standard industry software.
- Elimination of the use of proprietary protocols, especially between Securities Systems and their direct participants.
- Greater visibility in real time by all impacted parties of progress throughout each transaction life cycle.

This requires:

- Full adherence to the International Securities Numbering process (ISO 6166) and uniform usage of ISO 15022 based message standards between participants and Securities Systems.
- Agreement on standard identification codes for different market users, for example custodian banks, broker dealers or investors.

The model of the future will involve international co-operation to enable:

- The maintenance of a global, real time, on line rules based process enabling the creation of, or access to, accurate securities, counterpart and client identification codes.
- The creation of a series of common universal standards, covering, at the minimum, the basic Securities System message types.
- A mechanism to oversee and communicate best practise in securities and cash message standards.

4. Uniform market practises

Recommendation 4

Each market must have clear rules assuring investor protection by safeguarding participants from the financial risks of failed settlement and ensuring that listed companies are required to follow sound policies on corporate governance, transfer of economic benefits and shareholder rights.

Although many practises will be dictated by national economic needs, there are a series of core principles that enable efficient and fair settlement and clearing. These cover settlement liquidity, stock entitlement and certain core operational processes.

Best practise should ensure that:

- Stock borrowing and lending should be freely permitted to enable due date settlement of all market trades.
- There should be a transparent claims process to ensure that each holder can obtain the relevant rights to a security.
- The market should have clear rules designating the acceptable lapsed time for key investor related events. These should cover, at the minimum, registration (where appropriate), publication of shareholder information on company meetings, method of payment of dividends or interest and advice on corporate events.

The model market should:

- Ensure there is no fiscal or other impediment to stock lending and borrowing so that each buyer can have the maximum assurance of due date settlement.
- Be capable of re-valuing all trades (including the value of benefits accruing) that are unsettled on the due date, requiring cash equivalent to any adverse variance to be deposited with the market authorities and held in trust for the relevant buyer.
- Be structured to assure settlement of open trades between brokers from trade date. They should operate clearing or guarantee funds and other vehicles that will allow them to compensate for the eventual replacement cost of any failed transactions.
- Protect a buyer's entitlements for all benefits from securities purchased under the rules of each trading platform. This should be effective from the point of agree-

ment of each trade. The buyer should have, under the rules of each settlement system, the right to obtain restitution of the cash value of any benefits, if these are not passed on within ten working days of being available to other holders in the market place.

- Ensure that Book Entry Transfer Systems, in markets operating registration procedures, have electronic links with all stock transfer agents (also known as share registrars). They should ensure their records and those of the stock transfer agents are synchronised by the end of each settlement day. In the event of a reconciliation dispute between such stock transfer agents and the settlement system on the total number of shares in any issue held in that system, the settlement system should suspend the impacted issue until such dispute is resolved. There should be a maximum lapsed time between settlement and registration, in those centres without a book entry settlement system, of five business days and this requirement should be legally enforced.
- Ensure all traded companies are required to publish shareholder resolutions one month in advance of any meeting. They should be sent by post or electronic medium to each registered owner of the shares so that they can be received within seven days of publication. Shareholders should be entitled to vote by proxy through a duly accredited third party or by post through the Chairman of the appropriate meeting. All holders should be entitled to split their votes for and against any resolution.
- Require dividends to be paid on a set date advised at the same time as the announcement of the dividend amount. The pay date should be within two weeks maximum of the record date.
- Ensure that investors are informed of voluntary corporate actions in time. The initial announcement should include full details of the action. The entitlements should be distributed no less than two weeks and no later than three months after the initial announcement. There should be no less than two weeks' lapsed time between publication of the details of the corporate action and the final deadline for advice of intentions by the investor (or their agent) to the relevant issuer.

5. Reduction of settlement risk

Recommendation 5

The major risks in Securities Systems should be mitigated by five key measures:

- *the implementation of real delivery versus payment*
- *the adoption of a trade date plus one settlement cycle in a form that does not increase operational risk.*
- *the minimisation of funding and liquidity constraints by enabling stock lending and borrowing, broad based cross collateralisation, the use of repos and netting as appropriate*
- *the enforcement of scrip-less settlement*
- *the establishment of mandatory trade matching and settlement performance measures.*

Risk in settlement can be capital risk where only one side of a transaction settles. It can be market risk where a transaction has to be replaced due to default of one party prior to settlement. Or it can be operational risk where the transaction is not completed on the due date as a consequence of the failure of one party to settle as contracted. Given the increased values settled in world financial markets, there is a need to improve the risk profile of markets, but it is important to ensure that credit risk reductions should not be at the expense of operational performance.

The markets are working on a series of risk reduction measures:

- Minimising credit risk by introducing delivery versus payment. This ensures finality of cash and stock at the point of settlement.
- Tackling market risk by opting for shorter settlement periods.
- Migrating to full scrip-less settlement processes, both client and market side, thereby reducing the inventory of pending settlements.
- Bringing different markets onto the same settlement period, wherever possible, for settlement of securities. However, these are not yet being aligned, as would be

desirable, to the settlement periods for cash deposits, foreign exchange and relevant derivative instruments.

- Creating central counterparty structures, including settlement netting facilities, where these are deemed appropriate.
- Promoting due date settlement through rules on matching and settlement performance.
- Improving performance by enabling, in real time over electronic networks, the repair of erroneous instructions.
- Reducing the need for partial settlements by ensuring that markets have easy access to stock borrowing, and putting in place market rules discouraging settlement fails.
- Introducing intra day targets for settlement, especially in real time systems, so that settlements occur in an orderly fashion throughout the processing day.

There are a series of drivers relevant to each of these measures:

- The delivery versus payment models should enable the simultaneous exchange of absolute title to stock against final and irrevocable cash. The model should cover all direct participants in a Securities System. The process should be based on a legally sound definition of stock and cash finality within any batch process, be it overnight or within the day. Cash should be capable of immediate payment in central bank monies.
- The market should target trade date plus one settlement subject to its ability, at the minimum, to retain the levels of due date settlement performance achieved under the previous market settlement period. All markets should regard 97.5% due date settlement by volume and 99% by value as the minimum acceptable norms. In any event the maximum trade to settlement period should be two working days.
- There are still markets that permit scrip within their settlement system. Markets will no longer be able to accommodate paper if they are to move to trade date plus one settlement and thereby reduce systemic risks. The presence of paper will lead to split settlement periods in markets for paper and scrip-less settlement. This will harm liquidity and disadvantage the holders of paper (mainly the retail sector). Markets wishing to avoid this should eliminate paper in settlement by making scrip-less settlement mandatory.
- The variation in settlement periods between the international deposit and lending markets, corporate debt, government debt, equity securities and traded derivatives is inefficient and costly. In cross border markets, the availability of liquid foreign exchange markets to accommodate the securities markets' settlement timeframes is an imperative.

- Netting arrangements should only be used where they are legally sound. This is best achieved by adopting netting by novation and introducing sound margining to cover both initial and variation risk. Where there is any doubt about the legal resilience of such process, they must be supported by the enactment of new and sound legislation.
- The settlement process may incorporate one or more system batch runs. Such a process, until markets move to same day settlement, is compatible with forward settlement. Nevertheless, all markets should enable settlement to take place during the working day to accommodate turn-round trades and allow management of fails. It is for this reason that market technology needs to support real time processing and interactive communication.
- Due date settlement ensures that a buyer does not become a forced lender of stock to a seller. All markets should have:
 - Targets for prompt matching of all transactions between members of a trading platform and settlement system. All direct market participants (e.g. members of a trading platform) should target a match on trade date for all trades. Indirect market participants (e.g. custodians) should target a 100% match on trade date for all settlements contracted for trade date plus one; and by close of business on trade date plus one for all transactions contracted at trade date plus two or later. Where the seller and the buyer are both direct members of a trading platform permitting "locked in" trades and the relevant settlement system, their trades should be automatically matched as traded in that system. In order to achieve this, Global Custodians and other constituents must be in possession of the information needed in the relevant market by close of business on trade date.
 - Facilities to mark to market past due settlements. The seller should provide cash collateral for any variance. At the latest, there should be buy in against unsettled trades more than five days past due.
 - Procedures to discourage partial settlements as they are operationally inefficient.
 - Rules to ensure orderly settlement throughout the working day, especially as markets are moving to real time cash and stock settlement. This increases the need for cash liquidity. There is danger of gridlock where a buyer of securities settles purchases only after they have settled sales. Rules are needed to ensure that there is an orderly settlement flow throughout the processing day.

Markets should also promote these rules so that they become best practise for indirect participants of settlement systems as well as those operating on a direct basis.

6. Market linkages

Recommendation 6

Convergence of Securities Systems, both within countries and across borders, should be encouraged where this eliminates operational risk, reduces cost and enhances market efficiency.

The number of Securities Systems have grown over the years. They have much parallel functionality. More standard market practise and common messaging will further highlight the growing duplication of global infrastructure.

Markets demand low risk, low cost and robust systems. They are concerned at redundancy and duplication. There is a recognition that even single regional system will take some years to develop. Some competition will always be required and a single global entity would be unacceptable to the market place. We are seeing demand for:

- Convergence of infrastructure, subject to strong governance by the user population.
- Linkages between the trading, matching/confirmation and settlement systems across instruments.
- Linkages between the settlement systems and into electronic RTGS cash system.
- Linkages between national markets, subject to these introducing no additional risk into the home and host markets.

The objective is:

- To improve market liquidity, especially as there is a move to real time gross settlement.
- To improve data quality and availability by enabling a single input to drive trading through to settlement, with enrichment of data as appropriate by the different parties during each transaction life cycle.
- To reduce the cost of investment across instruments and markets by the provision of a single point of entry.

The market thus requires:

- Securities Systems within national markets to work towards the creation of a single platform.
- Securities Systems across national boundaries to work to eliminate duplication of infrastructure, whether through merger, joint venture or other co-operative means.
- Securities Systems to construct a link with their national real time gross settlement systems (or other, preferably electronic, same day payment systems where these do not exist). They will enable real delivery versus payment.
- A post trade virtual electronic infrastructure, enabling messaging links between the trading platform, through the matching or confirmation process and onto settlement.

7. Investor protection

Recommendation 7

Investor compliance with the laws and regulations in the home countries of their investments should be part of their regulators' due diligence process. They, in turn, should be treated equitably in the home country of their investments especially in respect to their rights to shareholder benefits and concessionary arrangements under double tax agreements.

The Securities Systems are powerful institutions in their individual countries. They have a moral obligation to ensure fair treatment of the different stakeholders in the market place. Fair treatment should not lead to over-regulation. Regulation is a critical determinant in measuring the relative attractiveness of the different financial centres around the world.

Stakeholders need to recognise that:

- Domestic policies in each market will require investors, both foreign and national to the host country, to comply with the letter and spirit of their laws, rules and regulations.
- All parties to the clearing and settlement process seek equitable treatment with domestic investors within each national market.

In practise this means:

- Compliance by all with local law and rules on market practise. Those relating to the maximum holding in a security, the short selling of securities and foreign exchange regulations need special attention.
- Equal rights to the full economic benefits of share ownership, irrespective of nationality, wherever an investor is allowed to hold a security. Countries operating local and foreign classes of shares should ensure where foreigners are permitted to own local shares, that they have a full entitlement to receive all economic benefits. Economic benefits cover dividends and capital changes, but do not cover voting rights.

- Concessionary tax rates, applied to investors as a result of double tax arrangements, should be accounted for by the local revenue paying agent through deductions at source. A standard international process to establish residence should be established. An undertaking, made in good faith, by the paying agent (based on a written warranty of residence by a bank or other regulated entity acting for the investor) should constitute adequate proof. Lodgement of such a declaration within ten days of any pay date should be an adequate deadline to enable the appropriate deduction at source to be applied.
- Equal protection for all investors, irrespective of their nationality, including access to local compensation arrangements, whether at the Securities System or Stock Exchange.

8. Legal infrastructure

Recommendation 8

Local laws and regulations should ensure that there is segregation of client assets from the principal assets of their custodian; and no possible claim on client assets in the event of custodian bankruptcy or a similar event.

Regulators and markets, to further improve investor protection, should work:

- *to ensure clarity on the applicable law on cross border transactions*
- *to seek international agreement on a legally enforceable definition of finality in a securities transaction*
- *to ensure that local law fully protects the rights of beneficial owners*
- *To strengthen securities laws both to secure the rights of the pledgee and the protection accorded to client assets held in Securities Systems.*

Securities laws in many jurisdictions are recent, and often unproven. In other countries they are inappropriate for the age of modern electronic clearing and settlement processes. Conflicts exist between the laws of many jurisdictions. In an increasingly global market place, it is often difficult to establish the prevailing law governing a specific cross border transaction or collateral movement.

The key needs of the modern market place are:

- Common approaches to regulation, especially regulation relating to investor protection.
- Greater clarity in respect of the laws of bankruptcy, especially where there is potential conflict between jurisdictions.
- Clear rules on title, protecting beneficial owners where legal and beneficial ownership is different.

- Clear rules on entitlement where securities are held as collateral, whether pledged or in other form.
- Clear rules on finality in transfer, and the absolute irreversibility of transactions in a Securities System.
- Clear and transparent process to cover the financial cost of losses in all Securities Systems.
- Equal access for all investors to compensation arrangements.

This brings the need for changes in the law in many countries:

- Local laws and regulations should ensure that there is no co-mingling of client securities assets with the principal assets of their custodian. There must be no possible claim on client securities assets in the event of custodian bankruptcy or a similar event. Segregation of principal and client assets should at all times be clear from the custodian's records. This should be replicated in the books of each depository by the availability, at the minimum, of two omnibus accounts per user. One such account would be for principal assets and the other for client assets.
- The prevailing law in the event of a disputed transaction (whether a claim in bankruptcy or for other reason) should be the law of the locality where transfer occurs, unless the different parties to the transaction have contractually agreed otherwise. The full recommendations of the International Bar Association, which have been supported by the ISSA membership, should be followed in all cases.
- Markets should recognise the rights of beneficial owners over the rights of legal owners and should enable stock accounts in depositories to be classified as holding principal or client stock.
- Finality, in securities settlement, should occur at the point of transfer of ownership of a security into the stock account of the buyer in the securities settlement system. In systems where batch processes are used, the point of transfer should be explicit. In systems where transfers are made contingent on a subsequent payment of funds, finality should occur once the payment can no longer be reclaimed by the seller or the seller's agent. The system should not permit the on delivery of a security or a lien to be created over shares unless finality has been achieved.
- Securities pledged or charged to a third party as security for indebtedness (whether in a stock lending transaction or other lending arrangement) should, irrespective of the legal ownership, be considered as the property of the pledgee. The pledgee should be entitled to sell such security unless the relevant debt has been extinguished.
- The rules of Securities Systems should be explicit in respect of any loss sharing provisions. Losses should be to the account of the entity that introduced the loss

into the system (e.g. the lodger of delinquent securities). Where this is not feasible, losses should be absorbed through the capital and reserves of the system, as well as by insurance. In the event that there is also a general loss sharing process, it should be clearly explained. It should operate in such a way that any losses are applied equitably among holders of the impacted security, and where this does not compensate for the full shortfall, the users of the affected Securities System. Loss sharing arrangements should be clearly explained to all direct and indirect (e.g. beneficiaries) users of Securities Systems.

- Compensation arrangements should treat all investor classes and nationalities equally and equitably.

Questions to monitor compliance with the ISSA Recommendations 2000

Recommendation 1

Securities Systems have a primary responsibility to their users and other stakeholders. They must provide effective low cost processing. Services should be priced equitably.

1. Is the board that governs the depository answerable to its users?
2. Does any single organisation, or sector (e.g. brokers, custodians, Stock Exchange) have a large voting position at the board of the depository?
3. Is there cross subsidisation of products (e.g. international services subsidised by local ones or transaction costs subsidised by asset servicing charges)?
4. What process is in place at the depository to ensure that it meets the needs of all its stakeholders (e.g. institutions, broker dealers, retail investors, issuers)?
5. What is the communications strategy of the depository to its stakeholders and how is this run?

Recommendation 2

Securities Systems must allow the option of network access on an interactive basis. They should cope with peak capacity without any service degradation, and have sufficient standby capabilities to recover operations in a reasonably short period within each processing day.

1. How often, over the last twelve months, has the depository been required to:
 - Change its published settlement timetable?
 - Extend the time of opening for settlement input by users?
 - Delay start of day processing?
2. Does the depository operate real time or multiple batch processing for settlement?
3. Does the depository allow interactive communication (on line real time) with its users, enabling settlement input and amendment?
4. Has the depository ever failed to recover an outage within the day or failed to start processing runs for a whole day; and, if so, when did that failure arise and what steps have been taken to prevent a similar event in the future?

Recommendation 3

The industry worldwide must satisfy the need for efficient, fast settlement by full adherence to the International Securities Numbering process (ISO 6166) and uniform usage of ISO 15022 based standards for all securities messages. The industry should seek to introduce a global client and counterpart identification methodology (BIC - ISO 9362) to further facilitate straight through processing. Applications and programmes should be structured in such a way as to facilitate open inter-action between all parties.

1. Does the market use ISIN as the primary securities identification code?
2. Are the major participants in the market linked electronically?
3. Does the depository communicate using true (i.e. not bilaterally agreed on sub-standards) ISO standards for securities messaging?
4. Does the market operate standard identification codes for counterparties or client accounts and, if so, how do (or could) these fit into a single global identification methodology?

Recommendation 4

Each market must have clear rules assuring investor protection by safeguarding participants from the financial risks of failed settlement and ensuring that listed companies are required to follow sound policies on corporate governance, transfer of economic benefits and shareholder rights.

1. Does the depository or the market have securities lending and borrowing schemes in place, and are these open to all market participants and their settlement agents?
2. Does the settlement system mark fail trades to market and collect margin from the failing counterparty to protect the innocent counterparty's interest?
3. Does the market operate a guarantee fund or have an equivalent procedure to protect against the cost of failed transactions; and which sectors of the market does it cover?
4. Are the stock transfer agents (share registrars) linked electronically to the depository?
5. Is there a legal maximum time period to complete ownership transfers in the books of the issuer? If so, does market practice adhere to the deadline?
6. Are investors entitled to all benefits arising on a security from the point of purchase; and how are any rules enforced?
7. Is proxy voting permissible in the market? and can such proxies be lodged by post or other remote delivery method?
8. Are there binding rules in the market stating the minimum and maximum lapsed time between the announcement and completion of key events, including registration, the calling of shareholder meetings, the payment of dividends or interest, rights issues, tender offers and other voluntary corporate actions?

9. Are all voluntary corporate actions advised through a central mechanism assuring consistent information to all investors?

10. Is information on corporate actions available electronically, and is the minimum lapsed time for responding to such actions sufficient to enable all domestic and foreign investors to respond in a timely and considered fashion?

Recommendation 5

The major risks in Securities Systems should be mitigated by five key measures:

- *the implementation of real delivery versus payment*
- *the adoption of a trade date plus one settlement cycle in a form that does not increase operational risk.*
- *the minimisation of funding and liquidity constraints by enabling stock lending and borrowing, broad based cross collateralisation, the use of repos and netting as appropriate*
- *the enforcement of scrip-less settlement*
- *the establishment of mandatory trade matching and settlement performance measures.*

1. Does the market use DVP settlement procedures in accordance with one of the recognised BIS models? If so, which one? If the model is not BIS model 1, are there plans to move to this model?
2. Does the market have a rolling settlement cycle of T+3 or shorter for all exchange traded instruments?
3. Could the market reduce the current settlement period to T+2 or below, without increasing fails rates? If so, how would this be achieved, and what plans are there to shorten the existing settlement cycle?
4. Is matching of trade details achieved on trade date, at least for direct market participants; and by trade date plus one for indirect participants?
5. Is the depository scrip-less, and, if not, is it working to enable scrip-less settlement?
6. Does the market allow partial settlements?
7. Can the depository accommodate same day turnarounds?

Recommendation 6

Convergence of Securities Systems, both within countries and across borders, should be encouraged where this eliminates operational risk, reduces cost and enhances market efficiency.

1. Is the depository linked electronically and in real time with other segments of the core market infrastructure (e.g. trading platforms, netting systems, matching platforms, payment systems)?
2. Is there one or more depository or settlement system in the market?
3. If there are several, has a consolidation been considered? If yes, by when?
4. Does (do) the securities system(s) allow other domestic or foreign systems to establish direct links on an equal basis to local members?
5. Does (do) the securities system(s) allow foreign market participants to become direct participants?

Recommendation 7

Investor compliance with the laws and regulations in the home countries of their investments should be part of their regulators' due diligence process. They, in turn, should be treated equitably in the home country of their investments especially in respect to their rights to shareholder benefits and concessionary arrangements under double tax agreements.

1. Do domestic regulators monitor the procedures in place at their locally based cross-border custodians to assure compliance with the laws and regulations of the home countries of their investments?
2. What are the areas (e.g. benefits, investor compensation) where foreign investors are not treated in the same way as local investors?
3. Can sales proceeds and income be repatriated without any restrictions?
4. Are double tax agreements simple to apply, and do foreign investors receive promptly their full entitlement to dividends and interest payments?

Recommendation 8

Local laws and regulations should ensure that there is segregation of client assets from the principal assets of their custodian; and no possible claim on client assets in the event of custodian bankruptcy or a similar event.

Regulators and markets, to further improve investor protection, should work:

- *to ensure clarity on the applicable law on cross border transactions*
- *to seek international agreement on a legally enforceable definition of finality in a securities transaction*
- *to ensure that local law fully protects the rights of beneficial owners*
- *To strengthen securities laws both to secure the rights of the pledgee and the protection accorded to client assets held in Securities Systems.*

1. Under local rules and regulations, what are the segregation requirements for keeping client assets and custodian assets in the depository?
2. How are clients' assets protected in the event of insolvency of a custodian or depository?
3. Does local law recognise the existence of beneficial owners who may differ from the legal owner of a security?
4. Does local law clearly define the point of time when a settlement, both for the security and the cash involved, achieves finality and thus cannot be unwound?
5. Does a pledgee have an absolute right to realise their security at all times?
6. Does the depository have loss sharing provisions in its rules, and how would these be applied?

Glossary of Terms

Beneficial owner	The rightful owner of a security.
BIS	Bank for International Settlements
The BIS Model One	BIS Model states that DvP occurs where “systems settle transfer instructions for both securities and funds on a trade by trade (gross) basis”. In the process, final (unconditional) transfer of securities from the seller to the buyer occurs at the same time as final transfer of funds from the buyer to the seller.
Book Entry	An accounting system that permits the electronic transfer of securities without the movement of a certificate or other documentation.
Capital risk	In settlement, this refers to the potential for a seller or a buyer to be out of stock and cash at one and the same time due to timing differences in the cash and securities settlement systems.
Central Depository	A facility for holding securities which enables securities transactions to be processed by means of book entry. Physical securities may be immobilised by the depository or securities may be dematerialised.
Central Counterparty	An entity that acts as the counterparty and guarantor for all trades in a given market.
Clearing System	A mechanism for the calculation of mutual positions within a group of participants to facilitate the settlement of their obligations on a net basis.
Client assets	Securities or other assets held by an agent on behalf of customers, and not constituting part of their balance sheet assets.
Co-operative	An organisation whose surplus revenues (operating revenues less operating costs and financing charges less provisions for capital expenditure less prudential retentions) are rebated to the users of the system in proportion to the charges levied to their account.
Cross border investor	An investor in a country other than the one of their location.
Cross collateralisation	The use of collateral held in one system to cover obligations in another.
Dematerialise	Maintain electronic records of title without the need to produce physical certificates or other like documentation.

Collateralisation	The process by which assets are used to secure exposures arising from various types of transactions.
Custodian	An entity, often a bank, that safekeeps and administers securities for its customers and that may provide various other services, including clearance and settlement, cash management, foreign exchange and securities lending.
DvP	Delivery versus Payment. See also "real DvP".
Double taxation	Arrangements between two jurisdictions to avoid cross border investors paying tax in both their country of tax residence and the country of their investment.
Direct participant	Participant in a system that directly exchanges orders with other direct participants and which directly settles with the/a settlement agent of the system.
Economic benefits	Entitlement to all financial flows arising from ownership of a security.
Entitlement	All the rights accruing to an investor as a result of capital and income distributions by a company in which they hold the relevant security.
Fail	A securities transaction that does not settle as contracted, usually due to technical or temporary difficulties.
Finality	Settlement of obligations between two parties by the irrevocable transfer of a cash and securities across the relevant accounts.
Forward settlement	A settlement that takes place other than in real time, usually either by subsequent overnight batch or during processing on the business day following input.
G30	The Washington based think tank that authored "Clearance and Settlement in the World's Securities Markets" in 1989.
Immobilise	Locate physical certificates on a permanent basis in a central vault facility, the contents of which are reflected in electronic records.
Indirect participant	Institution which has been granted access to a system but needs to exchange orders and settle through a direct participant to that system.
Interactive systems	Systems that enable a participant to pass instructions over an online network for these to be processed over a real time system.

Irrevocable	A transfer that cannot be revoked by the transferor or any other party without the express consent of the transferee.
ISSA	International Securities Services Association
Lien	A legal right to assets beneficially owned by a third party.
Liquidity	The ability of counterparties to settle obligations for full value when due.
Loss sharing	An agreement between participants in a system regarding the allocation of any loss arising when one or more participants fail to fulfil their obligations; the arrangement stipulates how the loss will be shared among the parties concerned in the event the agreement is activated.
Market infrastructure	Regulated investment exchanges, clearings and depositories, which through their common membership, enable efficient execution of a trade, its subsequent settlement and the lodgement of the resultant security through a book entry transfer environment.
Market risk	The replacement cost of a transaction that does not complete due to default by one or another party prior to the settlement date.
Matching	The process used by market participants before settlement of a transaction to ensure that they agree with respect to the terms of the transaction.
Multilateral netting	A netting system, whereby the participants only settle their net net positions resulting from the clearing process.
Netting	An agreed offsetting of mutual positions or obligations by trading partners or participants in a system. The netting reduces a large number of individual positions or obligations to a smaller number of positions. Netting may take several forms, which have varying degrees of legal enforceability in the event of default of one of the parties.
Novation	Satisfaction and discharge of existing contractual obligations by the substitution of new obligations.
Omnibus accounts	Single account held in a depository or with a sub custodian for all assets held by a client of that depository or sub custodian.
Pledgee	A person to whom securities have been pledged in return for specified (usually banking) facilities.

Real DvP	The simultaneous exchange of absolute title against final and irrevocable cash
Real Time systems	Systems that enable immediate update of information on holdings and transactions once data is received by the host application.
Regulated entity	A body regulated by a government or self regulatory organisation.
Repo	A repurchase agreement or a contract to sell, and subsequently repurchases, securities at a specified date and price.
RTGS	A gross settlement system in which each transaction is processed and settled in real time.
Rolling settlement	Settlement of each day's trade on a set number of business days following the relevant trade.
Scriptless	The ability to hold records of securities ownership in electronic media.
Short selling	The sale of securities not owned by the seller.
Stock Exchange	An organisation operating a trading platform.
Stock Borrowing	Borrowing of securities, with or without collateral, to facilitate timely fulfilment of securities obligations.
Sub custodian	A custodian acting as agent in their local market for institutions that are non-residents of the country of their investment.
Systemic risk	The risk that one participant in a settlement system fails to meet their required obligations and causes other participants to be unable to meet their obligations when due.
T	Common abbreviation used to signify "Trade Date".
Trade Date	The date on which a trade is executed.
Transfer	An act, which transmits or creates an interest in a security, a financial instrument or money.

