Global Clearing AND Settlement

FINAL MONITORING REPORT

GROUP OF THIRTY 30

All members of the Steering Committee served in their personal capacities. The views expressed in this report do not necessarily reflect the views or policies of their respective institutions, nor does publication of the report by the Group of Thirty imply an endorsement of the views expressed herein.

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Group of Thirty©

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FOREWORD

In 2003 the Group of Thirty published *Global Clearing and Settlement: A Plan of Action* which identified 20 recommendations in the spheres of interoperability, risk management, and governance, the implementation of which, it was hoped, would enhance the safety and efficiency of these global processes. After publication of this influential document, the Group, as well as those in the private and public sectors who had already committed a great deal of time to the project, felt that continued effort was required to secure the needed breakthroughs in global clearing and settlement.

The Group therefore established a clearing and settlement Global Monitoring Committee, chaired by Andrew Crockett, to review and report on progress in 15 major markets: Canada and the United States in North America; Belgium, France, Germany, Italy, Luxembourg, the Netherlands, Spain, Switzerland, and the United Kingdom in Europe; and Australia, Hong Kong, Japan, and Singapore in the Asia-Pacific region. The Committee, supported by regional monitoring committees as well as its Legal and Interoperability Subcommittees, undertook a multiyear assessment of developments. The objective was to identify areas where progress is being made, as well as areas where little or no progress has been apparent. We would like to take this opportunity to thank the Committee and its scores of members from the public and private sector for their support, not only of the monitoring process but also of the equally difficult task of regional and national implementation of the G30's clearing and settlement recommendations within their own markets.

Today we are pleased to report that a great deal of progress has indeed been made in implementing many of the Group of Thirty's recommendations. All regions have successfully moved forward at their own pace, as dictated by their particular market needs and infrastructure, conditions and other local circumstances. Where regional progress was needed there have been some advances, particularly in Europe, which has the regional institutions and lawmaking capacity, but also where there have historically been close ties, such as between the United States and Canada. Most major Asia-Pacific markets have also made progress on the domestic front. None of the above progress would have been possible without the tireless efforts of many private sector actors, regulators, and other interested parties.

This final monitoring report catalogues the achievements thus far in implementing the Group's 20 recommendations. In addition, it seeks to identify what still needs to be done, where, and by whom to make the further progress necessary to address the recommendations.

The Group of Thirty is pleased to have sponsored this long project and we commend its analysis and recommendations to all who are concerned about the safety and efficiency of the Global clearing and settlement infrastructure. We further support the efforts of those seeking to continue the drive to secure efficient interoperability, enhanced risk management, and the strengthened governance needed to deliver the increased efficiency in the clearing and settlement we all support.

Paul A. Volcker
Chairman of the Trustees
Group of Thirty

Jacob A. Frenkel
Chairman
Group of Thirty

ACKNOWLEDGMENTS

THE GROUP OF THIRTY WOULD LIKE TO PAY TRIBUTE to those whose time, talent, and energy over the last two and half years have driven the monitoring project forward. Special recognition must also go to those who did such an able job of coordinating monitoring efforts by chairing the regional subcommittees. We would like to thank Neeraj Sahai, Conrad Kozak and Frank Bisignano, who chaired the North American Monitoring Committee. Thanks also go to Tom de Swaan and Stephan Schuster for shepherding the work of the European Monitoring Committee, and for chairing the leadership group on interoperability issues. We must also thank Martin Wheatley, and before him Andrew Sheng, for overseeing the Asia-Pacific Monitoring Committee. We also thank and commend the careful and thorough work undertaken by the Legal Subcommittee, chaired by Philipp Paech.

Of course, none of the committees could have performed without the commitment of scores of members and their supporting institutions. The many thousands of hours they collectively dedicated to the monitoring and related implementation efforts ensured that we can report broad-based progress across many regions on a large number of the Group of Thirty's recommendations. The Group would like to thank all those who participated in a personal capacity, and the many organizations that provided facilities and hospitality for our meetings. For a full list of all those who labored so consistently on the project, please see Appendix 1.

Crafting a cohesive report reflective of many regional and industry considerations is never easy, but it was made a great deal smoother by the hard work and careful prose of Sam Dibb, who drafted the final monitoring report, and the Group thanks Sam for his efforts. We would also like to thank our editor Nancy Morrison and designer Sarah McPhie for their dedicated effort and flexibility while working on this report.

Finally, the coordination and bringing together of the many work streams and committees, and many aspects of report production, and allocation and organization of different responsibilities had their logistical center at the offices of the Group of Thirty. This work could not have been completed without the efforts of John Walsh (formerly of the Group of Thirty), Dawn Hewitt, and Stuart Mackintosh of the Group of Thirty.

Andrew Crockett
Chair
Global Monitoring Committee

EXECUTIVE SUMMARY

THIS REPORT PRESENTS THE ASSESSMENT BY THE Group of Thirty (G30) Global Monitoring Committee (GMC) of developments in the clearing and settlement arena since the publication of the G30 report, *Global Clearing and Settlement: A Plan of Action,* in January 2003. It identifies places where progress is being made as well as areas where little or no progress is apparent. A great deal has already been achieved, but many recommendations require further work. The Global Monitoring Committee notes that the clearing and settlement objectives and goals set out only three years ago remain achievable and, in many cases, are already being progressively implemented. The Committee underscores that the improved infrastructure that would result from full implementation of the G30 recommendations would help enhance confidence in the markets themselves and ensure that the vision of a safer, more efficient global clearing and settlement system can be brought to fruition.

INTEROPERABILITY

Progress is being made in achieving the interoperability agenda, which seeks to facilitate clearing and settlement across different national and international systems. This is most evident in Europe, but advances are under way between the United States and Canada. In other regions, the G30's recommendations are being acted upon, but mainly at the level of domestic markets. The longer-run aim remains the achievement of interoperability on a global basis. Concerning specific recommendations of the original G30 report:

- Coordinated timing between systems is well advanced in domestic markets and in certain regions. The United States and Canada are largely synchronized. In Europe, the introduction of the Target 2 integrated infrastructure will allow better coordination of securities settlement and payments systems. In the Asia-Pacific markets, some barriers remain and further synchronization is needed. By far the most significant long-term challenge will be synchronizing payment and securities settlement systems on a global scale. Progress to date on that front has been limited.

- The goal to have central counterparties in place and functioning in all major securities markets is almost fully implemented.

- The availability of securities lending is implemented at a basic level in all major markets. However, the supportive framework of law and regulation necessary to make the process an attractive economic proposition is not uniformly available in all markets. This is an area requiring further improvement.

- Significant progress on immobilization and the elimination of paper from clearing and settlement has been made, but paper and manual processes are still being used in some areas. Fully achieving this goal requires changes in law, business processes, and culture. Dematerialization remains the ultimate goal.

- The adoption of uniform messaging standards and communication protocols is under way, but not on a wide enough basis. While all large financial intermediaries have moved to adopt common international standards, most infrastructure providers still operate proprietary standards.

- The implementation of reference data standards has proven difficult. With no global owner of reference data and friction between the needs of the domestic and cross-border market users, progress has been slow. Future progress will require greater efforts by market infrastructure operators and international institutions with global reach.

- Automated institutional trade matching schemes exist in all major European markets, the United

States, and Canada, but not yet in Asia-Pacific markets, with the exception of Japan.

- Efforts to automate and standardize asset servicing processes, including corporate actions, tax relief arrangements, and restrictions on foreign ownership, are long-term goals that have yet to be achieved.

MITIGATING RISK

The G30's risk management agenda and recommendations center on financial, operational, and legal risks. Overall, there has been considerable progress in implementing the G30's recommendations in many areas, but in some cases the record is more mixed.

- On business continuity and disaster recovery planning, the news is positive. The implications of a large-scale market disruption have been carefully considered and improvements have been made in all major markets. The September 11, 2001 terrorist attacks, more recent acts of terrorism, epidemics of disease, and natural catastrophes have highlighted the stark consequences of inadequate and insufficiently tested disaster response plans. Business and government actors have undertaken planning exercises aimed at preparing for such circumstances.

- Risk management awareness among clearing and settlement services has clearly increased, but monitoring the extent of implementation among users of these services is beyond the scope of the G30 monitoring exercise. At present, the business models of individual service providers are not open enough. The G30 called for each provider to publish an outline of the risk framework, including underlying risk management processes and standards. In many markets this is a vital step where further action is required.

- Scenarios for dealing with a key market player that is disabled have yet to be addressed in most markets. An appropriate response to such a scenario remains to be formulated. Greater international cooperation will be needed to coordinate the response to failure of international intermediaries.

- Limited progress has been made in some markets on ensuring the final simultaneous transfer and availability of assets. Although all major markets generally offer some variant of delivery versus payment (DvP), in many markets users are still exposed to ambiguity.

- All of the target 15 securities markets looked at by the GMC have generally adequate conditions of legal enforceability with respect to contracts.

- The G30's call to advance legal certainty over rights to securities, cash, or collateral raised complex legal issues regarding "conflict of law" and "substantive law" matters. Both of these are being addressed by work on The 2002 Hague Securities Convention and the future UNIDROIT Convention on Intermediated Securities.

- On the issue of better valuation and support for closeout netting arrangements, there have been a number of significant improvements. These include more flexible close-out netting methodologies and the passage of EU statutes that provide momentum for convergence of close-out netting laws in the European Union. On a global scale, the ISDA Model Netting Act provides a good template against which to measure national legislative fixes.

IMPROVING GOVERNANCE

On governance, the GMC reports progress in a number of areas and notes that boards and senior management are increasingly recognizing the critical importance of governance. Nonetheless, challenges remain; continued focus and effort are required on governance matters.

- Boards and management have an increasingly clear understanding of the need for experienced board membership and certain infrastructure providers are adopting appropriate guidelines.

- There is a clear regulatory framework in place within each of the 15 target markets to provide oversight of clearing and settlement activities.

- There is a continued lack of clarity around fair access to services for users in some markets, particularly in the case of cross-border users.

- Further effort will be required to ensure that user and other stakeholder interests are given equitable attention. As with a number of the risk recommendations, these are matters for implementation by the industries concerned and by individual firms.

CONCLUSION

The members of the Global Monitoring Committee are heartened by the significant progress that has been achieved on many of the G30's recommendations during the last three years. But the Committee notes that a great deal remains to be done if the full efficiency gains of a truly global clearing and settlement system are to be achieved, while mitigating risk and ensuring sound governance. The GMC urges those involved to maintain their commitment to the goals laid out in 2003 and to the national, regional, and global efforts designed to achieve those goals.

1. INTRODUCTION

This report presents the conclusions of the Group of Thirty's Global Monitoring Committee on Clearing and Settlement. It outlines the G30's assessment of developments in the clearing and settlement arena since the publication of its report *Global Clearing and Settlement: A Plan of Action* in January 2003 and identifies areas where progress is being made, globally, regionally, and nationally, as well as areas where little or no progress is apparent. In many areas further work is still needed, but a great deal has been done. The report seeks to specify the organizations providing leadership in, taking ownership of, and accepting responsibility for ongoing reform, and the likely timeframe of this evolutionary program.

The G30 Global Monitoring Committee remains optimistic that the objectives and goals set out in the G30's January 2003 report continue to be achievable and are broadly on track. It is particularly grateful to the many individuals and organizations that have contributed to the monitoring effort to date and endorses their continuing efforts going forward.

Ownership is a crucial factor in determining the pace, extent, and effectiveness of reform. The Group of Thirty's first set of recommendations for clearing and settlement, published in 1989, were largely a call for action on the domestic front. With hindsight it is easy to underplay the challenges that these recommendations posed. Central banks, regulators, private firms, and industry organizations worked together in establishing and developing the necessary domestic institutions, systems, and standards over more than a decade. Yet identifying the domestic stakeholders, determining their roles, and coordinating their efforts at national levels was relatively straightforward.

The collaborative challenges now are of a different order, requiring cooperation between a multitude of organizations, across national boundaries as well as through the securities clearing and settlement value chain. In addressing cross-border issues, authority typically depends more often on moral authority, negotiation, and persuasion than on an absolute basis in regulation or law. Identifying those with the resources, commitment, willingness, and authority to drive change is critical.

The global challenge is reflected in evaluating progress against the various aspects of the 20 recommendations put forth in the 2003 report. Where these are essentially domestic, markets have generally taken significant steps forward. In some cases, little further work is required, although where individual systems have moved to adopt global standards users will not secure the full benefits until their peers in other jurisdictions follow suit. During the initial monitoring of its reform program G30 has focused on 15 countries,[1] selected on the basis of the importance of their markets and infrastructure to cross-border clearing and settlement. In some areas, such as in connection with establishing central counterparties, allowing unencumbered securities lending, and developing a sound legal framework underlying securities transactions, attention now needs to be broadened to include other rapidly growing and increasingly prominent markets.

The objectives and goals set out in the G30's January 2003 report continue to be achievable and are broadly on track.

Where regional efforts were needed there have been some advances, particularly in Europe, which has the requisite regional institutions and lawmaking capacity, but also where there have historically been close ties, such as between the United States and Canada. Regional developments can encourage the move toward global standards

1 The 15 countries are Canada and the United States in North America; Belgium, France, Germany, Italy, Luxembourg, the Netherlands, Spain, Switzerland, and the United Kingdom in Europe; and Australia, Hong Kong, Japan, and Singapore in the Asia-Pacific region.

and indeed are often a necessary first step. First mover implementation of global standards should not be mistaken for the first mover setting the standard; continued and open dialogue will be needed to attain the ultimate goal, which is and should be the development and implementation of truly global standards. Clear leadership is needed so that efforts are coordinated and market participants remain conscious of the view across borders and through the interconnected network of organizations involved in securities clearing and settlement.

Globally much remains to be done. Initiatives such as developing the ISO 15022 messaging standard and the work of the Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO) in drafting global regulatory principles demonstrate what can be achieved with clear ownership and broad industry participation. At the same time, ISO 15022 also illustrates the need for patient negotiation and measured progress where multilateral cooperation is required and where the interests and needs of large, international market participants are sometimes different from those of local firms and infrastructures.

The themes of ownership, leadership, cooperation, transparency, and strategic vision all point to and reiterate the overriding importance of sound and effective governance.

Appreciation of the commercial position and priorities of different market participants is critical, particularly for recommendations seeking to drive out inefficiency and reduce overall costs. The reform program proposed by the G30 is ambitious and expensive in the short term. Yet committed market participants are confident that the overall benefits, both in terms of efficiency and safety, will repay these costs many times over. However, those bearing the costs of change will not necessarily reap proportionate benefits. Progress will be achieved only if the organizations evaluating the required investment find individually that the benefits clearly outweigh the costs for them and, in some cases, their members. Each individual organization's assessment of the benefits will depend on the credibility of the commitment of the others. Driving change in this environment will require continued cooperation, occasional compromise, and a long-term, strategic perspective.

Regulators also have a crucial role, particularly in relation to risk management, where recommendations address not just the risks of individual organizations but also the systemic risks associated with potential failure of systems fundamental to the operation of global financial systems. In this area the most significant advances have been made in connection with business continuity and disaster recovery, which is now almost universally recognized as an essential part of the risk management process.

Transparency is vital. Market discipline works, but only where decisions can be based on relevant, reliable, and timely information. Initiatives such as that taken by the Bank of England in publishing in its December 2005 Financial Stability Review an assessment of the UK's progress and involvement in implementing the G30's recommendations are valuable.[2] Other organizations, including the European Central Bank, the International Monetary Fund, and the Hong Kong Monetary Authority, have indicated that they will consider producing similar updates. The G30 hopes that other national and international public sector organizations will follow suit.

The themes of ownership, leadership, cooperation, transparency, and strategic vision all point to and reiterate the overriding importance of sound and effective governance. While others can apply pressure and persuasion, in the end change will come about primarily through the collective actions of individual organizations in the private and public arenas, acting at the direction of their boards and senior officers.

2 http://www.bankofengland.co.uk/publications/fsr/2005/fsrfull0512.pdf

2. BACKGROUND

In January 2003, the Group of Thirty published the report *"Global Clearing and Settlement: A Plan of Action."*[3] This work marked the conclusion of more than two years of work by a group of industry leaders and experts drawn from a wide range of public and private institutions.

The report made 20 recommendations for strengthening global clearing and settlement of securities trades; these are reproduced in summary as Appendix 2. Building upon the G30's earlier work in domestic clearing and settlement, the Plan of Action encompassed wide ranging reforms, including creation and implementation of global standards in technological and operational areas, improvements in risk management practices, further harmonization of global legal and regulatory environments and improved governance for providers of clearing and settlement services.

It was recognized from the inception of the project that this would be an ambitious agenda that would take time to implement. New technical standards must be developed, disseminated, and then embedded in software and systems as these are upgraded over time. In some cases, potential legal changes associated with these recommendations add complexity. Codes of best practice have a similar development cycle, although they can be adopted more quickly by market participants. The G30 report contemplated implementation over five to seven years. However progress, even within that protracted timeframe, requires substantial effort internationally by a wide range of organizations.

It was to motivate the necessary effort that the Group of Thirty agreed to pursue a monitoring program to encourage progress and provide impetus to the reform agenda. Its mission and mode of operation, together with the various committees and participating individuals and organizations, are described in Appendix 1.

In April 2005 G30 published an interim progress report representing the summarized observations of the participants in the monitoring program. This report updates and builds upon that interim report and seeks to convey the program's conclusions.

3 http://www.group30.org/pubs.php?page=pubs2003.html

3. PROGRESS IN IMPLEMENTING RECOMMENDATIONS

THE OVERVIEW OF DEVELOPMENTS AND ISSUES THAT follows is categorized into the three broad areas of recommendation used in the January 2003 report: interoperability, risk management, and governance. While there are some important interdependencies among these categories—such as the need for legal changes to facilitate or underpin moves toward harmonized and automated business practices—the issues within each category have many common characteristics, both in terms of the challenges faced and the pathways followed in overcoming those challenges.

It is also instructive to assess the degree of development and progress by region. While the ultimate goal is developing a safe and efficient global network of clearing and settlement systems, in many instances the first cross-border steps will, and indeed have been, taken on a regional basis.

North America has efficient domestic markets, has made great strides in areas such as disaster recovery, and there are robust connections between the U.S. and Canadian infrastructures, yet full adoption of global standards continues to be a longer-term goal. There have also been valuable developments in individual Asia-Pacific markets and infrastructures, together with progress in a number of rapidly growing and increasingly important developing markets. But in essence these remain a collection of domestic markets. In the long term, further engagement in global initiatives will be needed if cross-border efficiency gains are to be captured.

On a regional basis Europe remains the main focus. The perceived high costs associated with clearing and settlement in Europe compared with the United States was one of the main drivers behind the G30 revisiting this area in 2000. While comparing cross-border to domestic costs can be misleading, the European Union has the desire to capture the scale benefits of a "domestic" market across its member states. Achieving efficient regional clearing and settlement arrangements is one of the foundations needed for progress toward a single European financial market, and Europe has the transnational political framework and institutions to facilitate such change.

INTEROPERABILITY

Comparing costs among countries, regions, individual firms, and specific systems is notoriously difficult because of the multitude of ways in which organizations measure, categorize, and account for their cost base and their different stages in the investment and development cycle. What data exists tends to emphasize the overarching importance of economies of scale, straight-through-processing and effective competition. This reinforces the need for harmonization of technical protocols, operational standards, and business practices. The advantages of interoperability include enabling improved and broadened automation, enhancing competition, and capturing benefits associated with systems on the scale of an enlarged network, rather than of its individual parts.

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The interoperability program, essentially the first eight recommendations, focuses on creating an effective global network. This requires connectivity among different firms, markets, and systems, both across borders and along the transaction processing value chain. This can be achieved by agreeing on common technical standards for messaging and communications, using universal reference data standards, eliminating paper, and automating trade matching.

Implementing these recommendations requires commitment to change and often substantial investment in technology and business practices that will have full force only if widely pursued and adopted across the industry. In general, no

first mover advantage exists to spur innovation and change at an individual firm level; thus overall industry progress is likely to move at the pace of the slowest.

Coordinated timing between systems, as called for in recommendation 4, is well advanced within domestic markets. However, in some Asia-Pacific markets there are still differences in operating hours between securities settlement and local payment systems and further synchronization is planned. It is now rare within major markets for funds not to be available on settlement date.

Progress is less advanced on a cross-border basis, although the United States and Canada are largely synchronized and in Europe the introduction of the Target 2 payments system in November 2007 will provide the opportunity to coordinate securities settlement and payments systems better on a regional basis.[4]

The greatest long-term challenge will be synchronizing payment and securities settlement systems on a global basis.

Cross-border coordination is complex but work toward harmonization is underway in Europe, driven by the European Central Securities Depositories Association (ECSDA) and the European System of Central Banks (ESCB). Both the system of business days and the intra-day processing time windows between central payment and securities platforms need to be synchronized. ECSDA has defined 10 standards that address both aspects and currently reports roughly 85 percent compliance among its member Central Securities Depositories. Full compliance is expected with the implementation of Target 2. The January 2006 merger of ECSDA and CEECSDA (the Central and Eastern Europe CSD Association) will extend the number of ECSDA members from 17 to 38, allowing broader monitoring of implementation of the standards.

The greatest long-term challenge will be synchronizing payment and securities settlement systems on a global basis. This will require cooperation between market participants, infrastructure service providers, central banks, and other public institutions. Harmonizing foreign exchange and securities settlement cycles is critical to improving the efficiency and safety of cross-border transactions, but progress to date has been slow.

An encouraging example outside securities clearing and settlement is a new global service for over-the-counter (OTC) derivatives, DTCC Deriv/Serv. This follows many of the principles set out in G30's recommendations in leveraging standard reference-entity data, working with accepted ISDA agreements, and liaising with users to develop systems consistent with front end trading platforms.[5] As a service unconstrained by legacy systems and procedures, this both broadens the interoperability agenda and illustrates the benefits that can be achieved by following the principles espoused by G30.

Central Counterparties (CCPs) are in place and functioning in all major securities markets and recommendation 6 is therefore almost fully implemented. In a few markets some instruments are still not CCP-eligible and the costs and benefits of widening the scope of CCP activities to include these should be considered. Details on this and other aspects of recommendations 6, 7 and 8 can be found on the International Securities Services Association (ISSA) website.[6] The publication in 2004 of the CPSS-IOSCO recommendations for CCPs,[7] discussed under recommendation 9, has already built upon this by creating an international benchmark for risk-management practices and standards.

A further step in the development of the basic CCP proposition is to look for efficient cross-border linkage between CCPs and CSDs to create wider networks, and to broaden the scope of market infrastructure to include a greater spread of products. It is not for the G30 to set out the nature and extent of such connections, which will be subject to cost-benefit analysis and other financial disciplines. It is preferable for the market to find its own solution. Yet the network economics of CCPs are such that further efficient connectivity should

4 http://www.ecb.int/paym/target/target2/html/index.en.html
5 http://www.dtcc.com/PressRoom/2006/tradeinfo.html
6 http://issanet.no-ip.org/g30_monitoring/index.php
7 http://www.bis.org/publ/cpss64.htm

bring great overall benefit, subject to meeting concerns over competition and concentration of risk.

Recommendation 7, which calls for availability of securities lending, is also implemented at a basic level, but the supportive framework of law and regulation necessary to make the process an attractive economic proposition is not uniformly available in all markets. This is an area requiring further improvement and in large part requires action from the legal, regulatory, or tax authority side rather than from the private sector. In Europe, the EU collateral directive further facilitates securities lending processes and provides all European countries with an appropriate and flexible legal framework for such activities. In Canada, securities borrowing and lending is already well established but the Canadian Depository for Securities (CDS) is pursuing further improvements.

In some jurisdictions, the regulations, laws, and operational practices in each market need to be further examined to identify impediments to efficient securities lending and propose a plan of action for eliminating them. Monitoring such progress can be undertaken by industry associations and other representative bodies, but responsibility for taking action must be primarily a task for national regulators and lawmakers.

The message is mixed for the remaining recommendations that require cross-border or international cooperation. In these cases, while a great deal of work is underway and goals have been set, the pace of implementation is short of what the G30 had intended.

Progress continues to be made in eliminating paper from the clearing and settlement process (recommendation 1). However, this is an area broad in scope. In many cases, it requires changes in law as well as business process and, in some cases local culture, particularly where retail customers are impacted. Full dematerialization of stock certificates remains the ultimate goal, but most of the benefit can be achieved through immobilization, which is largely achieved and which also provides a clear pathway to full dematerialization. In the last two years, great strides have been made in eliminating paper flow further along the processing chain, and electronic communication and payments is increasingly the rule. There have also been some important legal changes eliminating requirements for paper, such as move by the U.S. state of Delaware (where more than half of U.S. listed companies are incorporated) abolishing the requirement to make physical certificates available upon request, and legislation in Japan paving the way for dematerialization of various types of securities.

However, islands of paper and manual processes remain and are a persistent source of inefficiency. The initiative here lies in first instance with CSDs and other infrastructure providers, although their users must also take responsibility for driving and adapting to change. The effort should begin with elements under the control of individual institutions through identification of processes that require paper and revision of operating rules and procedures to eliminate those requirements.

Progress continues to be made in eliminating paper from the clearing and settlement process…

Moving to the wider market, industry working groups in each market should undertake a study of regulations and laws that lead to a requirement for physical paper so that necessary amendments can be made. Industry participants and expert groups can undertake initial work on developing and implementing international legal standards for the recognition of electronic documents. Ultimately action will be required by national authorities and legislatures to translate the proposed changes in law.

ISSA has suggested bringing aspects of this wide-ranging recommendation within the remit of other, connected recommendations in its ongoing monitoring program. For example, removing paper trade confirmations goes alongside introducing electronic messaging standards contained in recommendation 2, while eliminating paper prospectuses and tax processes is consistent with the objectives of recommendation 8. If this approach results in greater efficiency and better focus in monitoring, then it is a sensible way to move forward.

Pursuit of uniform messaging standards and communication protocols (recommendation 2), is patchy. While all large financial intermediaries have moved to adopt ISO 15022, most infrastructure providers still operate proprietary standards.

The Society for Worldwide Interbank Financial Telecommunication (SWIFT) has taken the initiative in developing a common communication protocol for EU Clearing and Settlement, constituting a tangible sign of progress on a regional basis. A draft protocol recommendation was issued for consultation in October 2005.[8] Indeed, SWIFT is proposing implementation in Europe of IS0 20022, an advance on ISO 15022. Evolution of standards to improve effectiveness and meet changing user needs has obvious benefits, so long as standards remain global in scope and, consider the needs of all stakeholders, and new versions are compatible with their predecessor.

Evolution of standards to improve effectiveness and meet changing user needs has obvious benefits, so long as standards remain global in scope…

SWIFT is supported by the main industry groups and regulators, but further effort is still needed to engage all stakeholders in reform. Those organizations that set standards and/or adopt common processes, including ISSA, SWIFT, the ICSDs, the Depository Trust and Clearing Corp. (DTCC), Omgeo, and the Japan Securities Depository Center, Inc. (JASDEC), will need to continue to provide leadership.

Implementing reference data standards (recommendation 3), is a complex and long-term project. There is no dispute that the diversity of coding systems and the difficulty of translating between them is a core reason for the currently high processing costs of global investment. More significant effort is needed to develop global standards in this area. There is not yet a clear global owner of reference data and there is friction between the needs of the domestic and cross-border market user. Senior-level support for standardization will be vital.

As with other areas where local standards exist but there is no global ownership, progress will depend largely on a core group of market infrastructure operators and international institutions, which together have global reach. A best-practice global standard agreed among Clearstream, DTCC, Euroclear, Omgeo, Eurex Clearing, and LCH.Clearnet might offer sufficient critical mass to cover the global players in world securities markets and a substantial subset of the national market populations. Agreement among such a range of organizations would be catalytic, providing the senior sponsorship and commercial logic to encourage others in the markets to align themselves to such standards as they develop new services or retool systems.

In an initiative facilitated by ISSA, a key group of market operators comprising Deutsche Börse/Clearstream, Euroclear, and SWIFT reached agreement to push jointly for rapid implementation of ISO 19312, which describes the data fields necessary to categorize financial instruments and to process all corporate events during a security's entire life cycle. This standard does not address the full scope of the recommendation, but the project is a significant first step. Also, by seeking to identify areas where progress can quickly deliver economic benefits, longer term and more wide-ranging change can be facilitated.

Automated institutional trade matching schemes (recommendation 5) exist in all major European markets, the United States, and Canada but, with the exception of Japan, not in Asia-Pacific markets—although Singapore has recently commenced development of such a utility. Furthermore, service providers such as Omgeo offer institutional trade matching for cross-border as well as domestic trades.[9] However, even where implemented, matching criteria, technical standards, and the legal implications of matching are market-specific and essentially domestic. Agreement on standards, let alone their adoption, implementation, and common use remains a relatively remote prospect, with the main and most contentious area of difference being whether matching is irrevocable.

8 http://www.swift.com/index.cfm?item_id=57993

9 http://www.omgeo.com/RESOURCES/REPORTS___WHITE_PAPERS/Reports_and_White_Papers.php?fla=1&aud_id=1&br=1

However, market participants recognize the potential benefits of standardization and are committing resources to promote awareness and facilitate debate as to what standards should be. As a consequence initial steps are being taken, such as the joint initiative between the European Securities Forum and ECSDA proposing standards and implementation plans for wider industry consultation.[10] Such regional initiatives are a pragmatic and necessary first stage, but it is critical that the overall objective remains reaching globally accepted and adopted standards. While achieving broad participation and reaching consensus across geographies and among different organizations may be a slow process, the scale of potential benefits dictates that this must remain the long-term goal.

Recommendation 8 addressed specific concerns in asset servicing: the activities at the end of the value chain, often archaic and sometimes overlooked, but nonetheless vital and the source of considerable opportunity for efficiency gains. It was always recognized that this was one of the recommendations with the longest timeframe for implementation, and this remains the case. However, there is now much greater recognition of the issues. Encouragingly, certain organizations are taking responsibility for specific areas, as ISSA is doing on issues related to foreign ownership restriction; and the Association of Global Custodians—as well as regional depository associations such as ECSDA, the Americas Central Securities Depositories Association, and the European Association for Listed Companies—on corporate actions and entitlements. The European Commission is sponsoring some of these initiatives, which fall within its jurisdiction. This is vital, as many improvements need to be reinforced by changes in law. However, more attention is needed in other regions.

In respect of harmonization of tax processes, little progress has been made by national authorities, but encouragingly the Fiscal Compliance Group, under the leadership of the European Commission, has undertaken analysis and research in this area. It is due to release a fact-finding report on debt by March 2006 with a follow up report proposing solutions planned for early 2007. In addition, some isolated areas of progress have been noted, including DTC's progress in achieving withholding at source in about 20 countries, eliminating any need for withholding tax reclaims, and ongoing work in France to remove restrictions for non-residents collecting withholding tax. On a broader front the ISSA tax relief model is a positive initiative, which may well provide a sound foundation for further harmonization work and has already been introduced to securities markets executives from over 50 markets.[11] In Europe a joint initiative (within the framework of the Clearing and Settlement Advisory and Monitoring Experts Group (CESAME) group chaired by the EU Commission) among various industry organisations to recommend target processes for corporate actions is proving effective. This initiative has completed recommendations on cash dividends, interest payments, and fixed income redemption. In addition recommendations on stock distribution are expected to be approved in the near future and work on reorganization events and voluntary corporate action has started. Domestic regulators and infrastructure providers are establishing action plans and timetables for the implementation of these standards, supported by changes to law where needed.

Market participants recognize the potential benefits of standardization and are committing resources to promote awareness and facilitate debate as to what standards should be.

Foreign ownership restrictions will likely remain where there are listed companies with national security or other public policy imperatives. Transparency of existing restrictions, reporting, and disclosure requirements applicable to foreign investors is

10 http://www.eurosf.com/upload/publications/ESF%20ECSDA%20pre-settlement%20date%20matching%2025Jan06.doc
11 http://www.issanet.org/html/news_taxrelief.html

key. ISSA is aiming to make a central information source available on its website. A generic format providing a general overview as well as links to public websites has been developed and tested in a dozen markets. Even where information is available, establishing whether or not holdings accord with these restrictions can still be a time-consuming and expensive process prone to potential clerical error. Automating and harmonizing reporting in this field remains a long- term goal.

RISK MANAGEMENT

The risk management agenda comprises the five recommendations centered on financial and operational risks, along with three more recommendations aimed at reducing legal risk.

Risk management awareness among clearing and settlement service providers (recommendation 9) is clearly increasing, but monitoring the extent of implementation among users of these services (recommendation 10) is beyond the scope of the G30 monitoring exercise. As with a number of other G30 recommendations that are aimed at boards and management of individual firms or organizations, compliance with these recommendations will be achieved primarily by a combination of market forces and national supervisory authorities.

Risk management awareness among clearing and settlement service providers is clearly increasing,

The efforts of CPSS-IOSCO (recommendations for Securities Settlement Systems[12] and for Central Counterparties)[13], and those of the Counterparty Risk Management Group[14] and the U.S. Payments Risk Committee have led to a greater understanding of the risks inherent in clearing and settlement and raised the bar in outlining the appropriate regulatory framework.

Service providers give frequent assurances as to their financial integrity and the adequacy of their risk management practices. Yet in many markets there is still insufficient clarity and openness over the risks inherent in the business models of individual service providers and the steps they take to mitigate those risks. Independent reports, such as those issued under the SAS 70 framework over the risks and associated controls of institutions, are helpful in encouraging market discipline and risk awareness among users. Similar practices should be encouraged through the value chain. They also promote an end- to-end framework of controls to help mitigate risks.

The January 2003 report's initial goal for recommendation 9, "Ensure the financial integrity of providers of clearing and settlement services", called for each provider to publish an outline of its business model, risk framework, and underlying risk management processes and standards. While some such reports have been made public, such as those of the CDS in Canada[15] and of parts of the Euroclear Group, in most markets this remains a vital step where further action is needed.

The clearest signs of progress in the risk area are visible with respect to business continuity and disaster recovery planning (recommendation 12). This is largely a result of the events of September 11, 2001 and the resulting regulatory and market responses. More recent terrorist acts, epidemics of disease, and natural catastrophes have highlighted the stark consequences of inadequate and insufficiently tested disaster response plans. Financial authorities and financial industry participants have a shared interest in promoting the resilience of the financial system to such disruptions.

The implications of a large-scale market disruption have been carefully considered and substantial improvements have been made in all major markets. In December 2005 the Joint Forum[16] released for consultation a paper entitled "High-level Principles for Business Continuity.[17] The objective of this initiative is to support international

12 http://www.bis.org/publ/cpss46.htm
13 http://www.bis.org/publ/cpss64.htm
14 http://www.crmpolicygroup.org
15 http://www.cds.ca/cdshome.nsf/Main-E?OpenFrameSet
16 http://www.bis.org/bcbs/jointforum.htm
17 http://www.bis.org/publ/joint14.htm

standard setting organizations and national authorities in their efforts to improve the resilience of financial systems to major operational disruptions.

The interdependence between organizations has also been subject to greater analysis, planning, and testing. The United States successfully ran its largest ever industry-wide test in October 2005, led by the Securities Industry Association (SIA), Futures Industry Association, Financial Information Forum, and The Bond Market Association. More than 150 financial firms were involved, using their normal work locations plus backup data centers and operational recovery sites, comprehensively testing both connectivity and transaction processing between and among those firms and their service providers, including DTCC. Another industry-wide test is planned for October 2006. The SIA and DTCC are also planning how the U.S. industry would respond to a potential avian flu pandemic, using strategies that could be employed for any infectious disease outbreak or bio/chemical attack.

In late 2005, Canada also successfully conducted its first live disaster recovery processing exercise on a trading day. Many other major markets have undertaken similar tests against different disaster scenarios.

Despite progress on business continuity, scenarios for dealing with a key market player that is disabled (recommendation 13) have not yet been fully considered in most markets, so an appropriate response to such a scenario remains to be formulated. This is the most challenging of all the recommendations, but temptation to put this in the "too difficult" box needs to be avoided. However thorough individual business continuity plans are, they cannot cover all scenarios and circumstances.

Although significant attention has been devoted to identification of systemically important institutions and ways to cope with their failure in some countries, the issue is not fully resolved anywhere. Coverage of institutions is not uniform. In some cases only CSDs and CCPs are covered, while in others guidance has been provided to all financial institutions. In some cases, the work being done emphasizes operational risk, resulting in overlap with the broader business continuity objectives of recommendation 12.

More positively, initial steps in the United States, the UK, and Switzerland form a base from which more coordinated and widespread action can be launched. In Europe, the EU banking supervisory authorities, central banks, and finance ministries agreed on a memorandum of understanding on dealing with a cross-border financial crisis; it took effect in July 2005. The U.S. Federal Reserve's endorsement[18] of the private sector working group on government securities clearance and settlement and setting up of a similar working group to study the feasibility of the "NewBank" concept is also encouraging. But progress is still at an early stage and this is an area where greater international cooperation is needed to coordinate the response to failure of international intermediaries. No major transnational effort has been taken in this area since the Windsor Declaration in May 1995, in which regulators of futures and options markets, recognizing the growth of cross-border trading, highlighted the importance of cooperation between market authorities, protection of customer positions, funds and assets, coordinated default procedures and regulatory cooperation in emergencies.

Although significant attention has been devoted to identification of systemically important institutions and ways to cope with their failure, the issue is not fully resolved anywhere…

Limited progress has been made in a number of markets in identifying in plain and unambiguous language the moment of finality to users of clearing and settlement systems, both as a legal and an operational matter, as proposed by recommendation 11. However, while all major markets generally offer some variant of Delivery versus Payment (DvP), in many markets users are still exposed to ambiguity. There is little evidence that securities settlement systems have amended their rules and

18 http://www.federalreserve.gov/boarddocs/press/other/2004/20040107/

contracts to specify either the moment of finality or when cash and securities may be transferred and used. There are some systems, particularly those that operate in real time, in which the specific moment of finality and availability of assets are already clear and legally binding, but in general greater transparency and clarity is still needed.

Regionally, the EU Settlement Finality Directive provides a sound framework to protect payment and securities settlement systems against the risk of participant bankruptcy in Europe. The Directive does not clarify the moment of finality, nor its modalities, and it does not cope with the risk of infrastructures reversing entries made to their accounts. However, an evaluation report on the Directive was been published by the EU Commission on December 15, 2005 and during 2006, the Commission and the member states will discuss possible amendments.

LEGAL FRAMEWORK

The Legal Subcommittee was extremely active in examining all issues, both explicit and implicit, raised by recommendations 14 to 16. Its detailed analysis of progress to date and the steps needed for full implementation are included as Appendix 3.

The task of monitoring a recommendation could have been limited to the question of whether the recommendation was implemented, and to what extent. On the other hand, monitoring could go beyond this by attempting to clarify or extend original recommendations, deliver additional background information, or even table further areas of recommendation as new issues became apparent. The Legal Subcommittee took a pragmatic and flexible approach:

- Where clear and specific steps were recommended, the monitoring exercise was limited to considering to what extent the recommended action was taken, and reporting on this with background information provided where helpful.
- Where a recommendation was of a more general nature, additional clarification and broader background information proved necessary to facilitate progress and therefore became part of the monitoring exercise.

Major securities markets generally now have adequate conditions of legal enforceability with respect to the contract enforceability issues identified in recommendation 14, and in the 15 markets subject to detailed monitoring:

- Oral and electronic agreements related to securities transactions are binding.
- Apparent authority to act is recognized under local law, although in Belgium, France, Italy and the Netherlands there are some restrictions related to constructive notice of the public register.
- There are no public policy restrictions on the enforceability of securities transactions.

However, isolated issues still need to be addressed. For example, some market participants are seeking to attempt to shift the burden of monitoring the trading activities of their own employees by sending their counterparties trader authorization letters. This results in a shifting of internal control risks to external counterparties (many of whom are large global financial dealers with separate product-based trading divisions spread across multiple time zones). This cannot be relied upon to ensure the proper daily operation of the market and may increase systemic risk, and so should be discouraged.

Furthermore, the Legal Subcommittee believes that issues connected to the enforceability of contracts may be more prevalent in countries with developing financial markets. Thus it has been proposed, as discussed further in Appendix 3, to investigate the current state of contract formation laws in certain emerging market countries that are increasingly of commercial interest to market participants.

Recommendation 15 called for increased legal certainty, such that market participants could determine with greater clarity their rights to securities, cash, or collateral, as developments in systems for

holding cash and securities and the cross-border nature of an increasing volume of transactions had not been matched by developments in the underlying legal infrastructure.

In essence, this addresses issues of "conflict-of-laws" and "substantive law" regarding securities, cash, and collateral. On a global scale, the *Hague Securities Convention*[19] (conflict-of-laws) and the draft *Unidroit Convention on Intermediated Securities*[20] (substantive law) are under active consideration. There is legislation in place within the EU, with further work being undertaken. Harmonization in both areas—conflict-of-laws and substantive law—is on the right track. However, given the nature of international harmonization of law, it is difficult to determine a clear framework in place for implementation within a specified timeframe. Market participants and regulators should continue to highlight the urgent need for international harmonization of laws underlying securities clearing and settlement, thereby encouraging further effort by governments and legislators.

There have been a number of significant improvements to valuation methodologies and close-out netting arrangements (recommendation 16). These include the development of more flexible close-out netting methodologies in major industry agreements and the passage of certain EU statutes that provide momentum for greater convergence of close-out netting laws in the European Union. However, more work needs to be done. For instance, the enforceability of netting and collateral rights needs to be extended to certain types of counterparties that became significant participants in financial contract markets. As another example, on a global scale, market participants and legislators should scrutinize netting legislation against the background of the ISDA Model Netting Act.

Some issues touched by these recommendations are important to provide a sound cross-border legal system to underpin financial markets, but the detailed steps needed to address all of these issues were not set out in the original report. Work in these areas is ongoing and further monitoring efforts are required. Against this background, the Legal Subcommittee has accepted the G30 Global Monitoring Committee's offer to continue its mandate beyond Spring 2006 and, on that basis, to develop the following issues further:

- Guidelines and databases containing information in relation to capacity and authority (recommendation 14).
- Cross-border recognition of domestic legal solutions, such as "safe harbors" for the protection of both collateral and settlement finality issues (recommendation 15) and enforceability of netting and close out (recommendation 16).
- Legal underpinnings of cash paid in a cross-border securities transaction; enforceability and finality of such cash transfers (recommendation 15).

In addition to adding these elements, the Legal Subcommittee volunteered to extend its scope so as to include important emerging capital markets, as the Subcommittee felt that most of the issues raised in recommendations 14 to 16 are of the highest interest for those markets. G30 whole-heartedly endorses this ongoing and important work.

Market participants and regulators should continue to highlight the urgent need for international harmonization of laws underlying securities clearing and settlement…

IMPROVING GOVERNANCE

The final series of the G30's recommendations concern governance. There are signs of progress in a number of areas, although by their nature such developments are often difficult to back up with hard evidence. On a positive note virtually every report setting out principles in connection with oversight, regulation, risk management, and similar areas recognizes the critical importance of

19 http://www.hcch.net

20 http://www.unidroit.org/english/workprogramme/study078/item1/main.htm

governance. Although some bemoan their repetitive nature, there is a significant degree of mutual and positive reinforcement between these calls for better governance, with the result that issues remain at or near the top of the corporate agenda.

Boards and management have an increasingly clear understanding of the need for experienced and appropriate board membership, as asked for by recommendation 17 and appropriate guidelines are being adopted by a number of infrastructure providers. In Canada, the Ontario Securities Commission's Recognition and Designation Order of the Canadian Depository for Securities includes terms and conditions for governance. Scrutiny of clearing and settlement arrangements in Europe, particularly as part of the wider debate on the future operational and corporate structure of exchanges and securities markets generally, has further heightened awareness among users and other stakeholders.

Boards and management have an increasingly clear understanding of the need for experienced and appropriate board membership…

There remains a lack of clarity around remote access to services for cross-border users in some markets (recommendation 18). Furthermore, continued focus is required to ensure that user and other stakeholder interests are given equitable and effective attention (recommendation 19). This may be particularly relevant where service providers have demutualized or where representation of stakeholders is unbalanced and, as mentioned above, where the concern of users projects through the securities trading process. The DTCC provides a good example, as it is now wholly owned by its users, which significantly mitigates such concerns. As with a number of the risk recommendations, these are matters for implementation and evaluation at the individual firm level, but these individual firms should make their policy clear so as to allow wider evaluation.

There is a clear regulatory framework in place within each country to provide oversight of clearing and settlement activities (recommendation 20). In May 2005 CPSS set out 10 principles for central bank oversight of payment and settlement systems.[21] This is an important step in moving toward consistent global standards. Furthermore, IOSCO is promoting adoption of a multilateral memorandum of understanding among supervisors to improve cross-border oversight and enforcement. Other advances in regulatory oversight, such as the CPSS-IOSCO standards for CCPs, are addressed elsewhere in this report.

REGIONAL PROGRESS

North America

North America has for many years been highly efficient when viewed from the perspective of domestic users. The DTCC cost per trade of 7 cents in 2005 remains the benchmark against which other domestic settlement systems are compared and to which cross-border costs need to aspire. There has also long been a high degree of cooperation between the U.S. and Canadian market infrastructures: for example, in harmonizing settlement links and timing between securities settlement and payment systems. In 2005, more than 20 years after CDS opened its "southbound" link to the National Securities Clearing Corporation (NSCC) and DTCC, the latter completed work supporting a "northbound" link to CDS facilitating the processing and settlement of Canadian dollar securities transactions at DTCC. Yet viewed from an international standpoint, more effort is needed.

The efficient domestic North American clearing and settlement systems in part explain why there has not been greater progress in adapting core systems to international protocols and practices in some areas. There are substantial costs associated with changing legacy systems and, in general, the more substantial and established the system the greater the cost of change. When legacy systems are replaced or enhanced, such events provide opportunities to incorporate international standards and practices, as CDS demonstrated when it implemented the CDSX clearing and

21 http://www.bis.org/publ/cpss68.htm

settlement system and the Internal Risk Management System in 2003–04 and with subsequent implementations. Furthermore, where a market such as the United States already benefits from huge economies of scale, the business case for adopting new standards can be hard to make, particularly in the short term and notably for domestic users. However, full participation in a truly international program remains vital and, in time, will bring substantial overall benefits. Pragmatically the timescale for change may well be longer than hoped. Reflecting on the 1989 G30 recommendations, many took longest to implement in the largest markets.

Less progress has been made in extending linkages between the U.S. and Canadian infrastructures throughout the rest of the Americas, often on the understandable grounds that standards applicable in these two markets would not have been appropriate in developing markets or that the costs of change would outweigh benefits. As markets in Latin America become increasingly important in a global context, these reasons diminish and the commercial imperative for assessing the associated infrastructure against the highest global standards increases.

The North American Monitoring Committee invited representatives from Brazil and Mexico as observers, and there is momentum building for broader involvement. Canada and the United States have liaised with other members of the ACSDA, as it is well placed to take a role in encouraging implementation of the G30 recommendations through the Americas, applying to developing domestic markets as well as pan-regional and global objectives. Significant linkage plans among Latin American markets and their related infrastructures are now being developed, building upon earlier experiences in other regions. Such initiatives are at a very early stage, but in some ways the lack of legacy systems and established practices in cross-border linkages presents an opportunity to move straight to systems embracing the most up-to-date global standards.

Increased effort is needed by both public and private sector institutions from the United States and Canada to join with similar organizations from Europe and other markets that wish to contribute in creating and adopting global standards. This is needed in order to address increasing transaction flows between regions, to provide leadership to other markets, to better make the case for change, and to create critical mass and so demonstrate the huge potential benefits from securing economies of scale.

Europe

There was and still is a strong need for action in Europe. On the one hand, well-developed, reliable, and well-organized national clearing and settlement infrastructure already exist. On the other hand, efficient cross-border clearing and settlement services are not in place and so do not match the cost efficiency of domestic services. While this is the case with all cross-border activity globally, the introduction of the Euro in 1999, the increase in European cross-border business, and the political will to drive progress provide the opportunity and demonstrate the necessity of further and rapid integration of financial services markets.

It is not only a political objective to promote the integration of the European markets; it is also in the interest of the industry to adapt to changing circumstances.

Globalization puts pressure on market participants to enhance operating and cost efficiency, particularly for transnational operations. Worldwide, cross-border transactions continue to gain in importance and further challenges to national service providers by foreign competitors cannot be ruled out. It is not only a political objective to promote the integration of the European markets; it is also in the interest of the industry to adapt to changing circumstances. Much work has been done and continues to be undertaken by industry participants and by public authorities sharing the goal of further harmonization and integration of the European post-trade services market.

A clearing & settlement expert group chaired by Alberto Giovannini (the Giovannini Group) advises

the European Commission on the identification of inefficiencies in EU financial markets, including those in the area of clearing and settlement. In 2001, this group defined 15 "barriers to efficient cross-border clearing and settlement in the European Union."[22] These barriers are to a large extent mirrored in and complementary to the 20 G30 recommendations.

A set of 19 clearing and settlement standards aimed at reinforcing the safety of the post-trade environment across Europe has been developed and submitted for consultation by the ESCB and the Committee of European Securities Regulators (CESR), based largely on the CPSS-IOSCO standards.[23] There are some important issues still to be resolved as to scope of application, interaction with existing banking regulations, and impact on the operations of competing service providers. ESCB and CESR are now working very closely with industry on a methodology for assessing progress and ensuring consistency with existing regulations. The Clearing and Settlement Advisory and Monitoring Experts Group (CESAME) has been established under the auspices of the European Commission to advise the Commission on clearing and settlement, chaired by the Commission and with Alberto Giovannini as Principal Policy Advisor, building on the work of the Giovannini Group, and has set up two experts groups to work on the removal of tax and legal barriers.

Most major Asia-Pacific markets have made progress on the domestic front.

The European Commission's current impact assessment process, which includes broad market consultations, will be the basis for a decision expected in the second quarter of 2006. The analysis will consider the costs and benefits of various options available, including adoption of an EU framework directive to remove the barriers remaining in the public sector domain. Industry participants therefore have further incentive to dismantle the barriers within their sphere of influence. Legal and fiscal issues that cannot be resolved without action from public authorities can then follow with full effect.

Momentum for the integration of clearing & settlement markets in Europe also results from related initiatives taking place in the European financial markets, in particular Target 2, which will provide a centralized cash payments system for the Euro zone in central bank money by November 2007.[24] It supports the integration of financial markets in general and securities settlement systems in particular by offering cash settlement services within a uniform technical infrastructure. It therefore fosters the harmonization of business practices and increases cost efficiency of cross-border payments.

Asia-Pacific

Most major Asia-Pacific markets have made progress on the domestic front. Securities certificates are largely either immobilized or dematerialized, CCPs are established in all major markets, and securities lending is generally allowed. There is also progress on use of ISO 15022, including its use in relation to corporate actions, although local practices still prevail in a number of areas and are likely to persist until the next system development cycle is underway. While perhaps inefficient from the perspective of large, international firms, such a situation is understandable when considering domestic market participants, which would be likely to share much of the costs of change but potentially see fewer of the benefits.

On the risk management front, there has been some improvement in financial and operational risk management practices, but it is difficult to provide a full assessment as, for example, few details of contingency or recovery plans or their testing are made public or independently verified. There is increasing awareness of the need for regional co-operation in this area. In February 2006 the Hong Kong Securities and Futures Commission held a conference on this subject for the Asian financial regulators. As well as considering how to respond and contribute to the Joint Forum work, the

22 http://europa.eu.int/comm/economy_finance/publications/giovannini/clearing1101_en.pdf#search='Giovannini%20Group'
23 http://www.ecb.int/ecb/cons/previous/html/escbcesr-standards.en.html
24 http://www.ecb.int/paym/target/target2/html/index.en.html#web

conference also sought to assess how regulators could bring about greater consistency and help create best practice in business continuity and disaster recovery plans across the region.

Yet there is little evidence of any broader initiatives on a regional basis. Full engagement with programs aimed at establishing consistent global practices and protocols remains some way off. While some organizations are participating in global initiatives, it is likely that most Asia-Pacific markets will continue to observe developments elsewhere, which they can implement locally when considered appropriate and relevant to their particular market.

4. WHERE DO WE GO FROM HERE?

As planned, the G30 Global Monitoring Committee was dissolved following its final meeting in New York in February 2006. With the publication of this final report, the G30's formal involvement in the monitoring process has ended. However, the Group of Thirty will continue to lend its moral authority to those engaged in and advancing the reform agenda as originally proposed by its 2003 report.

There is no shortage of people and organizations promoting the ongoing reform of clearing and settlement along the lines set out in G30's 2003 report, not least those mentioned in Appendix 1, which have worked closely to advance the monitoring process to date. Their contribution to this project and their ongoing efforts are both appreciated and endorsed.

It is anticipated that the regional monitoring groups will continue to function in some form, undertaking periodic assessments of progress toward the successful implementation of G30's 20 recommendations on clearing and settlement.

The task of implementing the interoperability recommendations falls principally on market participants and the infrastructure service providers. This encompasses individual actions to update internal systems and processes, but also the active contribution of industry organizations such as ISSA, which will chair future work on these recommendations.

Motivating private sector firms to contribute and cooperate on a voluntary basis will remain a challenge, particularly where such action does not necessarily confer immediate commercial benefit or first mover advantage, even where it does bring tangible improvements to industry stakeholders and end-users generally. Senior level attention will be critical in many areas to overcome structural inertia and varying commercial imperatives where these stand in the way of overall progress.

Ensuring safety and stability will necessarily remain the overarching responsibility of regulators and central banks, although this does not in any way diminish the accountability for sound risk management practices among infrastructure providers and other market participants.

The Legal Subcommittee will continue its work; it will expand its scope to include additional issues and broader market coverage to encourage sound legal underpinning for global securities markets.

Governance will remain primarily within the ambit of individual boards and, where appropriate, those responsible for regulation and oversight. Increased awareness of the need for and benefits of sound governance among users and other stakeholders will continue to drive and maintain improvements in this area. Where pockets of national protectionism persist, pressure must continue to be applied to lobby for their removal.

APPENDIX 1.

THE MONITORING PROCESS

The Global Monitoring Committee (GMC) was formed to review and report on progress in 15 major markets: Canada and the United States in North America; Belgium, France, Germany, Italy, Luxembourg, the Netherlands, Spain, Switzerland, and the United Kingdom in Europe; and Australia, Hong Kong, Japan, and Singapore in the Asia-Pacific region. The Committee was chaired by Andrew Crockett, President of JP Morgan Chase International.

The Committee's mission was to pursue an ongoing assessment of developments in the areas of recommendation and to identify areas where progress is being made, as well as areas where little or no progress is apparent. In addition, the Committee helped to identify what needs to be done, where, by whom, and in what order, to make substantial progress in meeting the recommendations. The benchmarks of progress used were the series of "next steps" laid out in the 2003 report, along with the proposed timeframe in that report.

Because much of the action has to take place on a regional basis, regional monitoring committees were also formed for North America, Europe and the Asia-Pacific region. These regional committees both reported to the GMC on overall progress and play the role of principal monitors for recommendations that are being implemented largely on a regional basis (see table of primary monitoring organizations below).

To deal with the complex of legal issues involved, a Legal Subcommittee was formed to monitor developments in that area. In addition, a number of monitoring organizations were recruited to assess progress on the various recommendations and report to the GMC.

At its meetings, the GMC received reports from the regional committees and monitoring organizations on each recommendation and made an overall assessment of progress. The members of the Global Monitoring Committee, Regional Committees, Legal Subcommittee, and Primary Monitoring Organizations are listed below.

GLOBAL MONITORING COMMITTEE

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JP Morgan Chase International

Regional Co-Chairs EUROPE

Tom de Swaan
ABN AMRO Bank

Stephan Schuster
Deutsche Bank AG

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Pierre Francotte
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Australian Stock Exch., Ltd

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David Walker
Morgan Stanley International

E. Gerald Corrigan
Goldman Sachs & Co.

John Gubert
HSBC Holdings plc

Jacques-Philippe Marson
BNP Paribas Securities Svcs

Phil Rivett
PricewaterhouseCoopers

Jeffrey Tessler
Clearstream International

Stuart Mackintosh
(formerly John Walsh)
Group of Thirty

Robert Diamond
Barclays Global Investors

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UBS AG

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Unicredito Italiano

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Sheryl Kennedy
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David Wright/Mario Nava
European Commission

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Bank of Japan

Andrew Large
Bank of England

NORTH AMERICAN MONITORING COMMITTEE

CHAIRS

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(formerly Frank Bisignano)
Citigroup Securities and Fund Services

Conrad Kozak
JP Morgan Chase

MEMBERS

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Depository Trust and Clearing Corp.

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Canadian Capital Markets Association

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Sheryl Kennedy
Bank of Canada

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Depository Trust and Clearing Corporation

Diana Chan
Citigroup

Allan R. Cooper
Canadian Depository for Securities

Gerardo Mejia
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Christopher McCurdy
Federal Reserve Bank of New York

Gilberto Mifano
BOVESPA and CBLC (Brazil)

John Panchery
Securities Industry Association

Judy Smith
Morgan Stanley

Chris Thompson
PricewaterhouseCoopers

Tom Tierney
Securities Industry Association

Amarilis Sardenberg
CBLC (Brazil)

EUROPEAN MONITORING COMMITTEE

CHAIRS

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ABN AMRO Bank

Stephan Schuster
Deutsche Bank

MEMBERS

Alessandro Profumo
UniCredito Italiano SpA

Yves Maas
Credit Suisse Financial Services

David Nicol
Morgan Stanley

Gerard Hartsink
ABN AMRO Bank N.V.

José Barreiro
BBVA

J.P. Marson
BNP Paribas Securities Services

Richard Pattinson (formerly David Weymouth)
Barclays Bank PLC

ALTERNATIVE MEMBERS

Mayre Humphery
Morgan Stanley

Angel Sánchez Aristi
BBVA

Heinz Fisher
Credit Suisse

Francesco Giordano
UniCredito Italiano

Andrea DiBiasio
UniCredito Italiano SpA

Frank Bisagnano
JP Morgan Chase

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Fabrice Demarigny
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European Central Bank

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Josef Landolt
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OTHER CONTRIBUTING ORGANIZATIONS:

European Association of Clearing Houses
European Banking Federation
European Central Securities Depository Association

ASIA-PACIFIC REGIONAL COMMITTEE

CHAIR

Martin Wheatley (formerly Andrew Sheng)
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PARTICIPATING FIRMS AND ORGANIZATIONS

Australian Securities and Investments Commission

Bank of Japan

Japan Securities Dealers Association

Japan Securities Depository Center, Inc.

Australian Stock Exchange

Hong Kong Exchanges and Clearing, Ltd.

Hong Kong Monetary Authority

Monetary Authority of Singapore

The Singapore Exchange Limited

LEGAL SUBCOMMITTEE

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CONSOB (Italy)

LEAD MONITORING ORGANIZATIONS, BY RECOMMENDATION

	Recommendation	Lead Monitoring Organizations	Other Input to be Coordinated with Lead Organization
	INTEROPERABILITY		
1	Eliminate paper and automate communication, data capture, and enrichment	North American Committee European Monitoring Committee Asia-Pacific Regional Committee International Securities Services Association (ISSA)	
2	Harmonize messaging standards and communication protocols	ISSA	SWIFT
3	Develop and implement reference data standards	ISSA	SWIFT ISO Working Group 11
4	Synchronize timing between different clearing and settlement systems and associated payment and foreign exchange systems	North American Committee European Monitoring Committee Asia-Pacific Regional Committee Association of Global Custodians	
5	Automate and standardize institutional trade matching	North American Committee European Monitoring Committee Asia-Pacific Regional Committee	Through the EMC: the European CSD Association (ECSDA) and the European Securities Forum (ESF)
6	Expand the use of central counterparties	ISSA	CCP 12 Through the EMC: the European Association of Clearing Houses (EACH).
7	Permit securities lending and borrowing to expedite settlement	ISSA	Pan Asia Securities Lending Association (PASLA)
8	Automate and standardize asset servicing processes, including corporate actions, tax relief arrangements, and restrictions on foreign ownership	ISSA	Through the EMC: European Banking Federation (legal) and ECSDA (technical). Through ISSA: Association of Global Custodians (AGC) ACSDA
	MITIGATING RISK		
9	Ensure financial integrity of providers of clearing and settlement services	PricewaterhouseCoopers	Through the EMC: the European System of Central Banks (ESCB) and the Committee of European Securities Regulators (CESR)
10	Reinforce the risk management practices of users of clearing and settlement services	PricewaterhouseCoopers	Through the EMC: CESR

	Recommendation	Lead Monitoring Organizations	Other Input to be Coordinated with Lead Organization
	MITIGATING RISK		
11	Ensure final, simultaneous transfer and availability of assets	North American Committee European Monitoring Committee Asia-Pacific Regional Committee Association of Global Custodians	
12	Ensure effective business continuity and disaster recovery planning	North American Committee European Monitoring Committee Asia-Pacific Regional Committee Association of Global Custodians	
13	Address the possible failure of a systemically important institution	North American Committee European Monitoring Committee Asia-Pacific Regional Committee Association of Global Custodians	
14	Strengthen assessment of the enforceability of contracts	Legal Subcommittee	ISDA, European Financial Market Lawyers Group (EFMLG)
15	Advance legal certainty over rights to securities, cash, or collateral	Legal Subcommittee	UNIDROIT, Hague Conference, European Union legislation (current and future), ISDA
16	Recognize and support improved valuation and closeout netting arrangements	Legal Subcommittee	GDSC, ISDA, European Union legislation (current and future), EFMLG
	IMPROVING GOVERNANCE		
17	Ensure appointment of appropriately experienced and senior board members	Regional Co-Chairs	
18	Promote fair access to securities clearing and settlement networks	Regional Co-Chairs	
19	Ensure equitable and effective attention to stakeholder's interests	Regional Co-Chairs	
20	Encourage consistent regulation and oversight of clearing and settlement service providers	Regional Co-Chairs	

APPENDIX 2:

SUMMARY RECOMMENDATIONS OF JANUARY 2003 REPORT: "GLOBAL CLEARING AND SETTLEMENT: A PLAN OF ACTION"

BUILDING A STRENGTHENED, INTEROPERABLE GLOBAL NETWORK

RECOMMENDATION 1. Eliminate Paper and automate communication, data capture, and enrichment.

Infrastructure providers and relevant public authorities should work with issuers and securities industry participants to eliminate the issuance, use, transfer, and retention of paper securities certificates without delay. All market participants should seek to automate elements of the process, such as confirmations and trade allocations, which introduce other forms of paper into the securities processing transaction flow as technology safely allows. All market participants should use electronic communication to transmit information for all instruments and transaction types. They should also identify opportunities to streamline processes by avoiding duplicative recording of data and manual addition of supplementary information at each stage of the value chain.

RECOMMENDATION 2. Harmonize messaging standards and communication protocols.

All market participants should adopt ISO15022 (the data field dictionary and message catalogue for securities information flows) as the global standard for straight-through securities messaging across the entire securities life cycle. Over time, XML (extensible mark-up language) should become the language to describe standardized messages. All market participants should support and use communication networks that adopt open, standardized, IP-based protocols for securities transactions.

RECOMMENDATION 3. Develop and implement reference data standards.

Market participants should collectively identify, develop, and adopt universal securities, counterparty, and relevant generic reference data standards that fully meet the needs of all relevant users. Issuers, exchanges, and other originators and distributors of data should make all relevant information available to the market in compliance with these standards for a fair price and on a timely basis.

RECOMMENDATION 4. Synchronize timing between different clearing and settlement systems and associated payment and foreign exchange systems.

Providers of clearing and settlement services and linked or otherwise associated payment and foreign exchange systems should collectively ensure that their design, procedures, operational timetables, and funding and cutoff times are such that the operation of one system does not materially reduce the efficiency or increase the risk of settlement in another. Market participants should work together to develop a comprehensive action plan to increase the efficiency and safety of cross-border securities transactions where the foreign exchange settlement cycle is not synchronized with the securities settlement cycle.

RECOMMENDATION 5. Automate and standardize institutional trade matching.

Market participants should collectively develop and use fully compatible and industry-accepted technical and market-practice standards for the automated confirmation and agreement of institutional trade details on the day of the trade.

RECOMMENDATION 6. Expand the use of central counterparties.

Market participants and relevant public institutions should collaborate to assess the potentially substantial risk reduction and efficiency improvements of using a central counterparty. These benefits are expected to outweigh their costs in most markets.

Where this is so, market participants should seek either to use the services of an existing central counterparty or to establish one of their own, whichever has the better risk, cost, and benefit profile.

RECOMMENDATION 7. Permit securities lending and borrowing to expedite settlement.

Relevant authorities should permit securities lending and borrowing as a method for expediting the settlement of securities transactions.

RECOMMENDATION 8. Automate and standardize asset servicing processes, including corporate actions, tax relief arrangements, and restrictions on foreign ownership.

Issuers, providers of clearing and settlement services, and other relevant market participants should advise investors of all details of corporate events that they require in an automated, timely manner and in compliance with accepted industry standards, so that each investor can make a timely decision on the action to be taken with full knowledge of the facts. Market participants and public authorities should work together to minimize the administrative costs to each party involved in tax relief arrangements through standardization and automation of procedures and communication of information and through the use and acceptance of electronic data and documentation. Relevant public authorities, infrastructure providers, and market participants should work together to harmonize and make transparent the processes, documentation, and communication of information in connection with foreign-ownership restrictions and reporting requirements.

MITIGATING RISK

RECOMMENDATION 9. Ensure the financial integrity of providers of clearing and settlement services.

Providers of clearing and settlement services should manage their risks and set standards and controls concerning the use of those services that allow them to conduct business in a safe, sound, and prudent manner consistent with their business model and all relevant supervisory and regulatory requirements. The need to operate prudently within the risk boundaries inherent within the business model requires risk management processes and standards, which should be applied objectively and consistently in determining compliance with risk measures, in three broad areas: the counterparty due diligence process; the procedures and techniques used to measure, monitor, and control risk exposure; and the minimum financial and liquidity requirements. Each organization should publish a report, at least annually, that describes the business model, risk framework, and underlying risk management processes, controls, and standards, together with the results of independent testing of those procedures. The report would thereby reassure users that the organization had operated effectively, and also would provide greater transparency to the market.

RECOMMENDATION 10. Reinforce the risk management practices of users of clearing and settlement service providers.

Organizations that use, or are considering using, providers of clearing and settlement services should establish robust due diligence and counterparty risk management controls and processes that appropriately evaluate, measure, monitor, and control the risks inherent in such activity and in associated customer-related business.

RECOMMENDATION 11. Ensure final, simultaneous transfer and availability of assets.
Providers of securities settlement services should reduce to the lowest possible level the credit risk created if securities or cash are delivered without receipt of corresponding assets, by linking securities transfers to funds transfers in a way that achieves effective delivery versus payment (DvP) and by making transparent the point at which finality of transfer is achieved. Once finality of transfer is fully assured, the rules should enable a receiver to re-use securities and cash without further delay.

RECOMMENDATION 12. Ensure effective business continuity and disaster recovery planning.
All market participants should, and all systemically important institutions must, regularly review, update, and test their business continuity and disaster recovery plans, including evaluation of reliance on third parties, to ensure with reasonable certainty that critical operations will continue with a high level of integrity and sufficient capacity following a disruption or disaster.

RECOMMENDATION 13. address the possibility of failure of a systematically important institution.
Market participants in each financial center should work together to identify those institutions, or parts thereof, that are systemically important to the clearing and settlement process. User groups should be established to address how they would react if, despite strengthened business continuity and disaster recovery plans, there were a failure for whatever reason at one of these institutions. Ways of mitigating the risks created should a systemically important institution fail, such as building a real-time data depository, should be evaluated. Where it is determined that effective and feasible solutions may exist, detailed business cases setting out the costs and benefits should be built up, and decisions on future actions and investment decisions should be taken accordingly. As well as enforcing suitably high standards of business continuity and disaster recovery planning in systemically important institutions, regulators and overseers should encourage this process of industry-wide contingency evaluation and planning.

RECOMMENDATION 14. Strengthen assessment of the enforceability of contracts.
Market participants should ensure that due diligence procedures examine contract enforceability, including basic formation and validity, as well as power and authority to contract.

RECOMMENDATION 15. Advance legal certainty over rights to securities, cash, or collateral.
Market participants must be able to determine, with certainty and reasonable cost and effort, what law defines and governs their rights to securities, cash, or collateral in a clearing and settlement system or other intermediary, what those rights are, and how to perfect and enforce them.

RECOMMENDATION 16. Recognize and support improved valuation Methodologies and closeout netting arrangements.
Market participants should ensure that master agreements provide that upon the early termination of a transaction or group of transactions, the determining party will have the flexibility to value such transactions by the method that is most likely to produce a commercially reasonable valuation at the time of termination. Market participants should include closeout netting provisions in their contract documentation. Relevant authorities in each jurisdiction should ensure that their laws give effect to closeout netting for all central counterparties, brokers, end users, and other market participants, and for all entity, transaction, and asset types.

IMPROVING GOVERNANCE

RECOMMENDATION 17. Ensure appointment of appropriately experienced and senior board members

Members of the boards of securities clearing and settlement infrastructure providers should, individually and collectively be of a weight in terms of experience and seniority to discharge the enlarged strategic, risk, and operational management oversight responsibilities described in this report.

RECOMMENDATION 18. Promote fair access to securities clearing and settlement networks.

Boards of securities clearing and settlement service providers, other organizations providing similar services, and public authorities should ensure that rules and other requirements that control or limit access to securities clearing and settlement services are accepted only where they are necessary and are designed exclusively for the purpose of controlling financial, operational, reputational, or regulatory risks; maintaining the safety of the system; or achieving other reasonable public policy objectives. Networks and services should be accessible to all users that pass risk and safety evaluations and enjoy appropriate financial standing, and users should be free to select the mix of functions and services that they wish to use on the basis of straightforward, transparent, and fair tariff policies grounded on the principle of user pays.

RECOMMENDATION 19. Ensure equitable and effective attention to stakeholder interests.

Board participation should represent different stakeholder interests fairly and equitably. Provision should be made for regular review of, and for changes as necessary in, board composition to ensure continuing balanced representation of varying stakeholder groups, including users.

RECOMMENDATION 20. Encourage consistent regulation and oversight of securities clearing and settlement service providers.

Providers of securities clearing and settlement services should be subject to consistent and transparent regulation and oversight, which should focus on the activities undertaken and risks incurred. Standards of regulation and oversight of cross-border activity should be complementary and consistently applied across all relevant jurisdictions. As a long-term goal and where coherent with other public policy objectives, regulatory and oversight standards should be harmonized.

APPENDIX 3:

ONGOING WORK OF THE LEGAL SUBCOMMITTEE

THE LEGAL SUBCOMMITTEE AND DR. PHILIPP PAECH did sterling work on G30's recommendations 14-16. The following appendix is intended to be of particular use to lawyers and those specialists who require further detail as to the legal framework that surrounds and underpins clearing and settlement in the 15 target jurisdictions. Based on this work, the Legal Subcommittee at a later date may investigate the current state of contract formation laws in certain emerging market countries that are increasingly of commercial interest to market participants.

RECOMMENDATION 14:

Strengthen assessment of the enforceability of contracts

The Legal Subcommittee's general conclusion when assessing the issues of legal risk identified in recommendation 14 within the set of 15 countries was that adequate conditions of legal enforceability exist within these areas. However, the Legal Subcommittee believes that the legal risk issues identified in recommendation 14 may be more prevalent in countries with developing financial markets. Thus it has been proposed to investigate the current state of contract formation laws in certain emerging market countries that are increasingly of commercial interest to market participants.

Recommendation 14 in the 2003 *Plan of Action*

This recommendation focused on the four basic categories of contractual enforceability issues that are fundamental to business contracts. These relate to:

> *Formation and validity of contract* refers to the principle that the law of jurisdiction that governs the contract or is otherwise applicable must respect and enforce the agreements accomplished and evidenced in the manner utilized by the parties. The enforceability of oral and electronic contracts was raised in connection with this issue.
>
> *Issues of power and authority* refer to the statutory empowerment and formalities applicable to parties entering into contracts. These often vary by jurisdiction and type of entity. In many cases, legal capacity and authority must be traced to the legal powers of the organization, the approval of the governing board, and the delegated power of the individual proposing to commit the organization. Understanding the applicability of the doctrine of apparent authority is important in this context.
>
> *Issues of public policy* refer to the fact that enforceability generally depends on whether aspects of the agreement violate law or public policy and on the effect of the violation in the relevant jurisdiction. A typical example cited by recommendation 14 is the gambling law of a jurisdiction.
>
> *Integrity and transparency of the legal system* refers to the reality that, regardless of the theoretical validity of a contractual obligation, access to and the reliability and transparency of the legal system that may be used to enforce the contractual obligation may be an additional risk that should be considered by market participants.

Recommendation 14 stated that market participants should analyze these issues carefully and take remedial steps where necessary to avoid being subject to laws that may not uphold these basic principles of contractual enforceability.

The *geographic* scope of the Legal Subcommittee's review of recommendation 14 has been limited to the 15 jurisdictions identified in the G30's 2003 Global Clearing and Settlement *Plan of Action*.

Consistent with the G30's *Plan of Action,* the *product* scope of the Legal Committee's review has focused on developments relating to securities transactions and has not included developments relating to foreign exchange or other products. Although recommendation 14 refers generally to contract enforceability issues, the Legal Subcommittee has not covered enforceability issues relating to contractual provisions relating to credit support or close-out netting since these issues are covered by recommendations 15 and 16, respectively.

DETAILED COMMENTARY

DILIGENCE PROCEDURES, ORAL/ ELECTRONIC AGREEMENTS, AND APPARENT AUTHORITY

The internal procedures of market participants (including both private and public market participants such as central banks) typically incorporate standards for pre-trade diligence on counterparties. These standards include obtaining evidence of capacity of the counterparty to enter into the relevant transactions (such as articles of organization statutory excerpts) and evidence of signing authority (such as board resolutions, incumbency certificates, extracts from commercial registers, and other statutory records or filings).

Most of the 15 jurisdictions covered by the G30 report (including the United States, the UK, Belgium, Germany, Singapore and Hong Kong) have laws upholding principles of apparent authority. These principles may on occasion restrict reliance on apparent authority when a public record of a market participant's authorized signatories is available.

Most of these jurisdictions also have statutes or other laws that uphold the validity of oral and electronic contracts relating to financial products. Typical electronic trading agreements require that the buyer of access to electronic trading systems monitor the authority of employees using such systems.

Certain regulatory standards incorporate principles of contractual enforceability. For example, one of the netting requirements under the Basel II Capital Accord rules is that netting contracts are valid, binding, and enforceable under relevant laws. These rules, when adopted by financial regulators in various jurisdictions, will provide an incentive to market participants to ensure that their due diligence and enforceability review procedures are sufficient to meet regulatory scrutiny.

However, one unhelpful development in financial markets is the practice of some market participants to attempt to shift the burden of monitoring the trading activities of their own employees by sending trader authorization letters to their counterparties. Such letters authorize counterparties to take trading instructions (limited as to the type of transaction or amount involved, as the case may be) only from certain individuals specified in such letters. This type of shifting of risk relating to internal controls to external counterparties (many of whom are large global financial dealers with separate product-based trading divisions spread across multiple time zones) may increase systemic risk. To that extent, this practice should be discouraged.

PUBLIC POLICY AND LEGAL SYSTEMIC INTEGRITY

The 15 jurisdictions covered by the G30's Settlement and Clearing *Plan of Action* generally have laws protecting the enforceability of financial contracts. Gambling laws and similar statutes that historically may have limited the enforceability of financial contracts no longer apply to most standard financial market transactions. However, market participants should be aware that some types of financial contracts such as credit derivatives, certain commodity derivatives, and new types of derivatives such as weather derivatives may fall outside the scope of legislation protecting financial transactions.

Emerging market countries typically have laws that limit the enforceability of financial contracts. One example of this are the *sharia* laws in jurisdictions subject to Islamic law. Market participants should analyze such laws before entering into transactions with counterparties in these jurisdictions

and structure transactions after taking such laws' restrictions on enforceability into account. In addition, extralegal factors such as the integrity of the judicial system should be considered before entering into these transactions.

2006 RECOMMENDATIONS

To further enhance diligence guidelines at the level of the market participant, industry groups should publish guidelines and, where possible, establish databases containing information that would help market participants when analyzing capacity and authority issues. One example of such an endeavour is a current project by the European Financial Market Lawyers' Group (EFMLG) focused on formulating Best Practice Guidelines relating to Signing Authorities and Powers of Attorney.[25] This project is scheduled to be completed in 2006. One of the EFMLG's aims is to achieve a common approach as far as practicable to establishing at the outset the requirements for evidencing authority for jurisdictions within the European Union, thus reducing the need for further inquiries, providing a clear and unambiguous description of the scope of the authority, and avoiding externalization of internal controls.

Trader authorization letters that attempt to shift the monitoring of trading authority to trading counterparties may increase systemic risk and should be discouraged by regulators and industry groups.

Before entering into financial transactions, market participants should investigate restrictions on enforceability that may apply in the jurisdictions where the content may be enforced. While most standard financial transactions are typically enforceable in the 15 jurisdictions covered by the G30's report, certain types of transactions like credit derivatives, certain commodity derivatives, and weather derivatives may raise issues that should be investigated before entering into such transactions.

Before entering into financial transactions with emerging market counterparties, market participants should investigate the power and authority of such counterparties to enter into transactions, the enforceability of such transactions under laws governing the insolvency of such counterparties, and the integrity of the judicial system in such jurisdictions.

RECOMMENDATION 15: Advance legal certainty over rights to securities, Cash, or collateral

This recommendation was aimed at ensuring that the legal infrastructure underlying the cash and securities holding system would allow market participants to determine in advance of any action, with certainty, and with only reasonable effort:

- what (domestic) substantive law governed their rights to securities, cash, or collateral in a clearing and settlement system or other intermediary,
- what those rights were, and
- how to enforce them.

Consequently, recommendation 15 dealt with issues of "conflict-of-laws" and "substantive law" regarding securities, cash, and collateral. The Legal Subcommittee dealt with these aspects separately:

- Conflict-of-laws issues regarding securities and collateral over securities
- Substantive law issues regarding securities and collateral over securities
- Substantive law issues regarding cash and collateral over cash.[26]

The goals set out in the G30 2003 *Plan of Action*, harmonization in both areas—conflict-of-laws and substantive law—are on the right track, although further efforts by legislators, regulators, and market participants are necessary.

25 http://www.efmlg.org

26 Conflict-of-laws difficulties regarding cash or collateral over cash was regarded as a non-issue.

On a global scale, the *Hague Securities Convention* (conflict-of-laws) and the *draft Unidroit Convention* (substantive law) are under active consideration. Furthermore, there is legislation in place within the EU that provides a sound and harmonized framework for conflict-of-laws issues, with further work underway on harmonization of substantive law.

Recommendation 15 in the 2003 *Plan of Action*

As background to this urgent recommendation, the 2003 *Plan of Action* emphasized the fact that modern developments in systems for holding cash and securities and the cross-border nature of an increasing volume of transactions had not been matched by developments in the underlying legal infrastructure. To increase the efficiency of both local and cross-border transfers and collateral transactions, the vast quantity of securities were being held, transferred, and pledged by entries to accounts with clearing and settlement systems and other intermediaries, rather than directly in physical form or directly by issuers.

Recommendation 15 called for action by a broad range of market participants and actors, including financial supervisors, central banks, intermediaries, end users, financial trade associations, and legislators. It stated that there were few areas where action by intermediaries and end users alone could achieve results, but in a number of areas determinations by the boards of clearing and settlement entities, financial supervisors, and central banks could be effective. In still other cases, and ultimately for the system as whole, national laws would need to be harmonized so as to be consistent with the stated objectives. The original recommendation 15 addressed the following four issues in detail: conflict of law; protection against intermediary insolvency risk; pledging and realization procedures; and finality.

Conflict of Law. The report stated that financial supervisors and legislators should ensure that the Hague Securities Convention was signed and ratified by their respective nations as soon as was reasonably possible. The Hague Convention, once ratified by all relevant nations, will ensure that there will be a clear and certain answer to the question—in an international setting—as to which law governs the determination of (a) the legal nature of the rights arising out of a credit of securities or cash to a securities account; (b) the steps required for a transfer or pledge of securities or cash credited to such accounts to be enforceable among the parties, including the intermediary, and senior to the rights of third parties; and, (c) the steps required to realize a pledge of securities or cash credited to such accounts.

Protection against intermediary insolvency risk. Recommendation 15 also postulated that the local law should provide that the rights of a person holding securities through an account with an intermediary in their jurisdiction were senior to the claims of the intermediary's creditors to such securities, except where the intermediary affirmatively granted such creditors control over such securities. If the financial supervisor or central bank was unable to provide such confirmation, it should take all appropriate action to ensure that its local commercial and bankruptcy laws were interpreted or amended so as to achieve such a result.

Pledging and realization procedures. Recommendation 15 pinpointed also that local laws that condition the effectiveness of pledging or govern the fairness or realizing on collateral should be simplified to facilitate and encourage risk reduction by reducing the cost of collateral transactions.

Finality. Lastly, all clearing systems and settlement systems were urged to specify in plain language the moment when a transfer or pledge of securities would become "final" (that is, irrevocable and unconditional) in its rules or contracts with its account holders. Financial supervisors and central banks should require this specification from each central securities depository subject to their jurisdiction.

DETAILED COMMENTARY

Full implementation of recommendation 15 will be achieved only by adoption of due diligence standards by market participants, preparation of conventions and legal guidance where appropriate, and adoption of a solid legal framework for cross-border transactions. Thus ultimate responsibility to provide a sound legal basis for cross-border financial transactions rests with national supervisors, market overseers, and legislators who must work individually and collectively to provide a solid legal framework.

CONFLICT-OF-LAWS REGARDING THE HOLDING AND TRANSFER OF SECURITIES HELD WITH AN INTERMEDIARY

As the value, number, and speed of cross-border securities transactions continues to increase dramatically, the need for uniform conflict of laws rules that reflect the reality of how securities are held, transferred, and pledged today (that is, by electronic book-entry through securities accounts) has become all the more critical. Legal uncertainty as to the law applicable to the perfection, priority, and other effects of transfers not only generates significant friction costs, it also constitutes a major obstacle to desirable reductions in credit and liquidity exposures. Increased exposure to unsecured credit risk amplifies systemic risk and the potential proliferation of the number of bankruptcies.

The Hague Securities Convention seeks to address these uncertainties. In its January 2003 report "Global Clearing and Settlement: A Plan of Action," the G30 stated:

> "Financial supervisors and legislators should ensure that the Hague Convention on the Law Applicable to Certain Rights in Respect of Securities Held with an Intermediary, adopted on December 13, 2002, is signed and ratified by their respective nations as soon as is reasonably possible. The Hague Convention, once ratified by all relevant nations, will ensure that there will be a clear and certain answer to the question in an international setting as to which law governs in determining whether a collateral taker has received a perfected interest in pledged securities" (p. 47).

The status of ratification of the Convention is summarized in Box A3.1.

Solution Provided by the Hague Securities Convention[27]

The Convention's primary conflict of laws rule is contained in Article 4. This rule is based on the relationship between an account holder and its intermediary. It addresses the conflict-of-laws issue by specifying a primary rule of applicable law based on the express agreement by the parties to an account agreement (not the parties to any collateral or other agreement) on the law governing all the issues falling within the scope of the Convention. This may be expressed in either of two ways: if the parties expressly agree on a law governing their account agreement (general governing law clause), that law also governs all the issues falling within the scope of the Convention; if, however, the account holder and its relevant intermediary expressly agree that the law of a particular State will govern all the issues falling within the scope of the Convention, that law governs all these issues (whether or not there is a separate choice of another law to govern the account agreement generally). The rule is not based on an attempt to "locate" a securities account, the office at which a securities account is maintained, an intermediary, the issuer, or the underlying securities. The parties' choice of law,

27 The Hague Convention on the Law Applicable to Certain Rights in Respect of Securities Held with an Intermediary (Hague Securities Convention) adopted in December 2002 under the auspices of the Hague Conference on Private International Law. The text of the Convention is available on the website of the Hague Conference at < http://www.hcch.net >. For a comprehensive analysis of the Convention, see the Explanatory Report prepared by Roy Goode, Hideki Kanda, and Karl Kreuzer, with the assistance of Christopher Bernasconi (Permanent Bureau), Martinus Nijhoff Publishers, Leiden/Boston, October 2005.

Box A3.1 Status of Implementation of the Hague Securities Convention

The status of implementation of recommendation 15 (as far as it relates to the Hague Securities Convention) may be summarized as follows, as regards the 15 target jurisdictions:

North America

Canada. The Uniform Securities Transfer Act has been introduced in the Ontario provincial legislature for enactment in 2006; other provinces are expected to follow suit shortly.

United States. The U.S. government is actively working toward signature of the Convention, together with Switzerland. The U.S. government is open to working with other governments that may wish to participate and join that effort.

Europe

Targeted EU markets: Belgium, France, Germany, Italy, Luxembourg, the Netherlands, Spain, the United Kingdom. The Convention is under active consideration in the EU. Subsequent to the publication of the Hague Convention Explanatory Memorandum, the Commission agreed, upon request of the European Council and recommendation by the European Central Bank, to prepare, a legal assessment of four specific issues and then to decide whether changes are needed to the current signature proposal.[a]

Since 1998, harmonized conflict-of-laws provisions have been introduced successively for the matters covered by the Settlement Finality Directive[b] of May 1998, the Collateral Directive[c] of June 2002 and the Banks Winding-up Directive of April 2001.[d] While these rules provide for a sound and harmonized framework at EU level, the choice-of-law rules in the Hague Convention are broader in scope and so remain an important goal.

Switzerland. The Swiss government is actively working toward signature of the Convention, together with the United States. The Swiss government is open to work with other governments that may wish to participate and join that effort.

Asia-Pacific

Australia. Subject to the clarification of certain legal issues, the Australian government hopes to be in a position to make progress in detailed domestic consultations and broader discussions on the benefits of the Convention with affected interests in Australia in 2006.

Hong Kong. The government of the Hong Kong Special Administrative Region of the People's Republic of China (the HKSAR) is actively considering the Convention, including its importance to the financial industry and the securities market. The government of the HKSAR will provide its views to the Central People's Government in due course. In accordance with Article 153 of the Basic Law, the application of an international agreement to the HKSAR shall be decided by the Central People's Government, in accordance with the circumstances and needs of the HKSAR, and after seeking the views of the government of the HKSAR.

Japan. The Convention is under active consideration. There are plans to sign and ratify the Convention in due course.

Singapore. The Convention is under consideration.

a See Commission "White Paper on Financial Services Policy (2005—2010)," p. 14, (http://europa.eu.int/comm/internal_market/finances/policy/index_en.htm#actionplan).

b Directive (98/26/EC) of 19 May 1998 on Settlement Finality in Payment and Securities Settlement Systems, OJ L 166, 11 June 1998, 45 ff. Art. 9(2) of the Settlement Finality Directive reads as follows: "Where securities (including rights in securities) are provided as collateral security to participants and/or central banks of the Member States or the future European central bank as described in paragraph 1, and their right (or that of any nominee, agent or third party acting on their behalf) with respect to the securities is legally recorded on a register, account or centralised deposit system located in a Member State, the determination of the rights of such entities as holders of collateral security in relation to those securities shall be governed by the law of that Member State."

c Directive (2002/47/EC) of 6 June 2002 on Financial Collateral Arrangements, OJ L 168, 27 June 2002, 43 ff. Art. 9 of the Collateral Directive reads as follows: "1. Any question with respect to any of the matters specified in paragraph 2 arising in relation to book entry securities collateral shall be governed by the law of the country in which the relevant account is maintained. The reference to the law of a country is a reference to its domestic law, disregarding any rule under which, in deciding the relevant question, reference should be made to the law of another country. 2. The matters referred to in paragraph 1 are: (a) the legal nature and proprietary effects of book entry securities collateral; (b) the requirements for perfecting a financial collateral arrangement relating to book entry securities collateral and the provision of book entry securities collateral under such an arrangement, and more generally the completion of the steps necessary to render such an arrangement and provision effective against third parties; (c) whether a person's title to or interest in such book entry securities collateral is overridden by or subordinated to a competing title or interest, or a good faith acquisition has occurred; (d) the steps required for the realisation of book entry securities collateral following the occurrence of an enforcement event.". As of October 2005, the Netherlands still have to implement the Collateral Directive.

d Directive (2001/24/EC) of 4 April 2001 on the Reorganisation and Winding up of Credit Institutions, OJ L 125, 5 May 2001, 15 ff. Art. 24 of the Banks Winding-up Directive reads as follows: "The enforcement of proprietary rights in instruments or other rights in such instruments the existence or transfer of which presupposes their recording in a register, an account or a centralised deposit system held or located in a Member State shall be governed by the law of the Member State where the register, account, or centralised deposit system in which those rights are recorded is held or located."

however, will be effective for purposes of the Convention only if, at the time of the agreement on governing law, the relevant intermediary has a "Qualifying Office" in the selected State: that is, an office that serves certain functions relating to securities accounts or is identified, by any specific means, as maintaining securities accounts in that State.[28]

The Hague Securities Convention is a pure conflict-of-laws convention. The law determined by the Convention (Convention law) applies to all the issues enumerated in the exhaustive list in Article 2(1). An issue not specified in Article 2(1) does not fall within the Convention's scope; therefore, the law applicable to any such issue is not determined by the Convention. The Article 2(1) issues include in particular the legal nature and effects against the intermediary and third parties of rights resulting from a credit of securities to a securities account, as well as the law governing the legal nature and effects against the intermediary and third parties of a disposition of securities. The Convention law also determines the perfection requirements of a disposition and whether an interest extinguishes, or has priority over, another person's interest. Further, the Convention law also governs whether an intermediary has any duties to a person other than the account holder who asserts, in competition with the account holder or another person, an interest in securities held with that intermediary. This includes the question whether so-called upper-tier attachments are permissible. The Convention law also governs the requirements for the realization of a security interest in securities held with an intermediary. Finally, the Convention law governs whether a disposition of securities held with an intermediary extends to entitlements to dividends, income, or other distributions, or to redemption, sale, or other proceeds.

SUBSTANTIVE LAW ISSUES REGARDING SECURITIES AND COLLATERAL OVER SECURITIES

Recommendation 15 promotes enhancing:

- Protection against intermediary insolvency risk
- Pledging and realization procedures, and
- The definition of the finality of a transaction.

These three issues depend on operational arrangements on the one hand and on their legal underpinnings on the other hand. As regards the legal side, contractual arrangements are important, but ultimately legal certainty depends on the underlying law. As regards contractual arrangements, the Legal Subcommittee stresses the need for diligent risk management procedures at the level of each firm. However, monitoring risk management on the level of the individual firm is beyond the scope of the 2003 *Plan of Action*.

As regards underlying law, legislative action in respect of the above-mentioned issues is needed in most of the 15 target countries. In some countries, the existing internal legal framework might not provide for a clear and simple solution, especially if the system were to be tested in times of "stress": for example, the insolvency of a major market participant. Additionally, many systems are to some extent incompatible with each other. This not only increases legal risk, but also increases transaction costs and the cost of credit secured by providing security over securities. Consequently, the G30 Legal Subcommittee endorses the principle that substantive law relating to the holding and transfer of securities

28 See Art. 4(1)(a) and (b). – If the applicable law is not determined in accordance with the primary rule, there are certain fall-back provisions in Art. 5 of the Convention. They result, ultimately, in the application of the law of the jurisdiction in which the intermediary is incorporated or otherwise organized. Art. 6 sets forth a list of factors that must be disregarded when determining the applicable law under the Convention.

Box A3.2 The UNIDROIT Convention

Since September 2002, UNIDROIT, an intergovernmental organization,[a] has been working on an international convention on substantive law regarding intermediated securities. The UNIDROIT Convention aims to strengthen and harmonize the law which underlies securities holding and transfer, covering 14 of 15 target markets.[b]

The future UNIDROIT Convention will apply to all situations where securities of any kind (shares, bonds, derivatives, and the like), are credited to an account which is maintained by an "intermediary" (banks, brokers, central securities depositories, custodians) for another person.[c] The account holder could be either the investor or another intermediary. This is the universal standard situation today: that is, nearly all securities holdings will fall within the scope of the convention. Conversely, the future convention will not cover situations in which an investor holds a physical certificate.

Clear and certain interest at all times: The primary goal was to create a harmonized regime under which an account holder or a collateral taker has a clear and certain interest at all times, in particular in the event of the insolvency of an intermediary. The protection against insolvency risk and issues of finality of transfer, as highlighted in recommendation 15, could not be addressed in a manner isolated from other aspects. Therefore, the international work on substantive law of securities holding had to deal with a number of fundamental legal issues regarding securities holding and transfer. Among these are legal rules on:

- transfer(that is, acquisition and disposition of securities)
- creation of security interests in intermediated securities
- effectiveness of credits and reversal
- prohibition of so called upper-tier attachment
- priorities among competing interests and good faith acquisition, and
- loss-sharing in case of shortfall at intermediary level.

However, with a view to achieving the goal of providing a clear answer to the question whether an account holder, or collateral taker, respectively, has an interest in securities and what this interest consists of, the draft UNIDROIT Convention attempts to limit itself to issues that are essential. Consequently, issues that are not essential to achieve this goal are left out.

Collateral interests: Additionally, the draft UNIDROIT Convention addresses the realization of collateral interests in securities with a view to simplifying enforcement so as to reduce risk and reduce the cost of collateral transactions. It is therefore in line with the corresponding second fundamental requirement of recommendation 15. In its Chapter VII, the draft UNIDROIT Convention addresses issues regarding a right to use collateral securities ("rehypothecation") and regarding the protection of so-called top-up and substitution arrangements. Although these issues are not directly linked to legal risk, they were included in the draft because of their importance for systemic stability. The rules on realization of securities collateral now proposed by the UNIDROIT draft are inspired by preexisting EU regulations contained in the Financial Collateral Directive (see below).

a The financial industry participates by providing expert knowledge to governmental delegations. Additionally, it provides input through several market associations that have been invited to actively participate as observers in the process, including ISDA, EMTA, ECSDA, AGC, CCP12, and EBF and others which have been invited to actively participate as observers in the process.

b UNIDROIT has 60 member States world-wide, including all a target countries (Hong Kong, though having its own jurisdiction, is a territorial unit of the PR China, which is a UNIDROIT member State), except Singapore, as well as the important emerging markets. Non-member States are able to ratify or to accede to UNIDROIT Conventions as Diplomatic Conferences for their adoption are open to both member States and non-member States.

c Full documentation can be found at http://www.unidroit.org/english/workprogramme/study078/item1/main.htm.

should be strengthened in a coordinated way by the 15 target countries and by other countries, particularly emerging capital markets.

The future UNIDROIT Convention

A global means for achieving this substantive law goal is the draft UNIDROIT Convention (see box A3.2). This Convention addresses substantive law regarding intermediated securities with a view to strengthening and harmonizing the law that underlies securities holding and transfer, and covers 14 of 15 target markets.[29] Moreover the underlying thinking corresponds exactly to what is postulated in recommendation 15. Intergovernmental negotiations on the UNIDROIT instrument are expected to continue through 2006 and come to an end in 2007 with the adoption of the Convention. Subsequent implementation in all relevant jurisdictions is a prerequisite for its coming into operation.

Measures by the European Union

There are important legislative measures already in place in all 25 members of the European Union, including the eight countries that are among the 15 that are the primary focus of this report. Since 2004, a further comprehensive project has been under way.

The Settlement Finality Directive of 1998 addresses the reduction of systemic and legal risks associated with participation in payment and securities settlement systems. It therefore essentially covers the finality issue raised in recommendation 15. The Directive applies to qualifying EU payment systems and securities settlement systems, as well as any participant in such a system, and to collateral security provided in connection with the participation in a system. Market participants that are not participating in a "system" in the sense of the Directive are not covered.

Articles 3, 5, and 7 address the effectiveness and irrevocability of payment and settlement transfer orders entered into a system and netting within a system, even in the case of the insolvency of a participant of the system. Articles 6 and 7 override rules that would have made certain transactions that took place prior to the opening of the insolvency proceeding void or ineffective (such as "zero hour rules"). Article 9(1) ensures that a collateral interest is effective in the event of the insolvency of the collateral provider.

The Financial Collateral Directive (FCD) of 2002 removes major impediments to the use of securities as collateral, in particular in a cross-border situation. It covers both collateral based on transfer of title and collateral not involving a transfer of ownership. Article 3 abolishes formalities as regards the creation of a collateral interest. Article 4 simplifies the procedures and formalities for the enforcement of collateral in a default situation. Article 5 establishes a right to use the encumbered securities. The provision of top-up collateral, substitution, and close-out netting are expressly recognized.

In addition to these two directives, the European Commission mandated a legal expert group, the Legal Certainty Group, in 2005 to address identified legal barriers for efficient cross-border clearing and settlement in the EU. The Group's work covers issues of legal uncertainty relating to the cross-border efficiency of EU securities clearing and settlement systems. Three main issues have been identified so far.

First is the absence of an EU-wide framework for the treatment of interests in securities held with an intermediary. This is perceived as hampering integration of EU financial markets. The relevant issues in this context are the nature of the investor's rights in relation to securities held in an account with an intermediary; the transfer of these rights, the treatment of upper-tier attachments, investor protection from insolvency of the intermediary; and the acquisition of these rights in good faith by third parties.

Second, there are differences in national legal provisions affecting corporate action processing, such as discrepancies in member states' laws as to the determination of the exact moment when a purchaser is considered to be the owner of a security: for example, for the payment of dividends.

29 UNIDROIT has 60 member states worldwide, including all target countries, except Singapore, as well as the important emerging markets. (Hong Kong, although it has its own jurisdiction, is a territorial unit of the PR China, which is a UNIDROIT member state.) Non-member states are able to ratify or to accede to UNIDROIT Conventions as Diplomatic Conferences.

Third, there are restrictions relating to the issuer's ability to choose the location of its securities that are contrary to the idea of an integrated financial market.

The Intersection between the Hague and UNIDROIT Conventions and EU Measures and the Future Development of these Initiatives

As a pure conflicts convention, the Hague Securities Convention has no effect on the substantive law that will be applied once the choice-of-law determination has been made. Therefore, even after the implementation of the Hague Convention, it remains the role of the substantive law of each jurisdiction to provide a sound legal framework regarding securities holding and dispositions that presents no gaps, uncertainties, burdensome complications, or barriers. This also means that issues of cross-border compatibility of the substantive law, as set out above, cannot be addressed by the Hague Convention.

Equally, a future substantive law regime cannot by its nature make the conflict-of-laws rule redundant. In the area in question, in any event, national law will continue to be applied to a given situation, although these laws might be harmonized with the laws of other countries. Therefore, market participants need to know with certainty, which country's law applies to a transaction.

Consequently, harmonization in both areas, conflict-of-laws and substantive law, must be pursued.

As to the scope of the harmonization of substantive law, both the UNIDROIT project and the measures taken by the EU go well beyond the steps required by recommendation 15. Their successful completion and implementation will contribute significantly to the stability and efficiency of clearing and settlement. This report therefore encourages competent national authorities and market participants to support these processes.

Despite the overlap in their scope, the work of UNIDROIT and the work of the recent EU Legal Certainty Group are not to be understood as substitutes for each other but as complementary. This is because, on the one hand, more countries participate in the UNIDROIT project (notably including the United States, Japan, Switzerland, Australia, and Canada) and, on the other hand, because the EU Legal Certainty Group might target a higher level of harmonization and even prepare the way for a global work on additional issues, such as corporate action processing. It is, however, most important that both projects proceed in a coordinated manner. Uncoordinated results would jeopardize global harmonization in the field of substantive law regarding securities settlement for years. As far as possible, therefore, both projects must go forward at the same pace. It is therefore necessary that sufficient resources are made available to both of them.

With a view to achieving full coverage of the 15 target countries, measures should also be examined that would allow the countries that are not yet involved to participate in the work on the UNIDROIT Convention.

CASH AND COLLATERAL OVER CASH: CONFLICT-OF-LAWS AND SUBSTANTIVE LAW

With regard to this aspect, the Legal Subcommittee felt that enforceability and finality of cash in the process of being paid cross border under a transaction involving securities might fall in a grey area. The issue is so far not included in any process of global harmonization. Given the complexity of this matter, it will be included in the Legal Subcommittee's future work program.

RECOMMENDATION 16: Recognize and support improved valuation methodologies and close-out netting arrangements

The Legal Subcommittee found that there have been many helpful developments relating to recommendation 16. These include the development of more flexible close-out netting

methodologies in major industry agreements and the passage of certain EU statutes that provide momentum for greater convergence of close-out netting laws in the European Union. However, as described in greater detail below, more work needs to be done.

Recommendation 16 in the 2003 *Plan of Action*

This recommendation focused on the importance of close-out netting in financial trading agreements. The ability of a non-defaulting party to terminate contracts and underlying transactions upon the insolvency or other default of its counterparty and net the resulting exposures under the contracts is essential to prudent risk management and systemic risk reduction in the financial markets. The 2003 Plan of Action identified the following important factors to be considered in connection with close-out netting:

Contractual valuation methodology. Market participants and industry groups should ensure that all master trading agreements should provide the party making the close-out calculation with the flexibility to value transactions by the method that is most likely to produce a commercially reasonable result at the time of termination. Such flexibility should include the ability to use alternative valuation tools when market conditions are illiquid and market quotation cannot be obtained.

Legal restrictions on close-out netting. The 2003 Plan of Action also identified several legal restrictions that could hamper a market participant's close-out netting rights. These are:

1. *Mandatory insolvency rules.* Close-out netting may offend principles of local insolvency law that impose a freeze on the disposition of the assets of the insolvency estate. Similarly, local insolvency liquidators may have "cherry picking" rights that allow the assumption of profitable contracts by the insolvent party and the rejection of contracts under which the insolvent party owes money to its counterparties.

2. *Entity types.* Certain entities may be subject to special insolvency procedures that override netting arrangements.

3. *Contracting parties.* Close-out netting is generally unenforceable where there is no mutuality of obligations. In addition, netting legislation may restrict netting to agreements where either one or both parties are of a particular type.

4. *Cross-border issues.* Agreements covering multiple branches of the parties may involve laws of many different jurisdictions. Some of these jurisdictions may have "ring-fencing" statutes that allow a local liquidator to first satisfy the claims of local creditors before those of foreign creditors.

5. *Central counterparties.* The rules of most central counterparties such as clearing corporations and exchanges do not provide a mechanism for dealing with the default of the central counterparty.

6. *Variable application of netting laws.* The differing scope and terms of close-out netting rules in different jurisdictions affects the ability of market participants to manage their counterparty risk exposures in an efficient manner. In some jurisdictions, close-out netting is mandatory in bankruptcy and close-out valuation is undertaken within statutorily prescribed parameters regardless of the contractual terms governing a transaction. In other jurisdictions, there are safe harbors that protect contractual

close-out netting rights. However, these safe harbors may be limited to certain types of financial products or certain types of counterparties

DETAILED COMMENTARY

Considerable progress has been made on a number of fronts as regards valuation methodologies and close-out netting. This progress has been driven by the implementation of appropriate standard master agreements. It has been further aided by the legal opinions on the enforceability of master netting agreements in jurisdictions where there is significant trading activity and participant interest. Work by the ISDA must be commended, from their promulgation of the master agreements to the so-called "Model Netting Act." The European Union has also clarified close-out netting arrangements with the passage of the Financial Collateral Directive.

CLOSE-OUT VALUATION METHODOLOGY

The call for the determining party to be provided with the flexibility to determine close-out valuation amounts in a commercially reasonable manner was implemented in the 2002 ISDA Master Agreement. The 2002 ISDA Master Agreement's definition of close-out amount provides some flexibility to the determining party when calculating a close-out amount in illiquid market conditions. The determining party may use external or internal valuation data when calculating the close-out amount for transactions subject to the 2002 ISDA Master Agreement using commercially reasonable procedures.

Other industry-standard master agreements, such as The Bond Market Association's Master Repurchase Agreement, the ISMA-TBMA's Global Market Repurchase Agreement, the Master Agreement for Financial Transactions sponsored by EBF/EACB/ESBG (EMA), and the FX Committee's International Foreign Exchange and Options Master Agreement also provide the determining party with similar flexibility when calculating close-out amounts.

CLOSE-OUT NETTING OPINIONS

Many industry associations have obtained legal opinions covering the enforceability of master netting agreements or similar arrangements in jurisdictions where there is significant trading activity or interest by financial market participants. These include ISDA, which has obtained close-out netting enforceability opinions for 49 jurisdictions worldwide covering the ISDA Master Agreements; the EBF, for 17 jurisdictions in Europe covering the EMA, inclusive of its cross-product netting provisions; the Foreign Exchange Committee, for 34 jurisdictions worldwide covering the FX master agreements; and ICMA/TBMA, for 43 jurisdictions worldwide covering the Global Master Repurchase Agreement. These opinions are accessible to members of these industry groups and also through certain subscriber databases.

NETTING LEGISLATION DEVELOPMENTS

The ISDA Model Netting Act[30] sets out key elements of sound netting laws and has influenced legislation in the British Virgin Islands (where many hedge funds are organized), the Czech Republic, Hungary, and Poland. Similar legislation is being considered in Anguilla, India, Israel, and Pakistan.

In addition, the EU Financial Collateral Directive (FCD), which also covers close-out netting arrangements, has been implemented in all but one country of the EU. However there are some problems with gaps in the FCD notably, that it does not set out core principles that should underlie a sound netting regime.

While the FCD requires EU member states to ensure the enforceability of close-out netting provisions (for example, against the possibly adverse effects of liquidation proceedings or reorganization measures), it does so only in the context of there being a provision of collateral involving cash or securities (whether through pledge/security interest or repo/title transfer). Furthermore, the FCD contains definitions only as to the general nature of a close-out netting provision, rather than

30 http://www.isda.org/docproj/model_netting.html.

specific details on its content or basic principles as to how it should operate.

In this regard, ISDA and the EFMLG have suggested further EU netting laws to be proposed by the European Commission with a view to filling gaps, promoting convergence, and resolving one possible legal uncertainty in the netting legislation of the EU Member States. Furthermore, the European Financial Market Lawyers Group (EFMLG) has published in October 2004 a report on the protection for bilateral insolvency set-off and netting agreements under EU law, identifying various legal uncertainties on the enforceability of contractual set-off and netting agreements that result from certain provisions of the afore-mentioned EU legal acts.

In this regard, ISDA has asked that the development of an EU netting instrument be taken forward by the European Commission with a view to filling gaps and promoting convergence in the netting legislation of the EU member states. Furthermore, the European Financial Market Lawyers Group (EFMLG) published a report in October 2004 on the protection for bilateral insolvency set-off and netting agreements under EC law. It identified various legal uncertainties on the enforceability of contractual set-off and netting agreements that result from certain provisions of the afore-mentioned EC legal acts.

Other EU legislation of note includes the EU Insolvency Regulation (applying to individuals and ordinary corporations) and the two EU Winding-Up Directives (applying to banks and insurance companies, respectively), which also include safe harbors for close-out netting arrangements and/or rights of set-off.

In the United States, the recently enacted bankruptcy reform bill (Title IX of the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005) increases the legal certainty of netting across different financial products with respect to counterparties covered by the U.S. Bankruptcy Code, and financial institutions covered by the Federal Deposit Insurance Act and certain other laws.[31]

In Japan, the new Bankruptcy Code enacted in 2004 and other insolvency legislation increased the legal certainty of close-out netting arrangements under bankruptcy, civil rehabilitation, and corporate reorganization procedures.[32]

2006 RECOMMENDATION

Although there have been many positive developments in the area of netting legislation, more work needs to be done to ensure the enforceability of netting and collateral rights with respect to certain types of counterparties that are now significant participants in financial contract markets.

Close-out netting and credit support liquidation safe harbors should apply to government-sponsored entities, pension plans, insurance companies, and similar entities, and should be crafted to ensure broad protection of close-out netting rights and to reduce systemic risk.

On a global scale, legislators and market participant should scrutinize their existing netting legislation and where necessary, takes steps to bring it into conformity with the ISDA Model Netting Act.

The institutions of the EU are called upon to encourage new Member States to implement the FCD with due regard as to the provision of an effective regime for close-out netting and should give guidance, where necessary. Greater convergence of existing netting regimes in all 25 EU member States would help strengthen

31 See also the Basel Committee on Banking Supervision, "The Application of Basel II to Trading Activities and the Treatment of Double Default Effects," July 2005, pp. 6 and 23.

32 See Article 58 (Paragraph 5) of the Bankruptcy Code. This provision applies mutatis mutandis to the Civil Rehabilitation Law (Article 51) and the Corporate Reorganization Law (Article 63).

legal certainty in the European financial markets. The European Commission is urged to complete its investigation and, if necessary, resolution of any possible uncertainty arising from the Insolvency Regulation and the Winding-Up Directives for banks and for insurance companies, which include provisions in different terms dealing with rights of set-off and/or close-out netting arrangements. In addition, an EU insolvency regime that ensures adequate protection for rights of set-off and close-out netting arrangements needs to be adopted for market counterparties (such as broker dealers/investment firms) that are not-banks/insurance companies covered by the Winding-Up Directives and for whom the Insolvency Regulation might not currently apply or its provisions (i.e. dealing with individuals and ordinary corporation) are not wholly appropriate.

APPENDIX 4:

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26. Japan's Savings and External Surplus in the World Economy
Masaru Yoshitomi. 1989

25. 1992: The External Dimension
David Henderson. 1989

APPENDIX 5:

GROUP OF THIRTY MEMBERS 2006

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