Straight-Through Processing (STP) is Everyone's Business

STP in plain language — why all securities industry participants should care about STP

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Why Should You Care about Straight-Through Processing (STP)?

WHAT IS STP FOR FIRMS IN THE SECURITIES INDUSTRY?

There are as many definitions of STP for securities transactions as there are securities practitioners. Yet they all have the same vision — eliminate every manual or duplicate step or time barrier from trade origination to its final settlement. Getting the maximum benefit from moving to STP means participants must examine their systems and processes and remove all the manual and redundant processing steps for the entire life cycle of a trade from end to end - not just from the time an order is received through to reconciliation, but potentially as early as account set-up when the client relationship is established through credit authorizations, money and securities transfers, securities lending and other related activities, ending with statement production and delivery.

Inefficient securities settlement processes cost the Canadian securities industry an estimated \$140 million a year. This means higher operating costs for investment managers, broker/dealers, custodians and others in the securities industry, all of which ultimately impact investor returns. STP is aimed at keeping individual participants and the entire Canadian securities industry competitive in the face of future capital markets challenges by lowering our costs, errors and risks. STP — or the lack of it — affects everyone. To become truly efficient and remain competitive in the global marketplace, we must have STP in place not just within each firm but also amongst all firms. STP requires a cross-industry effort and can only be truly effective if all parties in the securities processing chain are operating on an STP basis.

Who should care about STP?

- Investors institutional and retail
- Issuers
- Investment managers
- Advisors
- ✓ Mutual and segregated (seg) funds ✓
- Mutual fund dealers
- ✓ Broker/dealers
- ✓ Insurance companies
- Pension plans
- Funds and plan trusteesFoundations, endowments

- Custodians
- Exchanges and alternative trading systems
- Clearing and settlement agencies
- Service bureaus
- Industry associations
- Transfer and paying agents
- Securities registrars
- Provincial and federal regulators

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The Canadian Capital Markets Association (CCMA) is a federally incorporated, not-for-profit organization launched to identify, analyze and recommend ways to meet the challenges and opportunities facing Canadian and international capital markets. Its mission is to enhance the competitiveness of Canada's capital markets through a forum of industry experts who provide leadership and direction to the investment community. Its core purpose is to promote straight-through processing (STP) strategies to reduce ongoing errors and processing costs; lower operational, market, settlement and systemic risks; and maintain the competitiveness of Canadian capital markets. Made up of representatives from all parts of Canada's capital markets, the CCMA will promote Canada's evolution to STP across all industry segments. CCMA volunteers have already contributed over 45,000 hours to cross-industry STP efforts. For more on the CCMA and STP, visit www.ccma-acmc.ca.

What's in it for me?

Whatever securities industry segment you're in, STP serves to:

- Lower processing costs
- Minimize operational, market, settlement and systemic risks
- Eliminate errors and fails
- Minimize exception processing
- Provide faster, better service and, ultimately, better prices for investors
- Position yourself for future growth by implementing scalable processes and systems
- Improve the competitiveness of Canadian capital markets.

Apart from reducing back-office costs and eliminating inefficient processes, STP of trade settlement details will:

- Promote improved cash management, compliance monitoring and data reporting
- Enable uniform and more timely notice of entitlements and other corporate actions
- Enhance securities lending operations
- Enable integration with U.S. and international capital markets participants
 the U.S. has targeted achieving cross-industry STP by June 2004
- Set the stage for the possible eventual move to a shortened settlement period such as T+1 (the day following trade date) or even T+0.

Promoted by the U.S. securities regulator and U.S. Securities Industry Association (SIA), T+1 was and may again become a rallying cry, whether industry-led or mandated by regulators. If the U.S. shortens the settlement cycle to T+1, Canada must also adopt a T+1 standard or lose capital markets business to the U.S. Firms and the industry should therefore consider in their STP planning analyses, if not implement, what is required to complete their part of the securities handling chain by at most T+1, both to bypass steps that may be "throw-aways" if T+1 is re-introduced and to obtain the greatest STP efficiencies.ⁱⁱ

WHAT DOES STP MEAN FOR THE SECURITIES INDUSTRY?

On an industry basis, STP means information passing seamlessly and electronically between all firms involved in the transaction process. It goes far beyond the buyer and seller to include all affected parties: data provider, exchange, service provider, computer operator, regulator and more. Extending beyond a single securities participant to the entire securities industry, STP implies electronic rather than manual interfaces between participants, competitors and providers.

"STP's success or failure depends on the strength of the weakest link. While you can reduce costs, lower risk and position yourself strategically by implementing STP on your own, that's only half the equation... bringing only part of the benefits. If you invest in becoming STP-compliant and your counterparties do not, your transaction will take off on your new fast-flowing four-lane superhighway only to hit bumps and potholes when it meets your counterparties' dirt road."

— Tom MacMillan, Chair, CCMA



And it doesn't have to cost a lot... Low-cost solutions can bring early gains

Case Study: Banking Costs Lowered over 85% through STP

Most people are familiar with the transition from in-branch services to automated teller machines (ATMs) and Internet banking. During the infancy of the move from manual to electronic, many complained about the costs, loss of personal service and more. Today, few would consider standing in a branch line-up. Many object if it takes longer than a few seconds to get their cash, yet they'll wait three days ... for now ... to get cash from securities sold.

What made banking STP happen?

- Highly reliable fully automated processes within each institution
- ✓ Common industry standards for exchanging electronic transactions
- Interconnectivity between institutions through networks such as Interac, Plus and Cirrus.

Most banking transactions are now completed in a single continuous electronic process taking minutes, if not seconds. And the costs of retail banking services have come down, down, down...

Branch banking \$1.08
Telephone banking \$0.54
PC banking \$0.26
Internet banking \$0.13

Where to start? If you are just in the early planning stages, check out the CCMA's STP Self-Assessment Checklist on the Media/Publications page at www.ccma-acmc.ca for a jump start on steps to get you on your way.

There is no doubt that some firms are spending and will spend a lot to achieve STP — their business cases justify it. But there are low-cost ways to make big strides towards achieving STP right now. For example, small to mid-size firms are finding savings, at literally no cost, by re-examining their internal processes to ensure all basic information is captured right from the start, including complete and accurate:

- Standard data for each client
- ▶ Settlement agent (custodian, broker/dealer, etc.) information
- CUSIPs, ISINs, SEDOLs and other security identifiers
- Buying and selling broker/dealer information
- Trade details (price, quantity, security description).

Case Study: This past year, a custodian worked with two investment managers who needed to update the broker/dealer and CUSIP numbers they were using. The investment managers cleaned up the data at minimal to no cost. *The result? An increase in STP electronic trade delivery rates for one from 30 to 60 per cent and for the other from around 30 to almost 80 per cent.*They can realise cost savings right now. iii

Participants should start to benchmark their systems and operations and see what improvements to make now. While larger firms will find it worthwhile (and almost certainly necessary) to invest in internal systems to facilitate STP, revised and improved internal processes, checks and controls, coupled with third-party STP systems, will enable many firms to become STP-compliant — and the costs need not be that great.

STP in the securities industry — what is it? what will it do?

STP is not new to the Canadian securities industry. Online brokerage and trading systems and the computerization of stock exchanges are all examples of STP. For securities settlement, some technological enhancements have been made to the front-end and aspects of the settlement process have been automated. However, middle and back offices continue to require significant numbers of staff to fix errors or provide missing information needed to settle a transaction. It's easy to forget processing details when participants want to be working on the next deal or winning the next client.

In its simplest terms, STP means that when a securities purchase or sale order has been originated and the trade order executed, the trade will settle on time, without further need for manual input or changes. Of the estimated \$140 million of annual savings flowing from STP, about \$35 million comes from not having to make corrections or provide missing information to settle trades.

In implementing STP, firms must look at all of their related systems and processes to ensure internal and external compliance with the following STP principles:

- Replacing manual with automated processing
- Meeting standards for data quality, timing and messaging
- Implementing real- or near-real-time functionality where possible
- Developing standard interfaces/interoperability.

Yes — it's a complex business

Securities trading and settlement is more complex than a cash withdrawal, bill payment or money transfer, which commonly involve only the client and the bank. A single securities transaction often involves multiple primary processes operating sequentially and ancillary processes operating in parallel, requiring active involvement of several independent participants. Further complexities arise due to the existing manual interfaces between many of the internal processes and external participants. **Exhibit 1** identifies some of the manual processes and duplication.

My service provider will take care of it ... not true

Your service provider can't correct your mistakes. They can't guarantee getting the right information where it needs to be, when it needs to be there, without you. While your service provider will provide technology solutions for you, they will not enter your data, follow up with your inhouse staff, contact your counterparties or, most importantly, manage your exceptions.

I can't afford it now

In an environment of poor securities market performance, the tendency of many firms will be to slow down or cut investment in systems. In fact, now is the time for analysis and planning to take advantage of STP gains. And the decision may be made for you... participants will find that they have to move on STP to keep pace with their upstream and downstream counterparties. The consequences of not moving towards STP may mean lost business and will certainly mean lost opportunities.

WHAT DOES STP MEAN FOR SECURITIES PROCESSING AROUND THE WORLD?

In July 2000, the Swiss clearing and settlement organization SIS SegaInterSettle slashed fees for the inhouse settlement of all global securities transactions by 90% from 10.00 to 0.90 Swiss francs per transaction. SIS settles around 60,000 securities — including all globally traded blue chips — in 43 markets and in all marketable currencies. The CEO of SIS said: "Our price leadership for inhouse and crossborder, domestic and foreign, is the result of our low risk and straight-through-based realtime settlement." SIS boasts that transactions in SIS are settled within seconds on a simultaneous, final and irrevocable delivery versus payment basis.

Euroclear says that Euroclear member firms can settle their equity trades for less than one euro (USD \$.90) per trade if their counterparty is also a Euroclear member. By contrast, Euroclear's CEO says, "a trade between a Euroclear member and a member of a local depository could cost up to USD \$30 per transaction because of additional expenses involved in processing through a local depository and one or more intermediary banks."

The South African depository STRATE

announced pricing changes in June 2000, which, when analysed, indicate that settlement costs for a non-STP trade are six times those of an STP-qualified transaction.

STP Benchmarks estimated that a move from a 55 to a 90% STP rate on equity transactions would reduce equities processing costs from over USD \$11 to just over USD \$1.ix

Tower Group and SWIFT estimate the cost of an error-free cross-border trade at USD \$10:

- 59% of settlement instructions need repair, costing an additional USD \$16
- 10% of settlements are mismatched, costing an additional USD \$26
- 15% of trades fail to settle on time, adding a further USD \$50

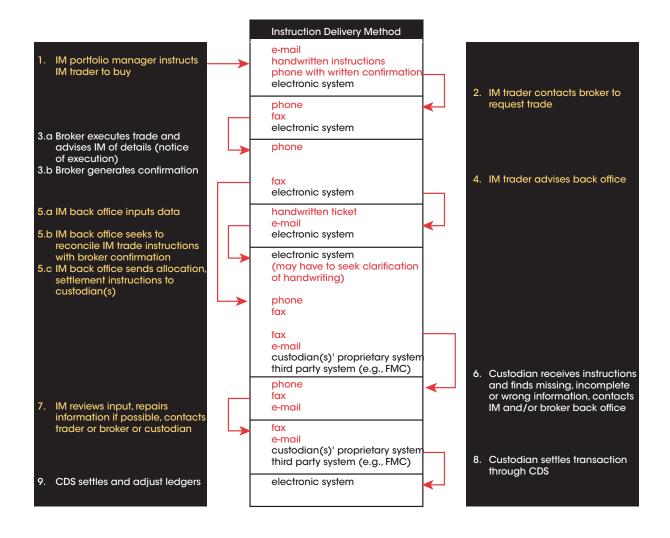
For every reduction in the number of cross-border trades requiring manual intervention to repair mismatches and settlement, firms will save USD \$92.*

Exhibit 1

Simple Securities Handling Process from an Investment Manager Perspective

Note: The following is a *highly simplified* transaction. It excludes the complexities of the mutual and seg fund business, where more parties would typically be involved. It excludes the challenges in the counterparties' shops where internal processes are also manual, for example, where a security has to be recalled from being on loan, where a physical certificate is involved or where a corporate action is in progress.

Legend: The delivery methods shown in **red** indicate manual processes, with a high risk of causing errors and correspondingly high costs. Activity between parties shown in **gold** shows the highly manual nature of the process *within* a firm. Activity between a party shown in **gold** and one shown in white highlights the areas of risk and costs *between* counterparties.



What's in it for Canadian investment managers insurance companies and broker/dealers?

Investment managers, insurance companies and broker/dealers all stand to gain from the efficiencies and savings described above, but they and other securities market participants have different problems, priorities and focuses.

Studies show that:

- Human error is the top reason for failed trades; the second most frequent cause is the provision of incorrect data.xi
- On the institutional side, common sources of manual intervention in Canada include correcting incorrect or misunderstood trade details from the investor, errors in order execution, trade inputting for orders submitted by fax/phone and discrepancies between counterparties' securities holding records. xii
- On the retail side, mutual funds processed in client name and the processing of seg funds rely on a combination of physical documents and network electronic functionality. Reliance on paper can result in additional errors, cost and delays.
- Manual intervention means that 13 or more people are actively involved in the processing cycle for a securities trade, compared to the two active participants in an STP banking transaction. xiii
- Once a trade has been executed, a domestic transaction needs up to 10 pieces of information to settle it; an international deal can require up to 16 data elements.xiv
- While the cost of manual intervention is high in Canada, cross-border costs multiply due to differences in time zones, laws, procedures, regulations, rules, languages and holidays one estimated cost of a failed cross-border trade is USD \$92 on top of the USD \$10 cost of an "error-free transaction." xv
- There are high error rates in corporate actions processing due to its manual nature it has been referred to as the "wild west" of the back-office because of the undisciplined processing that relies highly on manual handling.

As a result:

- Staff are "firefighters," under pressure to fix missing information to settle trades on time.
- Queries concerning trades often need trader or client advisor involvement, taking them away from their primary jobs.
- Only 54 per cent of institutional trades are reported to the Canadian Depository for Securities (CDS) Limited, Canada's equity and debt clearing and settlement organization, by the close of business on T+1 (in part due to technology, in part to our business culture and lack of defined market practice); less than 10 per cent of all institutional trades are confirmed by the end of T+1.xvi
- Corporate actions and entitlements are not being communicated and processed in a timely fashion.
- Securities lenders experience fails, resulting in disputes with borrowers over liability.
- The effect on insurance companies is heightened due to the overwhelming reliance on paper, for legislative, regulatory and historical reasons, to complete seg fund transactions.

In short, inefficient domestic and cross-border trade processing is impacting your bottom line today.



EXHIBIT 2 — INVESTMENT MANAGERS

DECLINE IN MANUAL INTERVENTION RATES

(TO COME FROM CGE&Y STUDY)

EXHIBIT 3 — BROKER/DEALERS DECLINE IN MANUAL INTERVENTION RATES (TO COME FROM CGE&Y STUDY)

What can investment managers, insurance companies and broker/dealers expect with STP?

- Eight-four per cent drop in manual interventions: Investment managers and broker/dealers surveyed in a recent CCMA-commissioned study expected to see an 84 per cent decline in the need to manually intervene in a trade (see Exhibits 2 and 3).
- Pewer problems in the case of business disruption: Participants with matched/confirmed trades on September 10, 2001 had fewer problems than those that did not following the terrorist attacks on the U.S. financial centre as they were able to match trades and correct errors earlier.
- Reduced risk: Reduced errors and faster corrections from STP technology and related processes will reduce operational, market and other risks.
- Decline in corporate action problems: There should be significant reductions in receiving notice of entitlements late, resulting in fewer late payments, reduced investment and market risks, less interest lost and fewer missed investment opportunities.
- Increased efficiency: Client name mutual fund and seg fund investors will have similar efficient electronic processing as accounts that are in nominee form.
- Less paper: Working with industry and the regulators, there should be declining paper work requirements for both client-name mutual funds and seg funds, thereby streamlined processing of these products.
- Easier compliance: More automated reconciliation and resolution activities will allow participants to better meet existing and future regulatory requirements, including expected increases in risk-based approaches to regulatory compliance review and supervision.
- More time to focus on the business, less on battling back-office fires: Whether you keep STP processes inhouse or outsource them, staff resources will be freed up to spend more time on client relations.

Consequences of not implementing STP?

Inability to meet expected regulatory requirements, for example, Canadian Securities Administrators (CSA) National Instrument 23-101 — Trading Rules, will require dealers and inter-dealer bond brokers to record and report certain order and trade information in electronic form as at December 31, 2003 — introducing systems to meet these requirements may be a participant's first steps towards the broader benefits of STP. In the U.S., Securities and Exchange Commission rule 10b-10, New York Stock Exchange rule 387 and others are being reviewed to potentially mandate the requirement to match on T.

- High fail rates and inefficient processing may impact client service and may come under regulatory scrutiny once STP becomes an industry standard.
- Higher execution, settlement and safekeeping costs . . . and/or lost business opportunities will directly or indirectly penalize participants not compliant with STP standards some U.S. firms are no longer transacting with counterparties that cannot communicate with them electronically . . . and they don't consider fax or phone to be electronic communication.

 Canadian firms report that they are starting to charge more to firms that don't provide information electronically.
- Securities lenders may decline to deal with non-STP borrowers seeking to earn additional returns.
- Higher operational costs will make mutual and seg funds less competitive with other retail investment products.
- Participants will not be ready.

The final analysis? Inefficiencies impact clients' investment returns and will result in lost business.



What's in it for other paticipants in the Canadian securities industry?

Some parts of the securities industry, for example, service providers, already benefit from greater STP. While greater automation exists in other parts of the securities industry, there are further opportunities for improvement and new revenue sources.

Investment fund companies (sometimes called "manufacturers") using FundSERV already benefit from STP. The FundSERV system provides for automated order entry and ensures that the order is properly formatted. The result is fewer problems and lower error rates. If a manual entry process is used, however, the potential for error is higher.

Issuers face the costs of securities issuance, processing of corporate actions and multiple filings with regulators. All these can be reduced through STP.

- Electronic securities issuance means that transfer agents no longer have to pass on the costs of blank certificate inventory, storage, audit and control, issuance, printing and deposits into/withdrawals from the depository.
- Being able to process corporate actions in a more electronic fashion should reduce costs further as well as reduce errors.
- Filing entitlement information centrally in one location will reduce the costs of multiple filings and reduce errors and investor complaints.

Securities lenders face delays and errors in transcription or misunderstanding as the loan recall management process is still fax- and phone-based. The process is time-consuming, inefficient and leads to disputes over liability should a security be recalled late and a corporate action election be missed. Automating loan recalls will reduce costs and risks.

Custodians face a number of processing challenges, caused by:

- Not receiving trade data electronically
- Invalid trades or missing information
- Trade data not matching with broker/dealer data
- Not receiving trade data on a timely basis.

Custodians will benefit by not having to key in trade-related data from faxes or phone calls or correct data, allowing them to focus on providing value-added services to their clients. Also, the elimination of manual steps, which are by their nature error-prone, should improve accuracy and timeliness for all clients. Custodians also face huge processing costs and risks in the handling of corporate actions that can be addressed to some extent by STP.

Clearing and settlement organizations and transfer agents are well along the way to becoming STP-compliant. FundSERV is implementing STP standards. The Canadian Depository for Securities expects to be in the final stages of migrating securities to its new equity and debt securities clearing and settlement platform by March 2003. Transfer agents are implementing direct registration systems by the end of December 2003 to provide an electronic alternative to investors wanting to hold their securities in their own name.

RISKS AND COSTS IN CORPORATE ACTIONS

Corporate actions and other entitlements are made up of dividend and interest payments, tender offers, rights issues, reorganizations, redemption calls and many more. These rights arising from the ownership of securities can create challenges.

Processing corporate actions is one of the most manual, error-prone, risky and expensive elements of securities processing today. Problems associated with entitlement processing include:

- Extensive use of manual and paperbased processes that lead to errors and delays
- Lack of industry processing standards and best practices
- Delays and/or uncertainty in the issuer payment process
- Lack of, inconsistent or inadequate legislative, regulatory or rules-based framework
- Challenges in communicating with the numerous, diverse and dispersed stakeholders in the entitlement processing chain from issuer through intermediary to investor and back.

An industry STP recommendation is to mandate issuers, offerors and their agents to report entitlement information electronically to a central hub on a timely basis, so that the information can be passed seamlessly through intermediaries and reach investors on a reliable and timely basis, xviii

What's in it for Canadian regulators and Canadian investors?

Key securities regulatory mandates include fostering fair and competitive capital markets, protecting investors and contributing to public and investor confidence. STP — aimed at ensuring that trades are executed, cleared and settled cost-effectively in Canada — contributes to meeting these objectives in many ways:

Fostering fair, efficient, cost-effective and competitive capital

- Canada's capital markets activity represents less than three per cent of global market capitalization — 10-15 per cent of Toronto Stock Exchange (TSX) listings are now interlisted, accounting for 40 per cent of TSX trading value.
 - To remain competitive, Canada must streamline its settlement processes, reduce risks inherent in existing settlement systems and adopt common processing standards.
- Capital markets business and ultimately jobs will move to the most efficient market.
 - STP will streamline and improve Canadian capital markets efficiency, thereby helping protect jobs in the Canadian securities industry and resulting in economic spin-off benefits.

Protecting investors

- Investors need greater transparency
 - STP initiatives, such as establishing a central hub for corporate actions reporting, will increase transparency by providing investors with easier and broader access to entitlement information.
- Investors face risks by holding physical certificates, which can be easily reproduced with today's technology and subject to fraud.
 - Providing investors with an option to hold securities electronically will provide a secure alternative to paper, reducing costs, risks and delays for investors.

Contributing to public and investor confidence in the integrity of capital markets

- Regulators are charged with enhancing the safety and soundness of the Canadian financial system through the evaluation of system-wide risks and promotion of sound business and financial practices
 - STP will help regulated participants ensure that customer service and back-office systems and processes are not outstripped by their growth.
 - In light of recent corporate scandals, where corporate governance was lax, regulators may consider compliance with industry standards, including settlement standards and best practices, as well as scrutinize high fail rates and inefficient processing in an STP environment.

With the growth in cross-border investment flows, both into Canada and to the U.S. or international markets, Canada must adopt STP to remain competitive. Disintermediation and loss of business to foreign institutions pose real threats to the Canadian industry. Regulators do or should have a keen and growing interest in STP.

COMMENTS FROM REGULATORS Canada

"Overall, the Canadian Securities Administrators, an umbrella group for Canada's provincial and territorial securities regulators, is of the view that STP will serve to improve efficiency and decrease operational risks in Canada's capital markets." xix Howard Wetston, Vice-Chair, Ontario Securities Commission

The U.S.

"'T+1' is a useful focal point, but in some ways is a misnomer. The fundamental goal of the T+1 project is not next-day settlement, it is risk reduction and efficiency. And STP is an essential part of achieving that goal, some estimate about 80%. Even if T+1 settlement is deferred, the industry must concentrate on the building blocks to achieve risk reduction and efficiency." xx Larry E. Bergman, Senior Associate Director, U.S. Securities and Exchange Commission

The U.K.

"... brokers need to ensure that their ability to provide effective customer service keeps pace with their growth and that they maintain control of the resulting back office and settlement pressures." xxi U.K. Financial Services Authority



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Industry-set priorities are...

STP will require new industry functionality through infrastructure or service providers or other vendors. It will involve regulatory change. It will require industry standards, best practices and deadlines and some of these will be developed by particular industry segments, for example, mutual and seg fund work is being undertaken by FundSERV and the Investment Funds Institute of Canada

The key cross-industry processes that need to be changed to eliminate manual steps and enable STP are the following:

Institutional trade processing: Process securities trade confirmation and settlement electronically among investment managers, custodians, broker/dealers and CDS.

Retail trade processing: Process investment transactions electronically among all parties involved in investment fund or other retail investment product handling.

Dematerialization: Replace paper certificates with electronic records of securities for direct and indirect holders.

Corporate actions: Migrate all corporate action announcements, notifications and payments into an electronic environment.

Securities lending: Process security loans between borrowers and lenders via automated electronic processes.

Each of these areas is being examined and addressed on an industry-wide basis by a Canadian Capital Markets Association (CCMA) cross-industry committee. The cross-industry STP work scope of these committees — more limited than the full scope of STP that a firm in the securities industry may look at — is reflected in the diagram below:^{xxii}

Securities Market Participants count Set-up & Trade Order Trade Order Trade Match & Trade Settlement Cash & Security Trade Management Instructions Allocations Management Settlement Corporate Actions & Entitlements Institutional Trade Processing Working Group Retail Trade Processing Working Group **Dematerialization Working Group** Corporate Actions Working Group Securities Lending Working Group Legal/Regulatory Working Group Communications and Education Working Group

CCMA Working Group Cross-Industry STP Scope xxii

Inserted in this booklet is a description of the work being undertaken at the cross-industry level with a summary of the CCMA working groups' current top priorities and targets. More detailed information is available on the CCMA Web site *www.ccma-acmc.ca*, Committees page.

You set your priorities

There is no "right" way to start implementing STP. The size, strategy, current systems environment and industry segment of your firm will be key factors in determining how you choose to implement STP and how you build your business case. An STP Self-Assessment Checklist can be found at www.ccma-acmc.ca on the Media/Publications page to help firms that are just beginning to think about STP.

It is always hard to start the process without an end in sight. And as with any large effort, the goals may change as new information becomes available. The key is to start and to stay informed of developments. An important step is getting involved in industry efforts to learn, obtain guidance and share the experience of other industry participants and to have an opportunity to impact the major decisions and changes that will happen in our industry over the next two years.

This can be done by:

- Attending STP conferences and workshops
- Learning what your industry's priorities are through your own industry association(s)
- Receiving CCMA, Securities Industry Association, vendor or other STP newsletters
- Regularly visiting the CCMA and SIA Web sites (www.ccma-acmc.ca and www.sia.com)
- Keeping abreast of industry and regulatory developments through the above and through regulators' and other standard-setting bodies' Web sites and communications — all key regulatory entities (federal, provincial and self-regulatory organizations) are observers of the CCMA's Board of Directors.
- Benchmarking your STP readiness and assessing STP/T+1 impacts on your current and long-term business strategy.

Conclusions

The Cap Gemini Ernst & Young study reflects substantial cost benefits for the Canadian securities industry flowing from STP although there will be a significant variation of benefits enjoyed and costs borne among participants, as reflected in Exhibit 4. Analyses of other markets reflect similar findings. While these estimates are generally felt to be realistic, they are not the sole (or most important) reason for implementing STP. STP is a fundamental change in the way we do business and establishes an environment better equipped to:

- Serve clients
- Reduce operating and other risks
- Enhance market integrity
- Meet internal and external reporting and monitoring needs
- Focus on core strengths.

Small to medium-size firms must gain processing efficiencies to compete.

Investors need to make sure the firms they deal with are following best practices and that they benefit from savings and efficiencies.

Larger firms and those affiliated with financial institutions will need to be part of the overall STP solution so as to operate efficiently within their peer group, within the industry and internationally.

Regulators must ensure that industry participants meet the standards for which they are responsible. By doing so, they will be fostering fair and efficient capital markets.

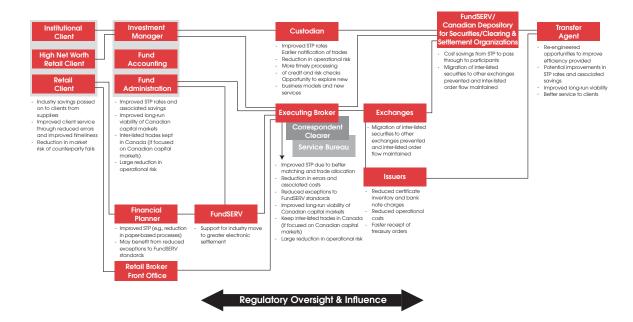
Custodians, exchanges, depositories and all other industry participants must ensure that they foster and support high levels of processing efficiency.

STP shifts the focus within participants from looking after the "nuts and bolts" to adding value and enhancing service to clients. This is ultimately where participants want to direct energies and efforts today.



Exhibit 4

Securities Processing Chain



End Notes

- STP/T+1 Value Proposition Survey, Cap Gemini Ernst & Young, October 15, 2002; this study, commissioned by the CCMA to promote discussion of STP and T+1, is available at www.ccma-acmc.ca, Media/Publications page benefits estimated in the report were based on surveys and extrapolations of available material.
- Due to the change in securities industry focus, industry STP goals have superceded, at least temporarily, the previous Canadian and U.S. securities industry objective of shortening the securities settlement cycle from the three days following trade date (T+3) to the day following (T+1). For discussion of why the change in focus from T+1 occurred, the likelihood that T+1 may again be named a goal in 2004 or subsequently or for more information on T+1, visit www.ccma-acmc.ca or www.sia.com.
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- *Euroclear on Deck: Price cuts and alliances likely to be next moves," Securities Industry News, April 29, 2002
- Based on eClientscope analysis of pricing changes announced by Johannesburg's central depository, STRATE, effective June 1, 2000
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