

13.1.2 CDS Application



THE CANADIAN DEPOSITORY
FOR SECURITIES LIMITED

85 Richmond Street West
Toronto, Ontario
M5H 2C9

March 10, 2005

Ms. Cindy Petlock
Manager, Market Regulation
Ontario Securities Commission
P.O. Box 55, 19th floor
20 Queen Street West
Toronto, Ontario
M5H 3S8

Dear Ms. Petlock:

Re: Application for Recognition and Designation of The Canadian Depository for Securities Limited ("CDS")

This letter and attachment sets out the application of CDS to the Ontario Securities Commission ("Commission") pursuant to section 144 and subsection 21.2 (1) of the *Securities Act* (Ontario) (the "Act") to vary and restate its recognition and designation order In the Matter of the Securities Act, R.S.O. 1990, Chapter S.5, As Amended (the "Act") and In The Matter of the Recognition of The Canadian Depository for Securities Limited (1997) 20 O.S.C.B.1033.

Facts

CDS is Canada's national securities depository clearing and settlement agency and is currently designated by the OSC as a recognized clearing agency pursuant to section 21.2(1) of the OSA and section 53(1) of the *Business Corporations Act* (Ontario) ("OBCA"). The Commission des valeurs mobilières du Québec (now known as the Autorité des marchés financiers ("AMF")) has recognized CDS under section 174 of the *Securities Act* (Quebec) which gives effect to the book entry transfer provisions in sections 10.2 to 10.4 of that Act. CDS has entered into a regulatory oversight agreement with the Bank of Canada and CDSX (as described below) has been designated by the Bank for particular purposes pursuant to the *Payment Clearing and Settlement Act* (Canada) ("PCSA"). Reference is made to the Rules of CDS, which constitute a common form agreement between CDS and its participants and between each of its participants. The OSC and AMF have given their approvals to the Rules in their current form and the Rules are available to the public on the CDS website, www.cds.ca.

In 2003 CDS completed a project to move all of CDS's domestic securities depository and settlement services to a single unified system known as CDSX. The CDSX system reflects the principles of a sophisticated risk model developed by CDS in consultation with its participants and its regulators, including the OSC, AMF and the Bank of Canada. The risk model was designed to meet current international standards for securities settlement systems including those set out in the Recommendations on Securities Settlement Systems Report issued in November 2001 by the Bank of International Settlements ("BIS") with the Technical Committee of the International Organization of Securities Commissions (IOSCO) (on which the OSC is a leading participant, as reflected in the fact that the Chair of the OSC was the Technical Committee Chair) . Included among the BIS recommendations was the requirement that securities settlement systems should have a "well-founded, clear and transparent legal basis" and "ensure timely settlement in the event that [a] participant with the largest payment obligation is unable to settle."

As at October 31, 2004, the value of securities on deposit at CDS exceeded \$2.3 trillion, consisting of 74,100 eligible issues of equity, debt, money market and stripped securities. During the 2004 fiscal year, CDS processed 47.9 million domestic trades and 14.9 cross-border trades through its linkages to National Securities Clearing Corporation and Depository Trust Company in New York. There were 112,800 entitlement events processed, comprising dividend and interest payments, money market maturities and corporate reorganization events for a total value of \$2.35 trillion. Entitlement funds payments were made by CDS to participants on the payable date in 99.96% of the events. Entitlement information was published to participants within 24 hours of receipt by CDS in 99.99% of the events.

Supporting Documents

In support of this application we are filing the following attachment which has been reviewed and accepted by CDS:

1. Criteria for the Recognition of Clearing Agencies under Section 21.2 of the Securities Act, OSC Criteria and CDS Responses, Submission to OSC, dated March 10, 2005.

International Standards

CDS is of the view that compliance with the terms of the above documents will fully satisfy relevant international standards, including:

1. The Bank for International Settlements/International Organization of Securities Commissions ("BIS/IOSCO"), Committee on Payment and Settlement Systems ("CPSS"), *Recommendations for Central Counterparties, November 2004*.
2. BIS/IOSCO, CPSS, *Recommendations for Securities Settlement Systems, November 2001*.
3. Group of 30, *Global Clearing and Settlement, A Plan of Action, January 2003*.

Conclusion

We look forward to receiving your comments at your earliest convenience. If you have any questions or would like to discuss any aspects of this application, please contact the undersigned at 416-365-8545.

Yours truly,

"Thomas Marley"
Vice-President, Legal, and Corporate Secretary
The Canadian Depository for Securities Limited

THE CANADIAN DEPOSITORY FOR SECURITIES LIMITED ("CDS")

Criteria for the Recognition of Clearing Agencies
under Section 21.2 of the Securities Act

OSC Criteria and CDS Responses

Governance

1. *A clearing agency's corporate governance arrangements shall be designed to fulfill public interest requirements and to promote the objectives of its shareholders and the users ("participants") of its depository, clearing and settlement services (collectively, "settlement services").*
2. *Without limiting the generality of the foregoing, a clearing agency's governance structure should provide for:*
 - (a) *fair and meaningful representation on its board of directors and any committee of the board of directors;*
 - (b) *appropriate representation of persons independent of the shareholders and participants on the board of directors and any committees of the board of directors;*
 - (c) *appropriate qualifications, remuneration, conflict of interest provisions and limitation of liability and indemnification protections for directors, officers and employees of the clearing agency..*

CDS Response:

CDS is owned by the six major Canadian chartered banks, the members of the IDA and TSX Inc. CDS has guidelines with respect to the appointment of directors. The guidelines are outlined in detail in a Pooling Agreement, the net effect of which allows the Bank shareholders to appoint six directors, the TSX Inc. to appoint two directors, the TSX Venture Exchange Inc. to appoint one director, the Investment Dealers Association of Canada to appoint one director and the CDS Board of Directors to nominate four non-industry directors. The non-industry directors are directors who are not employees, officers or directors of a company in the securities industry. The President and CEO of CDS is also a member of the Board.

The CDS Board of Directors recognizes that it is the prerogative of the shareholder groups, pursuant to the Pooling Agreement, to appoint Directors to the Board. The Executive Committee annually reviews the general and specific criteria to consider when directors are being appointed to the Board. The objective of this review is to recommend to the shareholder groups that appointments be made to provide the best mix of skills and experience to guide the long-term strategy and ongoing business operations of CDS. The Board Chair has the responsibility to ensure the criteria developed by the Executive Committee are communicated to the shareholder groups before they are required to propose their candidate(s). The communication explains the reason(s) the criteria were developed and encourages the shareholder groups to consider the needs of CDS.

CDS also has Section 3.01 of Bylaw 11 which constitutes three quorum groups (trust company, bank, and dealer) of the directors and provides that at least one member from each Quorum Group must be present as part of quorum for transaction of business at Board and Committee meetings. The quorum for the transaction of business at any meeting of the Board consists of six directors. Directors are designated into a quorum group by resolution of the Board. The Board regularly considers its size relative to its mandate and is satisfied that a Board size of fourteen is appropriate, effective and meets the needs of CDS at this time.

The CDS Board of Directors in April 18, 2002 approved the Board Corporate Governance Manual ("Board Manual") which outlines the policies and procedures by which the Board will operate and the terms of reference for the Board, the Board Chair, the President/Chief Executive Officer, a director and Committees.

A review of CDS' overall governance structure is currently underway and will be completed by six months from the date of the Recognition and Designation Order.

CDS will take reasonable steps to ensure that each officer or director of CDS is a fit and proper person and the past conduct of each officer or director affords reasonable grounds for belief that the officer or director will perform his or her duties with integrity. Each director in exercising his/her powers and discharging his/her duties shall act honestly and in good faith with a view to the best interests of the Corporation and exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances. In determining the best interests of the Corporation, each director shall consider, in addition to any other matters which each director considers relevant, the need for a fair and efficient central securities depository, clearance and settlement system in Canada, expressly recognizing the Corporation's broader public interest role in the Canadian capital markets securities industry. Code of Conduct and Conflict of Interest Guidelines for directors have been

developed outlining the general standards of behaviour expected to support these activities. Each director must adhere to the standards set out in applicable policies, guidelines or legislation. Any director who knows or suspects a breach of this Code of Conduct and Conflict of Interest Guidelines has a responsibility to report it to the Board Chair or the Corporate Secretary. To demonstrate determination and commitment, CDS requires each director to review and sign the Code annually. The willingness and ability to sign the Code is a requirement of all directors.

Individual directors have membership on the Board committees (Audit, Executive and Finance). Each committee operates according to a Board approved terms of reference outlining its duties and responsibilities. This structure is subject to change from time to time as the Board considers which of its responsibilities will best be fulfilled through more detailed review by a committee. Four members of a committee constitute a quorum including one member from each quorum group. No business may be transacted by the committees except at a meeting of its members at which a quorum of the committee is present at which a majority of the members present are resident Canadian.. The Board Chair is responsible for annually proposing the leadership and membership of each committee consistent with the Corporation's Bylaw to the Board for appointment.

Compensation is paid to non-industry directors only. The Executive Committee has the responsibility to review and approve non-industry director compensation.

CDS By-laws provide for the indemnification of its directors and officers against loss (including defence costs), to the extent permitted by the law, where they are acting in good faith and in the best interests of CDS. CDS finances any risk associated with this indemnification through the acquisition of Directors' and Officers' insurance. This insurance (subject to various terms, conditions and exclusions) provides coverage for all losses for which CDS indemnifies its Directors and Officers (the insured) and for which they become legally obligated to pay on account of any claims made against them for any "wrongful act" committed, or allegedly committed or attempted before or during the policy period. Such policy also provides the insured coverage in their roles as directors and officers of CDS for all losses for which the insured is not indemnified by CDS (subject to various terms, conditions and exclusions), and which the insured becomes legally obligated to pay on account of any claims made against them, for any "wrongful act" committed, or allegedly committed or attempted by the insured before or during the policy period.

Access

3. *A clearing agency shall provide any person or company reasonable access to its settlement services where that person or company satisfies the eligibility requirements established by the clearing agency to access the settlement services.*
4. *Without limiting the generality of the foregoing, a clearing agency must:*
 - (a) *establish written standards for granting access to the settlement services;*
 - (b) *keep records of*
 - (i) *each grant of access including, for each participant, the reasons for granting such access, and*
 - (ii) *each denial or limitation of access, including the reasons for denying or limiting access to any applicant.*

CDS Response:

CDS complies with the Recognition Criteria for Access. In particular:

3. Rule 2.2.4 describes the persons or companies that are eligible for participation in CDS Services. The categories are "Regulated Financial Institution", "Foreign Institution", "Government Body" and "Bank of Canada", which are defined as follows:

Regulated Financial Institution
a Person

 - (i) who is incorporated, established or formed pursuant to the laws of Canada or of any province or territory of Canada;
 - (ii) who is primarily regulated for prudential and liquidity purposes under the laws of Canada or of any province or territory of Canada; and
 - (iii) who is a Financial Institution, a broker or dealer trading in Securities, an insurance company or corporation, or a securities clearing corporation or depository;

Foreign Institution

a Person other than an individual

- (i) who is incorporated, established or formed under the laws of a jurisdiction situated outside Canada or who is primarily regulated for prudential and liquidity purposes under the laws of a jurisdiction situate outside Canada; and
- (ii) who is a broker or dealer trading in Securities, a bank or savings bank, a trust company or corporation, a loan company or corporation, an insurance company or corporation, a securities clearing corporation or depository, a central bank or any other Person trading in Securities;

Government Body

the Government of Canada or the government of any province or territory of Canada or any municipality in Canada, or any of their agencies;

Bank of Canada

the central bank of Canada formed under the Bank of Canada Act (Canada).

- 4. (a) The qualifications for each category of Participant are set out in Rule 2.2.5, ie. duly incorporated, in compliance with its regulations, meeting minimum capital requirements, minimum portfolio of eligible securities, legal opinion regarding security interests (from foreign participants), etc. The standards which each Participant must satisfy are in Rule 2.2.7, ie. financial ability, sufficient resources, qualified personnel, secure network access facilities, data processing and security capabilities in compliance with CDS specifications, insurance coverage, etc.
- (b) Rule 2.2.1 requires the full Board to approve or reject every application for participation. In practice, the Legal and Risk Management Departments review each application for completeness and acceptability. Their recommendation is vetted by the Executive Committee of the Board before presentation for final approval of the Board. The recommendation is made in writing and pre-mailed to the Board; the decision of the Board is recorded in the minutes of the Board meeting. The applicant is kept apprised throughout the process and is advised of its acceptance or rejection and any related conditions, together with reasons, immediately following the Board meeting at which the decision was taken.

Fees

- 5. *Fees and costs for settlement services shall be equitably allocated by a clearing agency. The fees shall not have the effect of unreasonably creating barriers to access to such settlement services and shall be balanced with the criterion that the clearing agency has sufficient revenues to satisfy its responsibilities.*
- 6. *The clearing agency's process for setting fees and costs for a settlement services shall be fair, appropriate and transparent. The fees, costs or expenses borne by participants in the settlement services shall not reflect any costs or expense incurred by CDS in connection with an activity carried on by CDS that is not related to the settlement services.*

CDS Response:

- 1. CDS prices for its core services (e.g., clearing, settlement and depository) and the principles according to which these prices are derived are available to all participants to ensure transparency. The prices are circulated via CDS bulletin and are on the CDS Web site.
- 2. With the exceptions noted below, prices for CDS services are based on full cost recovery to recoup CDS' annual budgeted costs for delivering CDS services. These projections are based on volume estimates and an agreed-upon service standard level. It is recognized that there are economies of scale when using certain of CDS' services and, consequently, that there are occasions when marginal rather than average pricing is appropriate.
- 3. Exceptions to cost recovery pricing may include:
 - Premiums for potential transaction volatility (i.e., volumes lower than planned) to provide a buffer in case expected revenues do not materialize (Note: Premiums collected but not required are rebated to participants at the end of the fiscal year or as directed by the Board of Directors)
 - Incentive pricing to encourage participants to adopt best practices, for example, supporting BIS/IOSCO or other recommendations
 - Risk adjustment factors to account for the risk brought to CDS by a particular service or participant

- Other circumstances as may arise, for example:
 - * when there is a major change in services and/or service delivery, where there may be multiple stages and/or a need to phase in price changes to minimize material non-volume-related variations in participants' expenses
 - * amortization of capital costs depending on the funding method for the capital outlay
 - * during the start-up of new services.
- 4. Pricing is discussed with industry representatives. Consultation is undertaken to ensure a fair and efficient distribution of costs, be responsive to market needs and avoid unreasonable barriers to access.
- 5. Any updates to the existing price list are presented to the Finance Committee and Board of Directors for approval before implementation. Prices are set or reconfirmed on an annual basis for effect at the start of CDS' fiscal year (November 1). In rare cases, changes during the year may occur when a new service is introduced or changed or additional information is available that would enable agreement on a more exact or equitable price.
- 6. Fee increases require at least 60 days' notice before implementation, subject to Board of Directors' approval to abridge the notice period as required.
- 7. Fee-setting principles, guidelines and processes are reviewed periodically to ensure that they remain relevant and equitable.
- 8. CDS invoices detail the prices, volumes and extensions at the transaction level to enable participants to understand the charges for the services that they use.
- 9. In view of the major changes in service usage, cost factors and billable service items, resulting from the implementation of CDSX and the termination of SSS/BBS in 2004, no material changes were made to CDS pricing model for the purposes of the 2005 Business Plan. In preparation for the 2006 Business Plan, CDS undertakes to review its fee-setting principles, guidelines and processes with a view to making fee pricing changes where relevant and equitable.

Due Process

- 7. *A clearing agency shall ensure that:*
 - (a) *participants affected by its decisions are given an opportunity to be heard or make representations; and*
 - (b) *it keeps a record, gives reasons and provides for appeals of its decisions to regulatory authorities.*

CDS Response:

- (a) Rule 3.2.3 provides that:

A Participant who disagrees with any action taken by CDS pursuant to the Rules, other than an action taken by the Board of Directors, may appeal to the appropriate committee of the Board of Directors by delivering to CDS within 10 days of the action a notice in writing specifying the action under appeal and the reason for the appeal. The committee shall consider the appeal within 30 days of receipt of the notice of appeal, and shall provide the Participant with an opportunity to make submissions in writing or in person. The committee shall give notice to the Participant of its decision within a reasonable time after hearing the appeal, and shall at the request of the Participant provide its decision in writing. The Participant may appeal the decision of the committee to the Board of Directors by delivering to CDS, within 10 days of notice of the decision, a further notice specifying the reason for the appeal. The Board of Directors (but not the executive committee) shall consider the appeal within 30 days of receipt of the notice of appeal, and shall provide the Participant with an opportunity to make submissions in writing or in person. The Board of Directors shall give notice to the Participant of its decision within a reasonable time after hearing the appeal, and shall at the request of the Participant provide its decision in writing. The decision of the Board of Directors with respect to an appeal shall be final, subject to any further right of appeal pursuant to Rule 3.2.4.(b). Rule 3.2.4 sets out the Participant's right to appeal decisions to the regulatory authorities.

The Autorité des marchés financiers has recognized CDS as a self-regulatory organization pursuant to the *Securities Act of Quebec*. The Ontario Securities Commission has designated CDS as a recognized clearing agency pursuant to the *Securities Act of Ontario*. Participants and applicants for participation have the rights set out in such Acts, and in any other Acts that may apply to CDS from time to time, to request a review of actions taken by CDS and of decisions of the Board of Directors.

Risk Controls

8. *A clearing and settlement system should be designed to achieve the following:*
- (a) *Where a central counterparty is employed, the central counterparty should rigorously control the risks it assumes.*
 - (b) *A clearing agency should reduce principal risk to the greatest extent possible by linking securities transfers to funds transfers in a way that achieves delivery versus payment.*
 - (c) *Final settlement should occur no later than the end of the settlement day. Intraday or real-time finality should be provided where necessary to reduce risks.*
 - (d) *A clearing agency that extends intraday credit to participants, including a clearing agency that operates net settlement systems, should institute risk controls that, at a minimum, ensure timely settlement in the event that the participant with the largest payment obligation is unable to settle.*
 - (e) *Assets used to settle the ultimate payment obligations arising from securities transactions should carry little or no credit or liquidity risk. If same-day irrevocable final funds are not used, the clearing agency shall take steps to protect participants in settlement services from potential losses and liquidity pressures arising from the failure of the payor or its paying agent.*
 - (f) *A clearing agency that establishes links to settle cross-border trades should design and operate such links to reduce effectively the risks associated with cross-border settlements.*
 - (g) *A clearing agency engaging in activities not related to the settlement services should carry on such activities in a manner that prevents the spillover of risk to the clearing agency that might negatively affect the clearing agency's financial viability.*
 - (h) *Where a clearing agency materially outsources any of its settlement services and related systems to a third party service provider, which shall include affiliates and associates of the clearing agency, the clearing agency shall ensure the outsourcing arrangement is carried out in accordance with best practices and that the outsourcing arrangement provides regulatory authorities with access to all data, information and systems maintained by the third party service provider necessary for the purposes of regulatory oversight of the clearing agency.*

CDS Response:

- (a) Through the process of novation, the settlement obligations and rights between the participants arising from the trades processed in the central counterparty (CCP) services (CNS, ACCESS and DetNet) are extinguished and replaced by corresponding settlement obligations and rights between each participant and CDS (the CCP for these services). For these novated trades, all obligations of each participant are owed to CDS and all rights of each participant are against CDS. The novated obligations and rights between CDS and each participant are due as of the value date of the trades. If a participant cannot complete settlement of its side of the trade, then CDS remains obliged to settle the other side with the counterparty. Following novation on value date, settlement of each side of the trade is attempted on subsequent days.

Risk mitigation in the settlement system is based on a combination of "defaulter pay" and "survivor pay". Each participant is responsible for covering the risk that it brings to the system to a tested confidence level. In the event that this coverage is insufficient, the other surviving participants are required by CDS' Rules to cover any shortfall.

To address principal or payment risk, system operating caps and lines of credit combine to limit the maximum amount that each participant can owe at payment exchange. Participants are required to pledge sufficient collateral relative to the level of risk of their transactions in order to provide CDS with sufficient realizable value in the event that they are unable to meet their payment obligations.

CDS is subject to replacement cost risk in its role as CCP in the three services. All trades and outstanding positions in the services are marked-to-market daily. This covers the potential loss between the original trade price and the current price that could result if there was a default by a participant and CDS was required as the central counterparty to settle the trades and outstanding positions.

Participants must also contribute to participant funds for each of the three CCP services to cover the mark-to-market payment owed by a participant in the event that it defaults and any loss that CDS might incur when it closes out a defaulter's outstanding positions.

CDS uses a Value-at-Risk (VaR) based margining methodology to measure the maximum loss that a given position could sustain with a given confidence level over a set period of time. This methodology takes into account the "riskiness" of the security as well as the impact of market liquidity over the potential liquidation period.

Caps also will be applied to limit the amount of outstanding positions that any participant can create in each CCP service.

Default procedures, backed by CDS' Rules, are in place to deal with one or more participant defaults.

- (b) Principal risk exists during the period of time when a seller has delivered securities for which they have not yet received payment or when a buyer makes payment and has not yet received the purchased securities. Principal risk is eliminated through the use of a delivery versus payment (DVP) mechanism. CDS achieves DVP by linking real-time transaction-by-transaction transfers of securities in participants' ledgers with book-entry transfers of funds positions in participants' CDS funds accounts upon settlement of each transaction. These securities and funds transfers are final and irrevocable and represent settlement when these transfers are entered into participants' accounts in CDSX. The net final funds positions resulting from these transfers are settled between CDS and its participants at the end of the day. The legal framework supporting enforceability of DVP are provided by CDS' Rules and provisions in the federal *Payment Clearing and Settlement Act*.
- (c) As described in 8(b), settlement of trades occurs intraday when securities and funds are transferred onto the CDSX ledgers of the two participants. The transactions must pass the system's risk edits in order to be settled. Once settled, the transactions cannot be reversed. Final settlement of participants' net fund positions arising from the intraday transfers of securities and funds occurs no later than the end of the settlement day during payment exchange. At payment exchange, the net final funds positions are settled between CDS and its participants on the books of the Bank of Canada. All payments by participants owing funds to CDS must be completed before any payments owed to participants by CDS can be completed. The payments must be made in funds that are final and irrevocable: in Large Value Transfer System (LVTS) funds for Canadian dollar obligations and in FedWire funds for the separate payment exchange for U.S. dollar obligations. Even though this final settlement of net funds positions does not occur until the end of the day, participants can use and trade the securities and funds that have been transferred to them by book entry during the day.
- (d) CDS allows participants to have intraday negative funds balances in their ledgers. The risk associated with this is controlled with system operating caps and lines of credit (granted by extenders of credit, comprised of major financial institutions, to receivers of credit) to limit the maximum amount that each participant can owe at payment exchange. The risk is also covered by using the securities in the participants' general and collateral accounts as collateral (aggregate collateral value (or ACV)). These securities are valued by applying haircuts to determine their current value. The haircut represents the amount that the securities could decline in value, based on historical statistics from the time of default to the time that the collateral securities are liquidated.

Intraday credit is also covered by a pool that is shared with other members of their participant class (extender of credit, settlement agent, federated participant, and receiver of credit are the four classes). Collateralization of the pool is through pledges of eligible (highly liquid) debt securities. Haircuts are applied to the value of these securities, based on debt rating (nothing lower than BBB) and years to maturity. If a participant defaults, 99% of the time the liquidation value of the pledged securities is sufficient to cover the defaulter's negative funds value.

CDS (as authorized in its Rules) seizes these pledged securities in the event that a participant defaults. The survivors of the credit ring in which the member defaults are required (also by the Rules) to cover the defaulter's obligation that arose from its use of the pool.

There are five CDSX collateral pools, which are designed to cover the default of the largest net debtor. There is one for each of the extender of credit, settlement agent and federated participant credit rings. There are two pools for the receiver of credit ring--one for Canadian dollar and one for US dollar settlement transactions in CDSX.

Caps are placed on the participants' maximum exposures they can incur in the system for trade for trade transactions. The caps are based on participants' capital. (For receivers of credit, the cap is based on their collateral contributions and a leverage factor.) Participants also face a cap on the amount of exposure they can impose in the CCP services.

(e) At the end-of-day payment exchange for Canadian dollar obligations, individual participants' payment obligations are netted and aggregated with the obligations of the banker they have designated to make or receive payment on their behalf. Designated bankers must have LVTS accounts at the Bank of Canada in order to complete the exchange of LVTS funds to or from CDS' account at the central bank. Only when all payments are received will CDS release payments from its LVTS account to participants who are owed funds by CDS. These payments are made in funds that are final and irrevocable, eliminating the risk of returned payments. LVTS is a risk-proofed system that complies with international standards for systemically important payment systems.

(f) CDS offers participants three links to effect Canada-U.S. cross-border transactions. These are ACCESS®, New York Link and DTC (Depository Trust Company) Direct Link.

In ACCESS® ("American and Canadian Connection for Efficient Securities Settlement"), participants can manage all domestic and Canada-U.S. cross-border activity using their own CDS account for settlement and custody. CDS manages the cross-border settlement through an omnibus account and handles the relationship with NSCC (National Securities Clearing Corporation) and DTC on behalf of ACCESS participants. In New York Link, CDS sponsors participants for direct membership in NSCC. Custodial, institutional clearing and settlement services are offered. Participants can settle transactions on a continuous net settlement and trade-for-trade basis. In DTC Direct Link, CDS sponsors participants for direct membership in DTC. Participants have complete control over U.S. settlement activities and can settle transactions on a trade-for-trade basis.

Both CDS and NSCC provide CNS systems that process trading activity. Trades conducted by ACCESS® participants are entered into CDS' CNS system while trades entered into by New York Link customers are processed within NSCC's CNS system. Following novation, the clearing organizations assume the contra sides of each CNS transaction and become responsible for their settlement.

Payment exchange for the three links to the U.S. marketplace is centralized through CDS. Participants who owe funds pay CDS and those who are in a credit position receive funds from CDS, through designated payment agencies. As with designated bankers for CDSX payment exchange, designated payment agencies are large financial institutions who settle on behalf of a number of New York Link participants. For ACCESS® participants, payment exchange and settlement is centralized (in US dollars) through CDSX. Payments to and receipt of funds from NSCC and DTC are made using FedWire. Since cross-border payment exchange is conducted with a private U.S. settlement bank, CDS has arranged a back-up arrangement with a second U.S. bank to mitigate the risk that the U.S. settlement bank could fail.

When the cross-border services were first established)in the early 1980's, CDS evaluated the financial integrity and operational reliability of DTC/NSCC and concluded they met CDS' linkage standards. Annual reviews of the linkage determine that these standards are maintained.

Securities traded through the cross-border services are held by DTC in New York, which are subject to U.S. law on securities and transfer pledges (Uniform Commercial Code Articles 8 and 9). This law determines with certainty the laws of the jurisdiction which will apply to transactions in a multi-tiered indirect holding system. As New York law applies to cross-border transactions settled in DTC, CDS would look to courts in New York to uphold the validity of CDS' claims as a participant in DTC.

ACCESS® operates in the same way as CDS' domestic CNS service (in CDSX). As a result, the service exposes CDS to the same risks and participants are required to contribute to a participant fund and to collateralize all of its settlement transactions. Since the risk mitigation techniques are the same for both ACCESS® and CNS domestic services, and risk controls in CNS are efficient and effective, the risks arising from ACCESS® are sufficiently controlled. In the New York Link function, since most trades go through the CNS functionality, CDS faces counterparty risk. As a result, CDS requires a participant fund contribution from all participants and full collateralization of negative funds balances. For the DTC Direct Link, trade-for-trade transactions are relevant. CDS requires full collateralization of negative funds balances but does not require a participant fund contribution.

(g) CDS INC. was incorporated by CDS in 1995 to house CDS' complementary services in a subsidiary to prevent risk spillover to the core services, and to separate the respective companies' different approaches to pricing and risk coverage. CDS INC. can provide services to both participants and non-participants and relies on contracts, rather than Rules and procedures to protect its interests. Pricing is structured to produce profits, which flow to the consolidated operation to reduce the costs of providing the core services to participants.

The payment obligations of CDS INC. to IBM for the development of the National Registration Database system were guaranteed by CDS. CDS is currently examining a process which would remove the guarantee by the end of the calendar year 2004. Henceforth, CDS undertakes not to provide any guarantees, or assume any liabilities, in favour of any third parties or any of CDS' subsidiaries. It is recognized that where services offered by CDS result in the novation

of participants' obligations to CDS or require the sponsorship of participants by CDS into other clearing and settlement systems, these legal arrangements do not constitute guarantees.

- (h) (i) CDS has implemented a policy to ensure the management of risks associated with the use of vendors and outsourcing. The policy and any updates to it are approved by management and by the board of directors. The policy outlines requirements for effective risk identification and management, business casing, vendor engagement, relationship management and service monitoring.
- (ii) CDS policy for outsourcing requires the creation of a business case for approval by senior management and, where applicable, the board of directors. The business case documents the objectives and scope of the arrangement, an assessment of expected costs and benefits, the degree of direct control over business functions, and an assessment of the risks and impacts.

CDS policy for outsourcing requires the execution of a contract for services which documents all aspects of the outsourcing relationship, including the scope and nature of the service being provided, key deliverables, performance measures and commitments, and penalties/remedies in the event that service levels are not achieved.
- (iii) CDS policy for outsourcing arrangements requires the inclusion in the service contract of a right to audit by CDS. This policy will be amended to include that any contract implementing an outsourcing arrangement that is likely to impact the settlement services, will permit the regulators of CDS to have access to and inspect all data, information and systems maintained by the third party service provider on behalf of CDS for the purposes of determining CDS' compliance with the terms and conditions of any regulatory order or securities legislation.
- (iv) CDS policy for outsourcing requires performance to be tracked and measured through the course of the arrangement. Significant engagements include regular review meetings with representatives from the outsource provider and CDS management, ensuring the prompt identification and resolution of service issues.

Financial Viability

- 9. *A clearing agency shall maintain sufficient financial and staffing resources to ensure the proper performance of the settlement services.*
- 10. *A clearing agency shall establish financial tests for the purpose of monitoring its financial viability.*
- 11. *The financial statements of a clearing agency shall be presented in a manner that allows for effective monitoring of the financial position and the performance of the settlement system, including providing audited annual financial statements.*
- 12. *So long as a clearing agency carries on a business other than the provision of the settlement services, it will allocate sufficient financial and staff resources to carry out its functions as a clearing agency in a manner that is consistent with any regulatory requirements.*

CDS Response:

- 1. CDS shall maintain sufficient financial and staffing resources to ensure the proper performance of the settlement services. The settlement services performed by CDS are highly automated. Consequently, the performance of the settlement services is largely dependent on the effective functioning of the settlement processes embedded in CDSX. CDSX was exhaustively tested by CDS and its various customer groups (participants and service bureaus) prior to its implementation in 2003. All major new releases of CDSX are also fully tested by CDS and its customer groups prior to implementation. Further, CDSX has been designated by the Bank of Canada as meeting international standards for a fully functioning clearing and settlement service.

In terms of ensuring that CDS is properly staffed to perform the settlement services, CDS has Service Level Agreements (SLAs) that have been negotiated with its participants and approved by its Board of Directors. CDS routinely reports its performance against these SLAs. A portion of these SLAs deals with settlement services. If CDS did not have adequate staffing to deal with settlement services the SLA requirements would not be consistently met and CDS management would take the appropriate action to remedy this situation. To date, CDS has delivered the settlement services in accordance with the SLAs.

In terms of sufficient financial resources, CDS is committed to meeting the Lamfalussy standard for settlement services and, as such, is committed to having the financial resources available through lines of credit to meet the financial requirements imposed by the default of the largest single debtor on any given day.

2. CDS shall establish financial tests for the purpose of monitoring its financial viability. Specifically CDS shall maintain:
 - (a) a debt to cash flow ratio less than or equal to 4.0/1, and
 - (b) a financial leverage ratio less than or equal to 4.0/1.For the purpose above:
 - (i) debt to cash flow ratio is the ratio of total debt to EBITDA (earnings before interest, taxes, depreciation and amortization) for the most recent 12 months, and
 - (ii) financial leverage ratio is the ratio of total assets to shareholder's equity.
3. CDS shall report to the Commission any decision made to retain all or part of its transaction volatility premiums collected or to be collected.
4. If CDS fails to maintain, or anticipates it will fail to maintain the debt to cash flow ratio or financial leverage ratio it shall immediately report to the Commission. If CDS fails to maintain either of the debt to cash flow ratio or the financial leverage ratio for a period of more than three months, its Chief Executive Officer will deliver a letter advising the Commission of the continued ratio deficiencies and the steps being taken to address the situation.
5. On a quarterly basis (together with the financial statements required to be filed), CDS shall report to the Commission the monthly calculation of the debt to cash flow ratio and financial leverage ratio.
6. CDS shall file unaudited quarterly financial statements within 60 days of each quarter end and audited annual financial statements, prepared in accordance with generally accepted accounting principles, together with any annual report to the shareholders, within 90 days of each year end. The quarterly and annual financial statements of CDS shall be provided on an unconsolidated and consolidated basis.

Operational Reliability

13. *A clearing agency should adopt procedures and processes that, on an ongoing basis, ensure the provision of accurate and reliable settlement services to participants.*

CDS Response:

Based on input from its customers, CDS has developed service level standards (SLS) focusing on three key areas: reliability, customer service and entitlements. The standards, covering the critical CDS depository, clearing, settlement and ancillary services, are amended, as required from time to time, based on input from a participant review group, comprised of senior operational representatives in the financial community and CDS management, and approved by CDS' Board of Directors. Since the SLS is an evolving document, it will change as participants needs change, as products and services evolve, as CDS' network and system environments are upgraded and as CDS develops ways to cost efficiently capture relevant information. Currently, CDS has set and meets or exceeds standards of over 99.4 per cent or more for: network availability, pledging availability, operational reliability, payment exchange, claims processing time, entitlement information processing, entitlements payment and accuracy.

The standard for network availability is 99.8% and CDS' network availability through April 30, 2004 is 99.9. As well, CDS is measured on its disaster recovery plan (DRP) as demonstrated by an industry test and on avoidance of disruptions to CDS participants. CDS reports its compliance with these standards in its quarterly newsletter. Internal and external audit reviews are conducted by CDS to assess operational reliability.

Capacity and Integrity of Systems

For all of its core systems supporting clearing and settlement business operations, CDS:

- makes reasonable current and future capacity estimates
- conducts capacity stress tests of critical systems to determine the ability of those systems to process transactions in an

- accurate, timely and efficient manner
- implements reasonable procedures to review and keep current the development and testing methodology of those systems
- reviews the vulnerability of those systems and data centre computer operations to internal and external threats including physical hazards and natural disasters
- maintains adequate contingency and business continuity plans

The above are included in the Risk Assessed Audit Universe and are subjected to periodic audits by the Internal Audit department.

Current Capacity

The CDSX system is built to meet current and medium term requirements. CDS architecture is designed to accommodate rapid upgrades in processor and data storage capacities to meet volatile business requirements. The system meets high standards for availability, security and efficiency, with sufficient redundancy in hardware, software and network elements to withstand component failure.

Changes in CDS systems, in capacity requirements, and in infrastructure supporting CDS systems are reported to the OSC in the *Production Plan Summary Report*, submitted every three months as detailed in the ARP Implementation documentation.

Future Capacity

On a regular basis system capacity is assessed against current and expected levels of market activity to ensure maintenance of availability and efficiency. The four key performance indicators assessed are volume of transactions being processed, average online response time, average online CPU utilization percentage, and reporting on missed batch deliverables. CDS technology is easily expandable without interruption to service. Data protection is accomplished through disk mirroring between the production and back-up sites as a vital part of the overall disaster recovery plan.

Because trade volumes are unpredictable, CDS bases its capacity projections on demonstration that our systems can handle two to three times current volume. This is accomplished by running a production simulation and increasing the simulated data input. Test results are reported in the *Production Plan Summary Report* submitted every three months as detailed in the ARP Implementation document.

Contingency

CDS production systems run at a standalone data centre, with contracted back-up to a vendor facility. By use of the disk mirroring technology noted above, committed recovery times are 2 hours for mainframe systems and 2 to 4 hours for client-server applications, with near zero data loss. Actual recovery times accomplished in semi-annual, audited tests have consistently proven to be closer to 1 hour. Sufficient back-up workstations at the CDS Data Centre are available on standby at all times for the use of business operations staff in the event of a disruption affecting the primary corporate office.

DRP/BCP testing is reported to the OSC in the *Production Plan Summary Report* submitted every three months as detailed in the ARP Implementation document.

Protection Of Customers' Securities

14. *A clearing agency providing depository services shall employ securities depository, account maintenance and accounting practices and safekeeping procedures that protect participants' securities.*

CDS Response:

1. CDS is committed to protecting participants' securities on deposit against loss and inappropriate disposition. For certificated securities, certificates are held in secured vaults at CDS or at approved custodians who meet CDS standards. There are additional controls on CDS book-entry-only strips and packages to ensure that they are appropriately accounted for.
2. Physical access to the securities held under CDS custody is restricted to authorized employees only. CDS employs an automated inventory system to track securities movements and their locations, facilitated by daily automated reconciliation of certificates to participants' holdings. Participants are provided with reports to verify the completeness and accuracy of the executed depository transactions.
3. Securities held externally by authorized custodians that meet CDS standards, including federal government issues and other debt securities, are reconciled by CDS daily and discrepancies are resolved on a timely basis.

4. Majority of securities are registered under CDS' names and held in non-negotiable form, in addition to other bearer instruments. Adequate segregation of duties among the different departments of CDS is in place to ensure the proper safeguarding of the securities. Movements of physical strip coupons are monitored and handled under dual/triple custody. Withdrawal requests of securities were validated prior to release to authorized personnel by the CDSX system, which has an online security feature that authorizes entry to the system.
5. Transferable securities inventory is counted bi-monthly, and non-transferable issue inventory is counted three times per annum. Participants are requested to provide positive confirmation of their ledger balance annually. In addition, an annual count of the physical securities under CDS custody is also conducted under the supervision of Internal or External auditors. Effective controls are in place to ensure any discrepancies are identified, investigated and resolved.
6. CDS employs armored courier to deliver securities between regional offices, which provide insurance coverage to cover potential losses during the shipment.
7. Risk Management ensures that appropriate control architectures are maintained and that key controls are documented and are consistent with CDS' policies and procedures. Periodic reviews are undertaken to ensure the controls remain relevant and effective. Line management monitors the controls to ensure compliance with procedures and constantly reinforces staff observance of security and control standards.
8. Management at CDS is committed to providing its services in a secure and controlled environment, with appropriate and effective internal controls and safeguards in place for the protection of participants' assets. The Report on Internal Controls and Safeguards (RICS) describes the safeguards, security and controls that management has instituted. CDS' external auditors' opinion on the design and effectiveness of these control systems is included in the RICS.

Rules

15. *A clearing agency shall establish rules that are necessary or appropriate to govern and regulate all aspects of the settlement services offered by the clearing agency.*
16. *The rules shall be consistent with the general goals of:*
 - (a) *ensuring compliance with securities legislation;*
 - (b) *fostering co-operation and co-ordination with self-regulatory organizations and persons or companies operating marketplaces, clearing and settlement systems and other systems that facilitate the processing of securities transactions and safeguarding of securities; and*
 - (c) *controlling systemic risk.*
17. *The rules will not:*
 - (a) *permit unreasonable discrimination among participants; or*
 - (b) *impose any burden on competition that is not necessary or appropriate in furtherance of securities legislation or the objects and mandate of the clearing agency.*
18. *A clearing agency's rules and the process for adopting new rules or amending existing rules, should be transparent to participants and the general public.*

CDS Response:

15. CDS has established Rules, supported by Procedures that are necessary or appropriate to govern and regulate all aspects of the settlement services offered by the clearing agency. The Rules are 286 pages in length and are publicly available at CDS website, www.cds.ca. For ease of reference, the Rules are divided into ten sections:
 1. Documentation
 2. Participation
 3. Operations
 4. Liability and Indemnity
 5. Risk Management
 6. Depository Service
 7. Settlement Service
 8. Payment Exchange for CDSX

- 9. Default
- 10. Cross-Border Services

The Procedures are also publicly available at CDS website, approximately 1300 pages in length and covering all aspects of participating in CDS services.

- 16. The Rules are consistent with the general goals set out in the acceptance criteria through the following means:
 - (a) Compliance with securities legislation is ensured through the preparation and review of the Rules by legal counsel for CDS and participants prior to submission to the Board of Directors for approval, to all Participants for comment and to the regulatory authorities for non-disapproval.
 - (b) Co-operation and co-ordination with like organizations is fostered through the authority granted by Participants to CDS under Rule 3.6.2 to disclose Participant information to such organizations where the Participant is also a member or to any Regulatory Body having jurisdiction over CDS.
 - (c) All of the Rules focus on controlling systemic risk, in particular, Rule 5, Risk Management comprising 50 pages.
- 17. CDS accepts the criterion, and is of the view, that its current Rules do not and future amendments will not permit unreasonable discrimination among participants or impose any burden on competition that is not necessary or appropriate in furtherance of securities legislation or the objects and mandate of the clearing agency.
- 18. The process for amending Rules and Procedures is set out in Rules 1.5 and 1.4, respectively. The process involves reviews by participants, the Board and the regulators of CDS.

The need for Rules or Procedures amendments is identified by CDS legal counsel in consultation with project development staff and participants during the design phase of a new service or enhancement of an existing service. The initial drafts of Rules amendments are prepared by CDS legal counsel and circulated for review and discussion to a group of participants' legal and business representatives (known as the "Legal Drafting Group"). When the LDG is satisfied with the draft Rule amendment, it is tabled together with an explanatory memorandum with the Board (or its Executive Committee) for approval for circulation for comment to all participants for 30 days (or such shorter period as the Board determines). The draft Rule amendment and explanatory memorandum are circulated to the regulatory authorities of CDS no later than the time that they are circulated to participants and are also posted upon CDS website.

Following receipt of comments from participants and regulators of CDS, further variations are drafted, if required, prior to submission to the Board for final approval for implementation. The regulators are requested to provide final non-disapproval within the time frames which they have established, following which the Rules are made effective upon ten days notice to all participants (or such shorter period specified by the Board).

The Procedures follow a similar process with the following exceptions: The final draft of the amendments to the Procedures are circulated to the "procedures committee" of participants when CDS project staff determine that the amendments are complete and ready; no Board approval is required. The Procedures amendments are then posted on the CDS website and circulated to the regulators. Following the making of any changes required by the procedures committee or the regulators, the Procedures become effective upon 10 days notice to participants, subject to regulatory non-disapproval.

Any participant who disagrees with any action taken by CDS pursuant to its Rules and Procedures, including the substantive provisions of the Rules and Procedures, has the right of appeal to the Board (Rule 3.2.3) and to the Securities Commissions (Rule 3.2.4). Section 21.7 of the Ontario Securities Act gives the Executive Director of the OSC or any person or company directly affected by decisions or rules of a recognized clearing agency the right to a hearing before the OSC.

Enforcement Of Rules And Discipline

- 19. *The rules of a clearing agency shall set out appropriate sanctions in the event of non-compliance by participants.*
- 20. *A clearing agency shall reasonably monitor participant activities and impose sanctions to ensure compliance by participants of its rules.*

CDS Response:

19. Rule 2.7.5 lists adequate causes for the suspension or termination of a Participant. Adequate cause includes failure to make settlement payments, fees payments, participant fund or collateral pool contributions, credit ring payments; failure to comply with participation qualifications or standards: or material breach of the Rules or Procedures.

Rule 3.5.2 provides that CDS' fee schedule may include fees for the failure to comply with CDS' Rules and Procedures. The following fines/penalty fees are set out in CDS 2004 fee schedule:

Undelivered certified cheque	Charge per incident for failure to deliver certified cheque within required timeframes	1,000.00
Proper valuation not provided	Charge per unvalued security for failure to provide valuation of all transfers, deposits and withdrawals	10.00
Bank declaration not submitted	Charge per day per share per ISIN (daily maximum of \$1,000) for non-compliance with Depository Rules re failure to submit bank declarations	0.001
Envelope not picked up by COB	Charge per envelope per day for failure to pick up envelope before close of business	25.00
Position not reconstituted	Charge per million par value (or thereof) per business day reserved for failure to reconstitute a position reserved for reconstitution	1,000.00
Delay of CDSX Payment Exchange Delay CDSX Pmt Exch -Init 15 Min	Charge for the first 15 minute extension for each participant requesting a delay	2,500.00
Delay CDSX Pmt Exch -Addl 15 Min	Charge for a further 15 minute extension for each participant requesting a delay	5,000.00

These fines/penalty fees are assessed on a per incident/occurrence basis. The size of the fine/penalty fee has been determined by CDS, following consultation with participants to be sufficiently large so as to act as a sufficient deterrent in the occurrence of the incidents listed.

20. Upon application for participation in one of CDS' services, firms are required to provide the necessary information to demonstrate that they meet the eligibility and qualification criteria for a particular type of participant. On a regular basis, CDS reviews the financial data and other information regarding participants to ensure that they continue to meet CDS' standards. Participants' daily activities are also monitored to determine that they are complying with the risk controls associated with the securities settlement system, such as the contribution of collateral to participant funds. Annually, CDS prepares a report to the Audit Committee on participants' compliance with the standards set out in its service Rules, custodial contracts and related procedures, using the participants' published information and other source material.

Information Sharing

21. *A clearing agency shall cooperate by the sharing of information and otherwise, with the Commission and its staff, other recognised clearing agencies, recognised exchanges and recognized quotation and trade reporting systems, alternative trading systems, recognised self-regulatory organisations, the Canadian Investor Protection Fund and other regulatory authorities responsible for the supervision or regulation of securities firms or financial institutions.*

CDS Response:

Rule 3.6.2 under Criteria 16(b) sets out our authority to disclose information to other SROs, clearinghouses, etc.

CDS has an MOU in place with the IDA and Bourse de Montréal Inc. to exchange information about participants that are members of both CDS and one of these self-regulatory organizations (SROs). The MOU enables CDS and the respective SRO to alert each other if there are any concerns about the financial health or capabilities of a common participant, so that appropriate action can be taken.

An information-sharing arrangement is in place between the New York Stock Exchange and a foreign participant of CDS, to advise CDS in the event that the foreign participant is placed on early warning.