



CDS Clearing and Depository Services Inc



Thomas Murray CSD Public Rating for : CDS Clearing and Depository Services Inc is AA

Public CSD Rating	Overall Rating	Asset Commitment Risk	Liquidity Risk	Counterparty Risk	Financial Risk	Operational Risk	Asset Servicing Risk
CDS Rating:	AA	AA+	AA	AA	AA	AA	AA-

The outlook for the rating is: Stable

Overall Risk Summary

Thomas Murray has assigned an overall central securities depository risk rating of AA to CDS Clearing and Depository Services Inc (CDS), which means very low risk. The rating is a weighted average of six different risk components comprising of asset commitment risk, liquidity risk, counterparty risk, financial risk, operational risk and asset servicing risk. CDS operates a clearing and settlement system called CDSX for all eligible securities. CDSX operates various processes (overnight and intraday batches and real-time) depending on the type of transaction. Securities are transferred in CDS's ledger position against a line of credit granted by the payment banks (extenders of credit), which must be fully collateralised. Actual cash settlement takes place at the end of the day (between 4.00pm and 5.00pm) via the Large Value Transfer System (LVTS) operated by the Bank of Canada.

The majority of participants are exposed to minimal asset commitment risk since securities are reflected in their accounts immediately after the completion of the settlement process against credit extended by the extenders of credit, with good funds. The exception is for extenders of credit who provide intra-day credit to other participants but only settle their trades at the end of the day. Liquidity risk is mitigated by the use of netting procedures for CNS settlements, the credit provided by extenders of credit and an active securities borrowing and lending programme. However, buy-ins are not common and there are no fines to encourage settlement on due date. Counterparty risk is contained by the use of a DVP system, enforcement of participation criteria and the use of a sophisticated risk containment model which includes settlement caps, collateral and guarantee funds. However, because of the loss sharing arrangements in place, participants are exposed to other members of their collateral pool and extenders of credit have intra-day exposure to receivers of credit.

Potential calls on CDS's financial resources are limited to operational claims and investment in infrastructure since despite acting as central counterparty, it does not take any risk on itself but rather transfers the risk to its participants in the form of loss sharing arrangements. It also has insurance to cover potential losses and arranged lines of credit in place with commercial banks in the event that additional funds are required. Operational controls appear to be in place and are verified by an independent auditor every year. There are detailed operational procedures in place that employees must follow in their daily activities. According to CDS's disaster recovery plan, critical activities can be recovered within two hours. The plan is tested twice a year with the participation of members.

Asset servicing risk is affected by the manual collection of corporate actions information required in the market (including CDS) due to the lack of a central source of information. Information is sent to participants following electronic receipt from

the transfer agent, TSX or DTC. CDS accepts limited liability under a claims process and under the terms and conditions of its rules for losses to the limit of its insurance coverage or recovery from a third party. Payment of corporate actions from issuers is received either via cheque or the LVTS electronic system but CDS always credits the participants' accounts via LVTS.

## Outlook Summary

There are currently no definitive plans that may change the rating. The single most important factor affecting the rating is the asset servicing risk area, in which there are constraints on market information dissemination related to regulatory specifications. CDS would like to become the central source of market information and provide timely and reliable information to the market improving the efficiency of the market and reducing the cost for market participants. This would seem possible especially if it can get the regulators to upgrade SEDAR in a way that would enable CDS to utilise the information through a direct data-feed into CDSX.

## Role of the Depository

The CDS Clearing and Depository Services Inc (CDS), a subsidiary of the Canadian Depository for Securities Limited, is the sole central securities depository in the Canadian market. CDS provides depository, clearing and settlement services for securities in Canada. CDS is a private business organisation incorporated federally in June 1970 under the Canadian Corporations Act and continued under section 181 of the successor Canada Business Corporations Act of 30 July 1980.

Equity and debt securities are immobilised or dematerialised within CDS. The issue of physical shares is still possible to satisfy (usually) retail market requirements, but mainly it is only restricted and legended issues that remain physical. All domestic federal securities that are held in safekeeping at the Bank of Canada (provincial treasury bills, bankers' acceptances, and commercial paper) are cleared and settled by book entry through CDS. The depository completed the migration process from its batch driven mainly equities settlement system (SSS/BBS) to CDSX, its real-time gross settlement platform for debt and equity securities, in October 2003. Cash settles on a net basis at the end of the day through a process called payment exchange.

International clearing and settlement of US transactions through DTC Direct Link and New York Link (where CDS sponsors participants) support OTC and exchange trades via a link with the National Securities Clearing Corporation (NSCC) for CNS settlements in New York Link and the Depository Trust Company (DTC) for trade-for-trade settlement.

<i>Risk Summary</i>	Risk
<b>Overall Risk</b>	<b>AA</b>
<b>Asset Commitment Risk</b> Asset commitment risk exposure for CDSX settlement processes is negligible as securities are transferred in real-time throughout most of the day, and from a payment perspective, finality of cash can be brought forward as counterparties with long cash positions may withdraw credit intra-day. The major exposure is for payment banks (extenders of credit) who only receive finality of cash after the completion of payment exchange through the LVTS system between 4.30pm and 5.30pm.	<b>AA+</b>
<b>Liquidity Risk</b> Liquidity risk exposure within the various systems is contained by the system design which incorporates, for example, a sophisticated netting model for interbroker settlement, availability of credit facilities, the Large Value Transfer System (LVTS) payment system, and the availability of stock lending.	<b>AA</b>
<b>Counterparty Risk</b> Counterparty risk exposure for CDSX eligible transactions is contained by the use of an effective gross settlement system for equities and debt, application and enforcement of membership criteria based on members' financial soundness and sophisticated risk containment measures (including net debit limits and collateral). Broker-to-broker transactions settled through CNS and DetNet have CDS as the counterparty. This risk exposure is blended with Financial Risk.	<b>AA</b>
<b>Asset Servicing Risk</b> CDS receives corporate action information from various sources: Issuers (who are legally obliged to provide corporate action information to securities holders, such as the depository as nominee, and SEDAR, a publicly accessible issuer information repository that CDS INC. (a subsidiary of the Canadian Depository for Securities Limited) manages for Canadian securities regulators), Transfer Agents, Information Vendors, Press, Stock Exchanges, and DTCC. CDS accepts limited responsibility under a claims process and under the terms and conditions of its Rules for losses to the limit of its insurance coverage or recovery from a third party, which arise from late, inaccurate or incomplete information or other errors. A limited number of non-material claims have been made against CDS for such losses over the last few years. CDS provides a passive proxy voting service as participants have to deal directly with the issuer/transfer agent once the information is received.	<b>AA-</b>
<b>Financial Risk</b> CDS provides a central counterparty service for all broker-to-broker transactions eligible for CNS and DetNet processing. CDS's resources are not exposed for its role as central counterparty due	

<p>to the loss sharing arrangements in place in the market. However, CDS operates risk management processes, liens on participants' assets in their General and restricted Collateral Accounts, guarantee funds to protect participants against a default. CDS's funds are exposed to claims for operational errors. Financial resources are available in the form of paid-in capital and reserves, earnings, explicit (contractual) or implicit support from shareholders or members, insurance coverage and access to credit.</p>	<p><b>AA</b></p>
<p><b>Operational Risk</b> Operational risk exposures are well-identified and contained by CDS. The depository employs full operational risk controls on clearing, settlement and depository procedures and is subject to external audit of these operational controls by KPMG.</p>	<p><b>AA</b></p>
<p><b>CSD on CSD Credit Risk</b> International links exist with NSCC and DTC in the US and other overseas CSDs. The Financial Risk assessment of each of these entities should be read in conjunction with this report (where available).</p>	<p><b>Links Exist</b></p>

## Asset Commitment Risk

### Summary

Low asset commitment risk exposure exists within the CDSX settlement process. Transactions processed through CDSX have different processing cycles with transfer of securities against a credit line with cash immediately available to participants. Final cash settlement between participants' payment banks occurs through the Large Value Transfer System (LVTS) with finality in Central Bank money between 4.00 pm and 5.00 pm SD. However, participants' cash balances are reflected in ledger accounts within CDSX. Participants can withdraw long cash against their CDSX cash balances at any time during the day and may use securities received to immediately fund a sale transaction. Hence, for direct participants in CDSX there is negligible asset commitment risk, with sole exposure being for payment banks (extenders of credit) who only receive finality of cash after the completion of payment exchange. Extenders of credit have counterparty risk exposure against other payment banks, where long cash withdrawals take place, triggered by the gap between the time of withdrawal and final receipt of funds in the LVTS.

### Processing Cycles

Most equities are traded on-exchange while bonds mainly trade OTC. Trading at the Toronto Stock Exchange takes place continuously between 9.30 am and 4.00 pm.

Trade data is sent to CDS by the exchange and by the broker(s) (OTC trades only). Exchange trades are locked in; non-exchange trades are affirmed intraday on a real-time basis via proprietary communication links. Investment Dealers' Association of Canada (IDA) members are required to use CDS's Broker-to-Broker Trade Matching service facility for OTC trades and plans to introduce a rule requiring agreement on institutional trade details on trade date (TD) have been agreed (National Instrument 24-101). In 2005, CDS implemented a message standard to allow institutional trade matching utilities to send CDSX a matched institutional trade. CDS has tested direct linkages with the Omgeo Central Trade Manager (Omgeo CTM) and SS&C Technologies to match trades in both Canadian domestic and cross-border securities through a single interface, which would help market participants to comply with National Instrument 24-101 providing, once implemented, fully automated messaging between the two systems to enable the electronic pass-through of matched trades on trade date.

CDSX has three distinct trade settlement processes: (i) CNS/Batch Net Settlement (CNS/BNS) (ii) Real Time Trade for Trade Settlement (TFT); and (iii) Intraday CNS Settlement. Trades that are targeted for settlement in CNS are settled in either the CNS/BNS process or the intraday CNS process. Participants can select between the CNS and TFT settlement processes.

#### - CNS/BNS batch and Intraday CNS Processes

The CNS/BNS process is a batch settlement process that increases settlement efficiency by combining the settlement of trades targeted to settle by CNS or TFT. The CNS component processes the CNS trades while the BNS component processes the TFT and DetNet trades. The goal of the combined process is to allow CNS and TFT activities to net against each other and to reduce participants' requirements for securities positions, funds, cap, credit and collateral. Settlement in the CNS/BNS batch takes place overnight between 4.00am and 5.00am on a multilateral net basis.

A trade is 'available' for settlement if it has reached value date, is in a confirmed status, and both parties "release" the trade for settlement. Settlement will be attempted for an 'available' trade for the first time in the CNS/BNS process. A trade will not settle if the buyer has insufficient funds, the seller has insufficient securities, or either party has insufficient Aggregate Collateral Value (ACV - refer to 'Risk Containment Model' under Counterparty Risk).

After CNS/BNS processing is complete, any outstanding CNS positions are available for settlement during the CNS intraday processes. Any new trades targeted to settle CNS will only be available for settlement in the next CNS process.

The Intraday CNS settlement process is run at scheduled times during the business day. There are four intra-day CNS batches at 10.00am, 12.00pm, 2.00pm and 3.30pm. Only unsettled CNS transactions, left over from the early morning CNS/BNS process ('CNS Outstandings'), are eligible for settlement by the Intra-day CNS Settlement process.

#### - Trade-for-Trade (TFT) Process

Any trade in any security is eligible for TFT settlement. However, TFT is mainly used for settlement of OTC and broker to custodian trades. Settlement takes place on a real-time basis in two different sessions: from 12.00am to 4.00am (mainly used for pledging of securities) and from 7.00am to 4.00pm against a credit limit monitored by CDS through ledger

accounts.

Free-of-Payment (FOP) transactions can also be settled between 4.15pm and 7.30pm SD (i.e. after payment exchange until system close).

In all settlement processes operated by CDS, securities are transferred at the time of settlement across participants' accounts while cash settlement takes place against a cap and/or a line of credit, which is provided by commercial banks ('extenders of credit'), which must be fully collateralised and actual exchange of funds takes place at the end of the day (between 4.00pm and 5.00pm) when payment exchange takes place (see cash settlement below). These lines of credit can be changed during the course of the business day (usually if an increase is required).

### Cash

Cash credit balances are redeemable at any time during the processing day. Intra-day cash transfers are fully supported by collateral with haircuts calculated by CDS. In the event of a cash withdrawal, a participant's bank would then carry counterparty exposure against another payment bank until actual net cash movements across the LVTS at the end of the day. Actual net cash movements ('Payment Exchange') between payment banks (LVTS participants) occur via the LVTS through an end-of-day cash transfer batch between 4.00pm - 5.00pm SD.

CDSX calculates the participants' final net cash positions and runs both a US and Canadian dollar payment exchange. For Canadian dollars payments are made via LVTS and Fedwire funds for payments in US dollars.

Participants' designated payment banks are required to execute an LVTS payment to the CDS account with the Bank of Canada, the central bank, and CDS executes payments to participants from the same account. The cash processing cycle (payment exchange) occurs between 4.00pm and 5.00pm.

### Asset Commitment Periods

There is negligible asset commitment risk for the majority of participants, since securities are settled in real-time, and long-cash positions can be withdrawn intraday. For extenders of credit and settlement agents, there is intra-day asset commitment period for sales since they are extending credit intra-day with final positions taking place at 5.00pm following the completion of payment exchange. There is no exposure for purchases since securities are immediately available upon settlement.

### Irrevocability

Securities transfers become irrevocable at the point of settlement in the CDSX book-entry system.

For cash transfers for transactions in which CDS acts as central counterparty (CNS and DetNet settlements), CDS assumes an irrevocable payment obligation to net creditors at the time of central novation (TD for DetNet, before the start of T+3 for CNS). CDS sponsors participants into New York Link and DTC Direct Link and is responsible for settlement of their obligations at NSCC and/or DTC.

### Finality

CDSX participants receive intraday finality on cash balances recorded in the CDSX system as transfers are effected in real-time. Funds transfers between extenders of credit (payment banks) are final after settlement within the LVTS at 4.00pm - 5.00pm SD for CDSX settlement. Settlement in US Dollars through Fedwire is made with same day value. Securities transfers are therefore irrevocable earlier than cash, but transactions cannot be reversed or unwound under any circumstance.

## Asset Commitment Risk - Key Indicators

### *Irrevocable commitment to the processing cycle*

	<i>Transaction Type</i>	<i>Start</i>	<i>Finish</i>
<i>Securities</i>	TFT (night)	12.30am SD	4.00am SD
	CNS/BNS Batch	4.00am SD	5.00am SD
	TFT (day)	7.00am SD	4.00pm SD
	CNS Intraday 1	10.00am SD	10.30am SD
	CNS Intraday 2	12.00pm SD	12.30pm SD
	CNS Intraday 3	2.00pm SD	2.30pm SD
	CNS Intraday 4	3.30pm SD	4.00pm SD
<i>Cash</i>	LVTS Payment Exchange	4.00pm SD	5.00pm SD

**Comments (i.e., on pre-funding and irrevocability)**

Participants who do not belong to the collateralized category credit rings are not provided any system operating cap and are required to either pre-fund their settlement activity or to receive the lines of credit from the extenders of credit.

**Securities processing cycle outlined**

For CDSX settlement, securities are transferred from the selling counterparty, to the buyer in real-time TFT system between 7.00am - 4.00pm and 12:30 am and 4.00am SD. Securities are not blocked for any given period before settlement.

**Cash processing cycle outlined**

Balances in CDSX cash ledger accounts are immediately redeemable. Final funds transfer for CDSX settlement via batch cycle in LVTS system.

LVTS batch payment is collateralised to cover the default of the largest net debtor. Only in the event of multiple payment bank defaults in a single day, would the Bank of Canada step in to guarantee payments in the system.

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## Liquidity Risk

### Summary

Liquidity Risk within the settlement systems of CDS is very low due to an active external securities lending market, immediate availability of securities upon settlement, and access to credit facilities. Short-term settlement failure is also mitigated by the existence of participant guarantee funds for all settlement types which can be used to buy-in the required securities.

### Processing Model

All immobilised or dematerialised stock within CDS is immediately available for onward delivery upon settlement. For CDSX transferred securities this effectively means in real time.

Securities and cash funding for CNS (inter-broker) settlement benefit from (BIS Model 3) multilateral netting which reduces the liquidity requirements for effective settlement. TFT trades settle on a model 1 basis with gross settlement of securities and cash in real-time. Although CDSX settlement is gross (BIS Model 1), the real-time nature of the processing allows for securities to be turned around same day.

Starting from 10 September 2007, a maximum limit of CAD 50 million for all debt trades with the exception of Tri-party Repo will be introduced, which aims to reduce the likelihood of late settlement of large value debt trades that could result in payment exchange delays. Currently, some participants settle very large transactions or opt to consolidate and deliver positions close to payment exchange or the CDS cut-off, which could result in failure to settle large settlement transactions because a dealer or custodian lacks sufficient position to settle the transactions or adopt corrective actions in time before the cut-off.

### Fails Management

Buy-ins are not common in the market, but CDS facilitates the process. In the event of lack of securities, buyers can request an intent to buy-in to CDS starting on SD, which then forwards the details to the exchange. The seller then has two days to deliver the securities until the buy-in is executed. The exchange publishes the trades on Trader Notes for its participants the same day and if a seller is available, the buy-in is executed.

Neither CDS nor the TSX impose any fines on unsettled trades. Unconfirmed TFT trades remain in the system for 10 days before they are removed. Confirmed unsettled trades, both CNS and TFT, are transferred to the next available batch until sufficiency of securities in the system. This process can be run for 365 days, although normally settlement takes place shortly after the fail since they are netted down with new trades reducing the securities requirement.

### Credit Facilities

Participants operate against credit limits for settlement within CDSX. Credit facilities are available through commercial banks which can be raised intraday if necessary and/or collateralised credit rings. There have not been any failures due to lack of credit in CDSX.

### Securities Lending

Stock lending is permitted within the market but is external to CDS. However, there is an active stock lending market among brokers, banking and other financial institutions. There are no restrictions on stock lending for non-residents. CDS processes stock loan transactions, but takes no active part in the loan process.

The amendments to NASD-Rule 3370-Prompt Receipt and Delivery of Securities by the Investment Dealers' Association of Canada (IDA) prohibits IDA members or persons associated with a member from executing a short sale on a NASD regulated market unless they are able to assure that they will receive delivery of, or have the ability to borrow, the securities by settlement date.

### Registration Model

For the initial immobilisation of securities, a registrar re-registers the security in the name of the depository central nominee, CDS & Co, so rendering securities into fungible form. Legal transfer of title occurs once securities balances are transferred within the books of the CDS.

Where the issuer has no established transfer agent or registration arrangements in place, CDS will directly coordinate security registration with the issuer. Where there is a transfer agent for a security, deposits are confirmed by the transfer agent before the participant is credited with the deposited quantity. Confirmation of a deposit takes place with 48 hours although there are also "rush deposit" facilities available to participants. In rare cases, it is possible for a deposit to be subsequently found by the transfer agent to have been invalid. In such a situation, the deposited quantity is reversed from

the depositing participant's ledger position. If this reversal results in a negative (i.e., short) position in the participant's ledger, the participant's cash settlement position is charged with 150% of the market value of the position in question. The short position is marked to market on a regular basis until such time the participant makes good the position. When the short position is covered, the cash collateral taken against the short position is credited back to the participant in the next settlement process.

#### Deposited securities

The majority of debt, money market instruments and equities are immobilised or dematerialised at the CDS with the significant majority of the remainder rarely traded.

In terms of dematerialisation, the option to hold a physical certificate will continue but the use of a nominee-name book-entry central securities depository is the first choice for holding securities for financial intermediaries and their clients.

#### Deposit and Withdrawal of securities

Although not legally mandatory to use CDS for safekeeping and settlement of securities, it is effectively obligatory under all Canadian Stock Exchange regulations and the rules of the Investment Dealers' Association of Canada. There is a very limited number of transactions in equities which involve securities held outside the depository.

### *Liquidity Risk - Key Indicators*

#### Settlement Models

CDSX - Model 1 - Gross simultaneous settlement of securities and funds (TFT settlements).

CDSX - Model 2 - Gross settlement of securities followed by net settlement of funds (Extenders of Credit).

CNS and DetNet- Model 3 - Net simultaneous transfer of securities and funds (CNS settlements).

#### Processing Periods

Overnight (by batch)	Yes
End of day	Yes
Batch daylight processing	Yes
Real-time and on-line	Yes
Other	No

#### Comments

There is real-time on-line and batch settlement through CDSX.

#### Credit Facilities

Central bank money used to settle cash elements of trades	No
Credit facilities provided by the CSD	No
Credit facilities provided by commercial banks	Yes

#### Comments

Intra-day finality is in commercial bank money, with Central Bank finality at the end of the day on SD.

#### Stock Lending

Is stock lending permitted in the market	Yes
Are stock lending facilities provided by the CSD?	No
Are stock lending facilities provided by commercial banks/brokers?	Yes

**Comments**

CDS does not act as principal for securities lending, but securities lending is facilitated through CDS.

***Transfer of Securities***

Are securities deliveries achieved by book-entry?

Yes

***Registration of Securities***

Period of time required to register a holding?

Immediate upon settlement

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## Counterparty Risk

### Summary

Low counterparty risk exposure exists for participants settling transactions through CDS, but it is possible exposure could arise in two areas:

1) For CDSX eligible transactions, participants are exposed to the other members of the credit ring collateral pool. However, the chance of losses arising from credit exposures between participants is reduced by the use of an effective gross securities settlement system which has effective net cash finality guaranteed by collateral posted by Canadian chartered banks. Risk exposure is further mitigated by the application and enforcement of membership criteria based on members' financial soundness. Should a default occur, timely remedy is sought by exercising legal claims on the defaulting member's assets or by bank guarantee. In addition, all members are subject to credit limits which help to contain any potential loss.

2) For clearing using the CNS and DetNet services, credit exposure is on the CDS, which assumes the role of a central counterparty. However, for CNS settlements, CDS only becomes the central counterparty in the morning of SD (T+3) exposing participants to each other during the first two days after trading. An analysis of the risks associated with CDS standing in as the central counterparty is blended under the analysis of financial risk (Refer to Financial Risk).

Securities settling in CDSX are final upon settlement in real-time during the day, but cash finality between payment banks only occurs upon payment exchange at the end of the day. CDS has an intraday lien on securities purchased but not yet paid for by the participant in the General and restricted Collateral Accounts. In other words, non-participant buyers are exposed to their Canadian agent, until the agent settles their daily net obligation with the CDS via the LVTS payment exchange. This exposure is mitigated by means of a collateral pool of assets that the participant maintains at CDS that is designed to cover 99% of potential losses in CNS and 97% of the potential losses in DetNet. In order for a client to be exposed to any loss of securities, the agent would have had to fail in its obligation to pay and the net obligation exceeds the value of the collateral pool. At that stage the credit rings of the different categories of participants would cover any residual liabilities.

### Participant Counterparty Risk

Counterparty risk exposure to another participant of CDS arises from the loss sharing arrangements used by CDS. However, the exposure is limited by the existence of an effective gross securities settlement system known as CDSX. Within CDSX, securities settle on a real-time trade-for-trade basis from 7.00am to 4.00pm (payment exchange); from 12.30am to 4.00am against payment; and from 4.00pm to 7.30pm securities only transactions are processed.

CNS runs four times during the day to try to settle long or short CNS outstanding positions; additional cycles can be run if warranted. CNS/Batch Net Settlement (CNS/BNS) runs in conjunction with the CNS process during overnight processing. At approximately 4.00 am, both CNS and TFT transactions are processed to try to maximize settlements. In summary, CDSX is an RTGS system for securities and irrevocable credit balances, with actual net cash transfers between paying agents, via the Large Value Transfer System, occurring in an end-of-day batch cycle between 4.00pm and 5.00pm SD.

The maximum level at which a member can maintain an open position is based on the cap amount assigned to a participant according to a formula in the Rules and Procedures and/or the line(s) of credit established by the extenders of credit. CDSX participation is limited to the Central Bank, Extenders of Credit, Federated participants, settlement agents and receivers of credit (investment dealers etc). Extenders of credit are restricted by incorporation status, capitalisation, and relationships with the Canadian Payments Association (CPA).

### Risk Containment Model

The risk model for CDSX settlement was built on the risk controls applied in the former Debt Clearing System (DCS) for government of Canada bonds and money market instruments, which was replaced by CDSX. Enhancements were made to the DCS model to cover the transfer of equity and some debt from the Securities Settlement Service (SSS) to CDSX.

The system includes the following principal features:

System Operating Caps - established for each extender and receiver of credit, settlement agent and active federated participant to limit the aggregate value of transactions which may be effected at any one time. Receivers are also capped by the Receivers-of-Credit Collateral Pool (contribution x leverage = cap).

Maximum Exposure Point (MEP) - the sum of the credit extended and funds used are calculated daily. A 65-day average is calculated for loss-sharing purposes. Loss allocation is restricted to the members of each credit ring.

Lines of Credit - provided by extenders to receivers of credit to guarantee funds for the settlement of pledges and trades.

CDSX Collateral - collateral maintained by credit ring members to provide coverage of intraday risk, until payment exchange is completed, associated with payment items submitted to CDS. Only the most liquid types of assets are permitted as collateral.

LVTS - procedures within LVTS guarantee that there will be enough collateral supplied by the private sector participants (i.e., banks) in LVTS to generate the necessary liquidity to permit settlement on the books of the Bank of Canada for the payment obligation of any participating financial institution that defaults on its obligations. At the beginning of each day, the participants pledge to the Bank of Canada appropriate collateral security with a value sufficient to cover the largest single permitted net debit position from a single participant in LVTS, thus providing the Bank of Canada with sufficient collateral to make available the necessary liquidity to settle the system even in the event that one of the LVTS participants defaults. The Bank of Canada also guarantees settlement of the system in the extremely unlikely circumstance that more than one participant fails during the LVTS operating day. The guarantee will only be called on in the event of the unanticipated failure of more than one participant on the same day during LVTS operating hours, with the failing participants in a net owing position vis-à-vis the system, and if the amount owed by the failing participants exceeds the value of collateral that has been pledged to the Bank of Canada. No payment confirmed by LVTS would ever be unwound due to settlement problems under the Payment Clearing and Settlement Act. LVTS payments provide clients with finality and irrevocability for each payment received.

Aggregate Collateral Value (ACV) - Securities in a participant's general account are the primary source of collateral, which can be used by CDS to obtain liquidity to make a payment on behalf of the defaulting party. This is accomplished by means of a 'super-priority' lien on these securities in the favour of CDS (established under section 85 (1.1) of the Ontario Business Corporations Act). Settlement of transactions that would cause a participant's payment obligations to exceed the value of securities in its general account available to cover these payment obligations are prevented. This applies to all participants.

If the ACV is greater than its payment obligation, the participant may move securities out of its general account into its segregated account intraday. If the ACV is less than its payment obligation, the participant may move securities from the segregated account to the general account.

Sector limits - CDSX eligible securities used in the ACV are limited to a percentage of the relevant credit ring's operating cap. This applies to banks and bank-owned brokers only.

### **Delivery Versus Payment**

For CDSX settlement, while securities move during the day and actual cash transfers occur at day-end on a net basis, credit received intraday is immediately redeemable for good funds. CDSX is a true DVP system with irrevocable funds transfer through the LVTS system.

### **Role of Central Counterparty (CCP)**

CDS operates two central counterparty (CCP) clearing services: Continuous Net Settlement (CNS) for the settlement of equity trades executed on the Toronto Stock Exchange (TSX), and DetNet for Canadian government bonds and treasury bills. CDS becomes the central counterparty for these trades via novation. In the CCP services, novation occurs as soon as the transactions are netted, which can occur prior to SD for DetNet trades (normally on TD) and in the morning of SD for CNS trades.

CDS transfers its exposure as a CCP to its participants via the loss sharing arrangements established in the CCP Participant Funds. In the event of default, the defaulter's collateral should be sufficient to cover the resulting losses in 99% of the cases for CNS and 97% of cases in DetNet. Any losses in excess of the collateral requirement of the defaulter are borne by the surviving participants in the service.

For the CCP services, CDS manages two participants funds: the CNS Participant Fund and the DetNet Participant Fund. Participants are exposed to a potentially unlimited loss as survivors in one of the CCP services resulting from another participant's default where the defaulter's own collateral was insufficient. However, there is a withdrawal option for participants of these funds in order to limit their loss allocation due to the default of one or more members of the fund. Withdrawal is possible by paying 500% or 700% of the participant's collateral requirements in that CCP service if the participant is withdrawing from DetNet or CNS, respectively.

All trades and outstanding positions in the CCP services are marked-to-market daily to cover the potential loss between the original trade price and the current price which could result if there were a default by a participant. Participants must contribute to the CCP funds to cover the marked-to-market payment owed by a participant in the event of default.

A cap is applied to limit the replacement cost risk arising from the outstanding positions that any participant can create in aggregate across all CCP services in which a participant is a member.

Currently, the CNS service is widely used while the DetNet service is only utilised by a minority of participants.

## Participant Criteria

Within participant groups and within services all participants are subjected to the same controls and regulations. Participants are required to sign standard agreements that cover their use of the different services. Specific and well-defined requirements exist for all categories. CDS requires that the participants provide evidence of their financial ability to meet their CDS obligations, the sufficiency of their personnel, the suitability of their computer equipment, and their ability to satisfy other standards which CDS may establish.

Participant eligibility requirements are the same regardless of the market in which the member is trading. Membership criteria is clearly defined in the CDS rules for the seven categories of participant: extenders of credit, settlement agents, receivers of credit, federated participants, transfer agents, ATON (Account Transfer Online Notification Service) participants and the Bank of Canada.

Participants must be a regulated financial institution, a government body, a foreign institution, the Bank of Canada, a transfer agent, ACT or an ATON participant. Foreign institutions must have minimum capital of CAD 1 million (USD 850 million), or be able to provide satisfactory evidence of financial strength to CDS.

Participants are classified into the following groups with these respective minimum capital requirements:

Extenders of Credit - CAD 1 billion (USD 850 million)

Federated Participant - CAD 1 billion in aggregate of federation and federated members

Settlement Agents - CAD 100 million (USD 85 million)

Bank of Canada - N/A

Transfer Agents - Perform the 'depository agent' and/or entitlements processor roles as well as a 'validator' role (no minimum capital requirements, but have a maximum of CAD 10 million (USD 85 million) for the processing of entitlements)

ACT Participant – N/A limited purpose cross-border participant that uses the New York Link and is therefore a limited purposed Link Participant.

ATON Participant – N/A limited purpose participant that can deliver and receive securities and make payments related to the transfer of client accounts

Receiver of credit - any other qualified participant (no minimum capital requirements).

## Participant Concentration

All major banks and brokers are direct and active CDS participants, giving the depository the widest possible participant base. However, 60% of domestic transactions in the market flow through the top six most active participant "families", each of which operate through bank, broker and/or custodian subsidiaries. This represents significant transaction flow concentration in the market.

In addition, there are currently six 'extenders of credit' although only two of them are currently active in the market as extenders to other than their own subsidiary companies. There is a potential for cost increases for participants if one of the banks was to withdraw as an extender to third parties. Also, participants would not have an option on their credit providers if this were to happen. However, market forces would come into play and other banks could start extending credit to third parties if returns from being in this business were attractive enough to mitigate the risks.

## Financial Compliance/Surveillance

CDS monitors the financial status of each participant on a variable basis depending on the financial status of the participant. Monitoring takes place through receipt of requested participant reports: copy of financial statements for the quarter; statement of its regulatory capital; its 'rating discount', and any other factors relevant to its classification; and an annual audited financial statement. No members have been suspended for failing to meet CDS standards over the last three years.

## Guarantee Funds

CDS operates collateral pools/credit rings for each of the participant categories (except for Bank of Canada) for funds for settlement in CDSX. Each collateral pool is kept separate, and generally operates so that on the failure of a participant, the survivors guarantee the payment obligations of the defaulter. The failing institution's contribution will first be used to cover any deficit in a service. After that, collateral of other participants in the credit ring of the service or category is used. This occurs on the same day of default since defaulting participant's payment obligation must be fulfilled on the day of default.

### *Counterparty Risk - Key indicators*

<b>Capacity of CSD</b>
Agent only
<b>Surveillance of participants by CSD</b>
Yes
<b>Settlement assurance</b>
Yes, for CNS, DetNet, NY Link and DTC Direct transactions.

**Participation criteria**

Yes

**Minimum Capital (local currency)**

Extenders of credit - CAD 1bn

Settlement agents - CAD 100 million

Banks - CAD 1 million

Brokers - CAD 1 million

Canadian Investment/ Foreign Institutions - CAD 1 million

**Size of Guarantee Fund - (Name, local currency, Euro and USD - (millions))**

Participant Funds (as of 31 January 2007)

CNS Participant Fund: CAD 56,042,046

DetNet Participant Fund: CAD 71,428,446

NSCC Participant Fund for New York Link: USD 72,485,600

DTC Participant Fund for New York Link: USD 3,474,151

DTC Direct Link Participant Fund: USD 664,542.

Collateral Pools (as of 31 January 2007)

Extenders of Credit Collateral Pool: CAD 1,613,000,000

Settlement Agents Collateral Pool: CAD 204,200,000

Federated Participant Collateral Pool: CAD 134,280,000

Contributing CAD Receivers of Credit Collateral Pool: CAD 17,253,884

Contributing USD Receivers of Credit Collateral Pool: USD 10,000,000

**Does the CSD act as a central counterparty**

Yes

**Comments**

Participation criteria also depends on a participant's role (e.g., Extender of Credit, Settlement Agents, etc).

CDS acts as central counterparty for exchange trades in CNS, and for Government of Canada bonds and treasury bills in DetNet.

***Participant Concentration (Local Currency Millions)*****Value of transactions in the market by top 10% of participants**

60% for top six financial groups through different entities

**Volume of transactions by top 10% of participants**

60% for top six financial groups through different entities

**Volume of largest individual participant**

N/A

## Asset Servicing Risk

### Summary

CDS receives corporate action information from various sources: Issuers (who are legally obliged to provide corporate action information to securities holders, such as the depository as nominee, and SEDAR, a publicly accessible issuer information repository that CDS INC. manages for Canadian securities regulators), Transfer Agents, Information Vendors, Press, Stock Exchanges, and DTCC. CDS accepts limited responsibility under a claims process and under the terms and conditions of its Rules for losses to the limit of its small claims fund or insurance coverage or recovery from a third party, which arise from late, inaccurate or incomplete information or other errors. A limited number of non-material claims have been made against CDS for such losses over the last few years. CDS provides a passive proxy voting service meaning participants have to deal directly with the issuer/transfer agent once the information is received.

### Information processing

There is no central source of market information and market participants, including CDS, have to actively look for information.

Issuers/transfer agents are legally obliged to supply CDS as a registered shareholder with certain corporate action event information, and CDS proactively gathers information from the System for Electronic Document Analysis and Retrieval (SEDAR), the stock exchanges, issuers, registrars and the press. CDS will verify this information with information providers, Newswires, Transfer Agents and other sources, unless the information is received from SEDAR or the Stock Exchange. Source documents are manually input and disseminated within 24 hours to CDS participants who are holding securities on behalf of beneficial holders. However, in February 2007, CDS automated its system to facilitate data capture in an electronic form from multiple vendors (eg TSX, Computershare and DTCC).

SEDAR currently holds information on only 22 of 60 event types which are required by regulation to be notified to SEDAR. The events that are notified to SEDAR may only represent 37% of total volume of events processed annually but this represents 80 – 90% of corporate action value. In addition, SEDAR information (in pdf form) is manually downloaded by corporate actions staff and used to update CDSX. The remaining 38 event types have to be manually captured and processed by depository staff which may increase the potential for operational errors. However, most of them are debt related and are automatically generated based on feature information in CDSX Security Master File.

CDS will notify all participants, regardless of their holdings, about mandatory as well as optional corporate actions. In fiscal year 2006, 100% of notifications were made within 24 hours of receipt of information via web-based bulletins (with prospectuses attached if the event type was filed on SEDAR and the participant elected to use this enhanced service) and broadcast via messages through the depository's proprietary electronic system. Accuracy rates for entitlement information sent in fiscal year 2005 was 100%. In addition, event information can be viewed online on the system or is available to participants via batch feeds.

CDS's SWIFT ISO 15022 MT564 message for entitlement information is compliant with numerous third party software vendors. No other corporate actions information is distributed via SWIFT.

### Instruction processing

Participants send corporate action instructions to CDS via the proprietary electronic system. Validation, as to sufficiency of securities position or funds, for voluntary events is done by the system when an instruction is received. When an instruction has not been received close to the deadline, CDS will not advise the participant, although it may provide a courtesy call.

Depository Agents (typically transfer agents) have the capability to take the role of depository agent in CDS's system. Tender instructions and shares will move from the participant's ledger straight into the depository agent's ledger which constitutes a legal tender, supporting extending instruction deadlines up to the legal expiry of the offer during the hours CDS's system is up and running (7.00am – 7.30pm). The previous cut-off of 24 hours will not apply if the depository agent is set up in the system.

CDS has canvassed the market and, in general, participants do not require CDS to contact them where instructions have not been received close to the deadline. The system does not accept instructions submitted after the deadline.

Claims for mandatory distribution events on outstanding trades and positions are automatically generated and settled by the system. CDS has an automated facility for processing withdrawal instructions where withdrawal rights are part of the terms and conditions and where instructions are received prior to the withdrawal right expiry date and time.

CDS accepts limited responsibility, under a claims process and under the terms and conditions of its Rules, for losses to the limit of its insurance coverage or recovery from a third party, which arise from missed corporate action deadlines where instructions have been received within published deadlines.

CDS ensures that the allocation of securities and cash resulting from Corporate Actions are made through their proprietary system upon release of payment by the paying agent. Cash payments are made in same day funds, increasingly via the Large Value Transfer System (LVTS) - For 2006, around 70% by value was received via LVTS. Once payment is received from the issuer, corporate actions staff will manually match the payment to their records and once this is completed, CDS proceeds to distribute payments to participants via the CDSX payment process. In the majority of cases, distribution of entitlement funds occurs on pay date although if funds matching cannot be completed before the end of PD, payment is executed on PD+1. CDS will pay interest on any money retained overnight only if they are able to obtain interest on this money from the issuer or paying agent. In fiscal year 2005, 99.8% of income and 99.99% of corporate action (where predetermined) entitlements were credited on due date.

#### Proxy Voting

CDS provides a passive proxy voting service as participants have to deal directly with the issuer/transfer agent once the information is received. CDS sends participants notifications of general meetings but does not accept proxy voting instructions. The depository supports the announcement of all meetings but will not attend meetings on participants' behalf.

Participants' holdings do not need to be re-registered to attain voting eligibility, nor are positions frozen around meeting dates. Issuers are obligated to inform CDS of meeting dates, which CDS then provides each week, as a regulatory requirement, to 2 of the main national newspapers. There are no separate electronic notifications from CDS.

#### Other services

CDS assists Canadian participants investing in US securities by transmitting information on rates to be withheld by the IRS and distributing the net payment to participants. It also withholds tax on behalf of American investors investing in Canadian securities.

### *Asset Servicing Risk - Key indicators*

#### *Information processing*

<b>Securities covered</b> Depository eligible securities
<b>Information sources used</b> SEDAR, Issuers, Transfer Agents, Stock Exchange, Depository, registrars & press
<b>Information provided in English</b> Yes

#### *Number of Events during last full year*

<b>Dividends</b> 27,590 (as at 31 October 2006)
<b>Interest &amp; Redemptions</b> 63,310 (as at 31 October 2006)
<b>Corporate actions</b> 15,810 (as at 31 October 2006)
<b>Notification via</b> Proprietary electronic and email
<b>SWIFT message types</b> MT564
<b>Notification within</b> 24 hours
<b>Information processing comments</b> Money market maturities totalled 30,500

#### *Instruction processing*

<b>Use of depository</b> Market practice and IDA regulation
<b>Settlement on due date</b> Yes

<b>Optional corporate actions supported</b> Yes
<b>Cash account credited</b> Yes
<b>Central paying agent</b> No
<b>Entitlements based on</b> Ledger positions and Outstanding trades

*Proxy voting services*

<b>On-line</b> No
<b>Outsourced</b> No
<b>Announcement of meetings</b> Yes
<b>Elections (Voting)</b> No
<b>Results reporting</b> No

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## Financial Risk

### Summary

Financial resources are in the form of paid-in capital and reserves, earnings, explicit (contractual) or implicit support from shareholders or members, insurance coverage and access to credit. In the case of credit losses, supplemental resources can be found in the form of guarantee funds and collateral protection.

CDS acts as the central counterparty (CCP) for on-exchange transactions eligible for CNS processing, and for future-dated Government of Canada bonds and treasury bills in DetNet. However, CDS's resources are not at risk for its role as CCP due to the loss sharing arrangements in place.

Potential calls on CDS's financial resources could arise as result of the following:

- Investment in operational infrastructure,
- Operational losses for which CDS has assumed liability,
- Losses for which a public Court has considered CDS accountable.

The Canadian Central Bank provides no guarantee for CDS, although it will provide funds should more than one participant default in the market.

### *Financial and other Resources*

#### Capital Structure

CDS has seen a slight reduction in its shareholder equity in the past two years from CAD 46.7 million (USD 34.3 million) as at 31 October 2004 to CAD 44.6 million (USD 38 million) in 2005 to CAD 41.54 million (USD 37 million) as at the end of October 2006. Although shareholders' equity and reserves have remained stable at CAD 8.7 million and CAD 10 million, respectively, over the last year, the financial accounts for the year ending 31 October 2006 reported a reduction in the unappropriated retained earnings from CAD 25.9 million in 2005 to CAD 22.9 million in 2006 (CAD 28 million in 2004).

CDS is wholly owned by the Canadian Depository for Securities Limited (CDS Limited), the holding company for the CDS Group. CDS Limited is owned by the major Canadian chartered banks (33.3%), members of the Investment Dealers Association of Canada (15.2%) and the Toronto Stock Exchange (18.1%) and other investors under nominees (33.4%). The CDS does not directly pay dividends but rather returns money in the form of rebates. In order to increase capital, CDS would have to raise it like any other privately-held corporation by issuing additional shares or borrowing. There are no shareholders, bankers or investors who are legally bound to provide capital to CDS. No capital calls have been made in the past 20 years. No government body has an ownership stake and hence direct government support has to be discounted.

Although CDS's capital is not significant relative to assets under custody, its resources are only at risk for claims due to its fault in the operational procedures that causes a loss to a participant. CDS takes no liability in its role as central counterparty for CNS and DetNet trades since the losses caused by a default of a participant in the system are assumed by the other members of the respective credit ring pools and participants funds.

#### Earnings Performance

CDS operates with a priority to provide customer efficiency rather than a return on shareholder equity, and structures its financial strategy to required cash-flow rather than a specific profit. CDS has the flexibility to raise or lower fees as required which it has combined with the granting of rebates to participants over the last 5 years. A rebate of CAD 19 million (USD 17 million) was accrued as at 31 October 2006 and was netted against the domestic clearing and settlement, depository, international and courier revenues in the consolidated statement of operations.

In some years, an operating profit has been an objective in order to build capital for projects. This surplus has offset net losses in 2005 and 2006. In 2006, CDS's net operating revenue was down at CAD 88.3 million (USD 79 million) from CAD 94.1 million (USD 80 million) in 2005. This decrease is mainly attributable to the lower income received from clearing, depository and international revenues due to the rebate made in December 2005. An increase in the value of total expenses from CAD 97.7 million (USD 83 million) in 2005 to CAD 98.2 million (USD 87.5 million) in 2006 also contributed to obtain a net loss of CAD 3 million (USD 2.7 million) against the net loss of CAD 2.1 million (USD 1.8 million) reported in 2005.

While the losses reported in 2005 and 2006 do not represent a threat to CDS's financial sustainability, it might restrict its ability to accumulate reserves for systems and other developments.

During the 2006 fiscal year, which ended on 31 October 2006, 31% of revenues were obtained from depository services, 26.4% from clearing services, 5.3% from international, 6% from SEDAR, 14.3% from NRD, 5.8% from SEDI, 3.8% from courier and 7.3% from other services.

In order to protect itself against drastic changes in transaction volumes, CDS invoices and collects a transaction volatility premium (TVP) (currently set at 7%) for use in the event of unexpected declines in transaction volumes. Since the inception of the transaction volatility premium in 1991, and with the exception of using the TVP to fund the development of CDSX, 100% of the value of premiums has been refunded annually to CDS members.

#### **Guarantee Funds (Central Counterparty Funds Only)**

CDS manages two guarantee funds, whose size is detailed in the Counterparty Risk section. These apply to trades for which CDS acts as the CCP:

- DetNet for government debt transactions
- CNS for on-exchange equity transactions

#### **Access to Credit**

CDS has committed lines of credit in place with its bankers. These can be used to cover a default in case the collateral posted by the participant is not immediately available to cover the fault (e.g. the collateral is with the extender of credit). In addition, operating lines of credit for both CDS Clearing and Depository Services Inc. and CDS INC. may be used more generally or to cover general cash flow requirements or to cover a liability claim that was not fully covered by the insurance arrangements or to cover insurance deductibles.

The amount available under these facilities is not available as it is considered confidential to CDS, but it is considered sufficient to cover any liquidity need that would arise in the normal course of the business.

#### **Insurance**

CDS does not publicly disclose information on insurance coverage. However, CDS does have extensive insurance coverage that includes insurance for the loss of securities including electronic securities, computer fraud, directors liability, errors and omissions by staff, damage to building and equipment and others. The insurance limits and deductibles vary in size for the different types of cover. The policies are reviewed by the Audit committee and the Board of Directors on a regular basis to ensure the policies are appropriate for the organisation and to approve any changes to the policies.

#### ***Potential Claims on Financial Resources***

##### **Credit Loss**

CDS does not provide credit facilities to its participants.

##### **Central Counterparty Exposure**

CDS is not exposed to credit losses as a result of its role as central counterparty for trades involving government fixed income securities and equities since it operates a loss sharing arrangement for market participants. In order to protect participants against a default in the system, CDS maintains an active risk mitigation function. In the event of a payment default CDS has a lien on delivered securities for which it makes payments. Brokers settle their trades with their own systems. CDS and NSCC net all trades and settle securities transfers by book-entry line by line. Participants pay CDS at end of day or vice versa. Payments to DTC and NSCC are made through same-day fund settlement using US Federal Reserve's FEDWIRE.

##### **Liability for Operational Losses**

CDS has a limited programme in place to compensate participants against losses due to operational errors by CDS. The board establishes a maximum limit for compensation which is currently set at CAD 120,000 for a six-month period for budget purposes. A claim exceeding this amount can be made and will be recovered from its insurance policy (please refer to Depository Liability under operational risk). 2 valid claims were made against CDS in fiscal year 2006 for a total of CAD 1,259 and USD 7,062.

The depository accepts liability for losses caused by theft, system failure, errors, omissions, and fraud up to a value limited by the extent recoverable under their insurance policies or from third parties. The CDS does not accept liability for losses triggered by reconciliation errors with registrars or issuers, or from force majeure events.

Nevertheless, it should be noted that any participant that feels to have reasonable ground on which build a lawsuit against the CDS can bring the case in front of the Court.

##### **Investment in Infrastructure**

CDS made a large investment in the conversion process to CDSX. CDSX maintenance and enhancements took place in four separate implementations in February, May, August and November 2005. CDS also ensured that CDSX was able to handle the unprecedented transaction volumes that they have been experiencing, although this did not require a significant

or expensive upgrade.

CDS plans to continue outsourcing to a third party for the maintenance of CDSX.

<i>Financial Risk - Key indicators</i>					
<b>Ownership of the CSD</b>					
	<b>Number - Domestic</b>	<b>Number - Foreign</b>	<b>Total Percentage</b>		
Central Bank	0	0	0		
Stock Exchange	1	0	18.1		
Participant banks	6	0	66.7		
Broker/dealers	n/a	0	15.2		
Mutual funds	0	0	0		
Private clients	0	0	0		
Others	0	0	0		
<b>Comments</b>					
The following participant banks are common shareholders of CDS, holding in aggregate 66.7% of the issued common shares:					
<ul style="list-style-type: none"> <li>• Bank of Montreal</li> <li>• The Toronto Dominion Bank</li> <li>• National Bank of Canada</li> <li>• Canadian Imperial Bank of Commerce</li> <li>• Royal Bank of Canada</li> <li>• Bank of Nova Scotia</li> </ul>					
The remaining (33.4%) is held by the TSX Group and the Investment Dealers Association of Canada.					
<b>Statistics</b>					
	<b>Capital structure Local Currency</b>				
Issued capital	8,661,000				
Surplus	0				
Reserves	10,000,000				
Retained earnings	22,882,000				
<b>Total</b>	<b>41,543,000</b>				
<b>Comments</b>					
Statistics as at 31 October 2006 in CAD.					
<b>Lines of stock</b>					
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Lines of stock	68,100	70,200	74,109	74,100	75,400
% Stock Exchange transactions cleared and settled through CSD	100	100	100	100	100
Total value of securities under custody	CAD 1,818 billion	CAD 2,040 billion	CAD 2,308 billion	CAD 2,690 billion	CAD 3,093 billion
<b>Comments</b>					
figures for year ended 31 October.					
<b>Equities</b>					
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Market Value	CAD 595.0 billion	CAD 707.0 billion	CAD 964.0 billion	CAD 1,210.472 billion	CAD 1,439 billion
% of issued securities in the CSD	N/A	97	97	97	97 (est)
% of market capitalisation	N/A	97	97	97	97 (est)

in the CSD

**Comments**

figures for year ended 31 October

**Fixed Income**

	2002	2003	2004	2005	2006
Market Value	CAD 1,223 billion	CAD 1,333.0 billion	CAD 1,344 billion	CAD 1,479.582 billion	CAD 1,654 billion
% of issued securities in the CSD	N/A	96	96	99.9	99.9 (est)
% of market capitalisation in the CSD	N/A	97	97	99.9	99.9 (est)

**Comments**

Fixed income figures for 2002 onwards also include values for Money Market instruments.

Figures are for year ended 31 October

**Money Markets**

	2002	2003	2004	2005	2006
Market Value	N/A	N/A	N/A	N/A	N/A
% of issued securities in the CSD	N/A	N/A	N/A	N/A	N/A
% of market capitalisation in the CSD	N/A	N/A	N/A	N/A	N/A

**Comments**

Fixed income figures for 2002 onwards also include values for Money Market instruments.

**Expenses**

	2002	2003	2004	2005	2006
Expenses as % total operating revenue	110	88	96	99	-

## Operational Risk

### Summary

CDS maintains a well-defined and comprehensive system of internal controls and safeguards. Depository, clearing, data processing and business continuity key controls and related procedures, which are consistent with CDS's business, exist and have been satisfactorily tested by internal as well as independent external auditors. Other operational risk controls and systems exist which are all regularly reviewed by the internal risk committee and Internal Audit group within CDS.

Key controls exist within CDS which help to minimise operational risk exposure categorised as.

- Safeguarding assets which are consistent with controls expected to be found in a Depository which operates a clearing function.
- Depository controls surrounding CDSX and non-CDSX securities.
- Clearing controls surrounding settlement including payment exchange.
- Data processing controls surrounding computer operations, systems performance, capacity planning, systems development and maintenance and change controls.
- Business continuity controls including internal and external programmes necessary to ensure the smooth running of CDS.

Independent reviews of controls are provided by the internal audit department and the annual external audits executed by KPMG LLP in the form of a 5970 report (Canadian equivalent of the SAS 70 report). The latest report covered the period between 1 August 2005 and 31 July 2006.

### Depository controls

#### Physical security

Depository controls within CDS are aimed at protecting participants' securities on deposit against loss and inappropriate disposition. All certificates are held in secure vaults at CDS or at approved custodians who meet CDS standards. Underlying certificates are subject to an annual external audit.

There are tight controls around CDS's vaults that employ a variety of security measures.

CDS operates under a logical segregation of duties which restrict people that have access to the certificates or ledgers. Transport of certificates is via armoured courier which provides a high level of security.

Equities and corporate debt - Government of Canada domestic debt issues, provisional treasury bills, commercial paper and bankers acceptances, mortgage backed securities, equities and corporate debt are CDSX-eligible. All domestic federal securities on deposit are in safekeeping at the Bank of Canada. Provincial treasury bills, commercial paper, bankers acceptances, mortgage backed securities, equities and corporate debt are book-entry only.

CDS does not allow participants to withdraw physical certificates of non-transferable/defunct issues (NTIs). The compulsory immobilisation of NTIs at the CDS only has a limited effect on the operational risk exposure related to these securities, as these are issues of companies that are no longer traded in the market and can therefore not be transferred between owners.

Independent audit reports as at July 2006 confirmed that the physical certificates, non-certified inventory positions and packages of securities at 8 June 2006 were matched to book-entry-only positions and participant ledger balance records of transferable securities maintained by CDS.

Access to the building is restricted and is controlled by security guards with continuous monitoring of security cameras. Access is controlled with electronic cards and entrance to some areas is only permitted to specific employees. There are also alarms inside the building to warn against unauthorised entrances.

#### Reconciliations

At the end of each working day CDS runs a automated process to compare the ledger positions for each class of financial instrument handled by the system and the inventory held by CDS. If a discrepancy exists, an exception report is generated and the problem should be resolved the following working day.

For physical securities held at the subcustodian on behalf of CDS, a monthly report is sent by the relevant custodian and CDS manually reconciles it against CDS's records. If a discrepancy exists, it is input in a discrepancy log and the situation

resolved by the relevant CDS staff. If the error came from the custodian, the situation is referred to them for correction.

Automatic daily reconciliations also take place with custodians and transfer agents for dematerialised securities. Discrepancies are reported in the custodians Reconciliation Exception Report and CDS's records are deemed to be correct unless the custodian proves otherwise.

## Risk Management

There is a specific risk management department that is in charge of designing the risk management procedures for CDS which are discussed within the risk committee, chaired by the Chief Risk Officer and attended by the managers of the different departments. Risk management policies are also discussed within the risk advisory committee, attended by participants.

Each division is responsible for assessing the risks involved in their areas based on the probability of occurrence and the potential financial impact. Rankings are assigned for each process under a standard procedure to ensure that the risks are consistently assessed across CDS. Depending on these two criteria (probability of occurrence and impact), a four-point scale is assigned and subsequently, the two factors are multiplied to calculate the risks.

## Audits

There is an internal audit division that reports to the management. The Chief Auditor leads the department that comprises teams covering IT audit and operational audit.

The mission of the internal audit is to provide an independent, objective assurance as to the quality and effectiveness of CDS's controls, operational and management processes and to provide value-added consulting services designed to improve CDS's operations and functions. The internal audit department also evaluates and improves the effectiveness of risk management, internal control and governance process.

Internal audit also supports the work of the external auditors by providing their opinions on CDS's controls. In fact, the internal audit plan and the plan presented by the external auditors are coordinated and complementary. The internal audit plan is established every year and covers the main areas to be audited and the schedule. CDS identified 36 areas for audit during the 2006 audit plan.

The results of the internal audit are provided to the management of CDS as well as CDS's Board and are discussed during the audit committee. The review of CDS's internal controls structure, business continuity programme and other audit issues is executed by the audit committee.

CDS also has appointed an external auditor, KPMG, which complements the work executed by the internal audit and provides an independent view on the controls undertaken by CDS and CDS Inc. KPMG has acted as CDS's external auditors for 30 years, but CDS's policy is to review the appointment of its external auditors every five years.

The review on controls is undertaken under a 5970 report (the Canadian equivalent of the SAS-70 report).

The external auditors also report to the management of CDS and participate in the audit committee which is a subcommittee of the board of directors. The external auditor could meet separately with a particular participant at the request of the participant to discuss the findings of the report. The reports are also available to the regulators such as OSC and BoC.

As part of the external audit process, there are visits over 10 months throughout the year with concentration over July, August and September.

KPMG is not involved in any implementation project and the risk model is currently outside of their scope.

## Staff training

There is a specific budget allocated to staff training of approximately 1% of CDS's revenues (CAD 1 million in 2006) which is allocated across the different areas. CDS is also working to develop an in-house training course for new employees.

In order to apply for a training course, employees have to complete an application form, which is submitted to the managers for approval. The manager must then send the form to the Human Resources area for processing and final approval.

## Clearing controls

Instruction Receipt and Processing

Settlement instructions are sent by participants via CDSX in various electronic forms and are classified as on-exchange (exchange) or OTC (non-exchange). Details of on-exchange transactions are received in a batch file from the relevant exchange in a confirmed status.

Off-exchange transactions are entered, modified and deleted through online screens, real-time messages or batch processing. The transaction is entered by one party and then confirmed by the counterparty. If there is disagreement in the trade details, participants can modify or delete the trade.

National Instrument 24-101 is a regulatory requirement for market participants to achieve increased rates of matching for institutional trades to improve the timeliness and efficiency of trade settlement processing. There is a timetable for specific targets to be met (i.e., 80% of trades should be matched by 12.00 pm on T+1 by Q4 2007; 95% of trades are to be confirmed by 11.59 pm on TD from Q1 2010).

CDSX calculates and submits settlement obligations to participants daily for trades executed on trade date (TD). Trades coming from the exchanges are "locked in" on TD. However, in the rare situation that both parties to a trade agree to amend the trade, participants can, on TD+1, request an amendment to a trade reported to CDS from a domestic exchange by faxing the relevant forms to CDS from both buyer and seller. Requests are then verified and authorised by a CDSX control analyst and once the correction is made, a second analyst verifies the details of the request. Net settlement obligations are calculated four times a day under the CNS system, and, if physical securities are part of the settlement process, the envelopes containing the securities are logged and balanced before release to authorised personnel. However, it should be noted that physical transactions represent much less than 0.1% of securities in CDS. Participants can match transactions before processing and can verify through CDS systems access that transactions were executed as per their instructions. In the CDSX system all collateral requirements must be in place before payment exchange can be concluded on any given day.

SWIFT ISO 15022 messaging standards are mainly used for its links to Euroclear France and Japan Securities Settlement & Custody Inc (JSSC). SWIFT includes corporate actions and messaging to/from virtual matching utilities.

#### Collateral management

Collateral pool calculations are maintained and monitored using the Collateral Management System (CMS) which is integrated into the CDSX platform.

#### Reporting

Participants are able to check in real-time the status of each trade they have input in the system. Using this system they can track whether a particular trade is pending and the reasons for this status. In addition, participants receive a batch report with detailed information at the end of each batch cycle and at the end of the business day. These reports detail their account movements, the list of settled, failed and partially settled transactions, details of loans, and details of collateral movements.

Intra-day messages or automated clearing input (ACI) files are generated for participants subscribing to CDS's messaging function. A settled transaction report is available intra-day on request.

#### Data processing controls

##### Data processing

CDS operates its own data centre in a separate secure facility. Control procedures exist to monitor changes to software, disaster prevention mechanisms, data storage and retention of files, program libraries, and systems software.

CDS's data centre runs on a 7/24 basis. Computer operators working on 12-hour shifts monitor data centre activities. Computer operators follow daily checklists of the activities to be executed during each shift.

The tasks executed by the computer operators as well as the timing of job completions are monitored including the submission of the daily shift turnover log to senior IT managers for review. The CDSX daytime and evening time deliverables summary (including target, and actual completion and variances) is produced daily.

#### Security

CDS employs industry standard network security measures including high-level information security policies for firewall remote access, network component configuration management and Internet usage. In 2005, an independent consultant validated the effectiveness of CDS's perimeter security infrastructure. The migration of dedicated test systems to segregated environments provides a safety net for the testing of leading-edge securities infrastructure without impact on any production environments.

A password (using ISO 17799 standards) is required to log-in to the system. Passwords must be changed every 30 days. There is a decentralised model whereby each participant administers their own access, although CDS's policy is that each unique password must only be used by the registered person.

Participants' and remote employees' connections are protected by running on private networks, either using dedicated circuits or VPN.

Passwords are also used by CDS employees to access the system. There are restrictions in terms of data access.

CDS regularly uses third parties (ethical hackers) for vulnerability assessments.

#### Data Zaps

A data zap is any change application or control data that is conducted outside of a production application to add, change or delete the data. Intervention is required at times to bypass control or application programming defects, which cause or will cause an interruption to the processing schedule. The defect is identified for correction.

A threshold level of four data zaps per month has been set by the risk committee and is regularly reviewed.

#### Disaster Recovery/Business Continuity Procedures

CDS maintains an off-site processing centre and an off-site disaster recovery site. CDS's disaster recovery centre employs synchronous data mirroring to protect against the loss of transactional data. Critical systems are recovered in 2 hours, 4 hours, 8 hours or 16 hours depending on the significance of the relevant process.

In the event that CDS's offices become inaccessible, CDS has a range of options that can be used depending on need. CDS has split its core operation into two geographic regions. An outage in one region would be handled in the other region. For corporate divisions, CDS has both permanent and as-required capabilities at a commercial business recovery site. Lastly, CDS is in a position to rely on employees working remotely (from home) in order to execute their daily activities. The computer systems can even be brought up and managed remotely. CDS has a practice that key employees work from home regularly to verify that the connection works and all activities can be executed this way. Through these various business contingency options, CDS believes that it would be able to run operations remotely for an extended period of time.

Software changes can be made remotely while hardware changes require the physical presence of IT staff in order to take place.

CDS conducts semi-annual disaster recovery tests, and the last live test took place on 13 May 2006 with all deliverables met. Regular reviews with IT departments are undertaken to help ensure the disaster recovery plan is current. Updates to technology or processes are immediately incorporated into the DRP plan, as are required changes identified in live tests.

The back-up data centre is warm and has a UPS and a Diesel generator. There are also back ups for digital and analogue lines.

Application and data back ups are shipped to an independent third party for storage. CDS implements retention of three generations (three months) of back up data, based on approved back up policies and procedures which are periodically updated.

On 11 November 2005, CDS conducted a live disaster recovery (DR) processing exercise on a trading day. The purpose of the exercise was to conduct live processing from CDS's DR site for a full day's cycle. All two and four hour recovery objectives and the Friday's overnight batch deliverables were met.

CDS Contingency Planning Services provides terminal access, office space and general support to participants who are temporarily unable to access CDS systems for whatever reason. CDS has also implemented the Participant Shared (Terminal) Access programme to enable different CDS participants to share CDS terminals in the event of a systems breakdown or disaster affecting their access to CDS. Once the participants have reached an agreement on the conditions of the sharing, CDS allocates appropriate segregated user Ids to the terminals to allow for multiple user access.

#### Depository Liability

CDS is only liable to participants in respect to the operations of services (including any client or customer of a participant, any person on whose behalf a participant was acting in any capacity, or any other person claiming through or against such persons). CDS takes no liability against any other third parties.

## CDS's liability for participant loss

CDS shall be liable for any participant loss, subject to the limitations set out in Rules 4.2.5 and 4.2.9. The depository accepts liability for losses caused by theft, system failure, errors, omissions, and fraud up to a value limited by the extent recoverable under their insurance policies or from third parties. The CDS does not accept liability for losses triggered by reconciliation errors with registrars or issuers, or from force majeure events, damage, cost, expense, liability or claim suffered or incurred by a participant, other than a loss of securities, which arises from a participant's participation in a service, but only to the extent such was caused or contributed to by any act or omission of CDS or of any director, officer, employee, contractor or agent of CDS done while acting in the course of office, employment or service. Neither DTC nor NSCC shall be considered to be an agent of CDS. Notwithstanding the foregoing acceptance of liability, CDS shall not be liable to a participant for any participant loss in respect of which that participant is required to make indemnification pursuant to Rules 4.1, 10.2 or 10.5, nor for any participant loss arising from the delivery services.

## CDS's liability for loss of securities

Rule 4.2.4 applies only to CDSX and not to cross-border services. CDS shall be liable to its participants for a loss of securities, subject to the limitations set out in Rules 4.2.5 and 4.2.9. A loss of securities means any circumstance in which CDS would be unable to deliver to all participants all securities held by CDS for them, including:

- The theft, destruction or mysterious disappearance of any certificate or other instrument evidencing securities;
- The determination that any security is a defective security;
- The determination that the registration of any security in the name of CDS, a nominee, a custodian or a nominee of a custodian, is invalid, improper, defective, subject to any adverse claim or privilege or cannot be effectively and right-fully transferred.

CDS has set a limitation on the maximum liability amount of CAD 120,000 every six months, which is a board-approved annual budgetary guideline.

However, participants are able to make a claim for a higher amount if subject to the net amount recovered by CDS from its insurers or any other person in respect of the participant loss or loss of securities. If a participant suffers a loss caused by CDS, which is uninsured or unrecoverable by CDS, then the board may, in its discretion, make good the loss to the participant from CDS retained earnings or contingency reserves. In effect, if there were one or more participant losses in excess of CAD 120,000 in a six month period, the board would be called upon to exercise its discretion and would not be constrained by their previously established budgetary guideline.

CDS does not accept liability for losses triggered by reconciliation errors with registrars or issuers, or from force majeure events.

## Systems Performance

Systems performance within CDS is monitored through a series of procedures, controls and indicators to monitor stress in the system including, for example, pre-established targets and standards, critical early warning indicators including system responses times, cycle processing times, critical job run times, periodic reviews of operational performance statistic and capacity planning.

The current capacity is well over 1 million trades per day. During 2006, 651,000 trades were the maximum number of trades in a single day while the average was around 380,000 to 420,000 trades a day.

In fiscal year 2006 systems availability was 100%, which remained stable from 2005. There were no whole days where the system was disrupted.

<i>Operational Risk - Key indicators</i>	
<b>Control objectives identified by the CSD match standard objectives</b>	Yes
<b>Key controls and procedures are identified by the CSD</b>	Yes
<b>Independent evidence exists that key controls and procedures have operated effectively through the last year</b>	Yes
<b>Material errors have been identified</b>	No

## CSD on CSD (Credit) Risk

### Summary

CSD on CSD (credit) risk exposure on DTC must be assessed by reading the Financial Risk assessment of that entity contained in its respective Thomas Murray Depository Report. CDS sponsors participants into the New York Link and DTC Direct Link, and is responsible for the settlement of their obligations through these links.

CDS's major cross-border depository link is with the US depository, Depository Trust Co. and its sister company, the National Securities Clearing Corporation. In 1998, the CDS link to the DTC was enhanced with DTC becoming a CDS participant for USD trades and in 2006 for CAD transactions. Transfers are executed as regular movements at the CDS terminals.

### CSD - CSD Links

CDS has full settlement and custody links with the DTC, and custody-only links with Euroclear France and JASDEC. A link with Euroclear UK & Ireland is to be launched on 27 August 2007, pending regulatory approval / non-disapprovals.

All CDS participants became eligible to use any of the Canada-US cross-border channels for against payment transactions in October 2001. CDS offers its participants 2 different Canada-US cross-border settlement links: the New York Link and DTC Direct Link.

In the New York Link service, CDS sponsors participants for direct membership in NSCC and DTC. In the DTC Direct Link, CDS sponsors participants into DTC only. For both links, CDS is responsible for settlement of participants' obligations at NSCC and DTC respectively. Participants indemnify CDS for its obligations to NSCC or DTC associated with their activities in the New York and DTC Direct Links through a settlement bank credit ring and collateralisation of a participant fund based on risk-based margining (RBM). CDS also has a cross-border move with DTC, which is on an FOP basis only.

The links do not cover the settlement of US T-Bills (which are not settled and held within DTC) or federal Government of Canada securities.

### Processing Cycles

DTC and NSCC operate within the same time zone as CDS and operate a similar daytime multi-batch system to that used for equities by CDS.

Certain messages between CDS and the Depository Trust Company (DTC) are processed on a real-time basis. In order to support the messaging facility, all Northbound cross-border movements submitted through DTC must reference the receiving CDS Participant's CUID as the third party.

### *CSD on CSD (Credit Risk) - Key indicators*

#### **International Links: List of international links established and/or planned by the CSD**

USA: DTC and NSCC - settlement and custody

France: Euroclear France - custody only

Japan: JASDEC - custody only

## Governance and Regulation

### Management and governance of the depository

CDS is a private business corporation, incorporated federally on 9 June 1970 under the Canadian Corporations Act and continued under section 181 of the successor Canada Business Corporations Act.

The CDS board of directors consists of 15 directors, 10 from shareholders, 1 from CDS management, and 4 independent directors from outside the securities industry. Individual directors have membership on the Governance/Human Resources Committee, the Audit/Risk Committee and the Finance Committee.

The Governance/Human Resources Committee is responsible for the supervision of human resources and compensation issues.

The Audit/Risk Committee reviews the financial statements as well as CDS's risk management and insurance programmes. It is also in charge of reviewing CDS's internal controls, business continuity programme and audit issues. It also revises and reports to the board, management's recommendation for the appointment of the external auditor, the terms of engagement and the appropriateness and reasonableness of the proposed audit fee.

The Finance committee approves and defining the financial policies of CDS.

In addition to the board and its three committees, CDS has several internal and external committees as follows:

External Committees:

- Strategic Development Review Committee, which includes three separate subcommittees for issues relating to debt, equity and entitlements.

- Risk Advisory Committee.

Internal Committees:

- Strategy group

- Executive steering committees

- Risk committee

- Operations committee

- Project review group.

### Regulatory and independent examination of the depository

CDS is regulated by the Ontario Securities Commission and is a recognised clearing agency under section 21.2 of the Ontario Securities Act and in the province of Quebec, under section 169 and 170 of the Quebec Securities Act, regulated by the Autorite des marches financiers (AMF) de Quebec. Recognition as a clearing agency is essential to conducting securities and depository activities and to effecting securities transfers and pledges by book-entry in the records of CDS. Under federal Protection of Securities Regulations, CDS is specifically authorised to act as a prescribed custodian of securities for federally incorporated financial institutions such as banks, trust and loan companies, insurance companies and pension funds. CDSX was designated as a clearing and settlement system subject to the provisions of Part 1 of the Payment Clearing and Settlement Act 1996 which provides for the formal oversight of CDS by the Bank of Canada.

The Depository Bills and Notes Act, 1998, section 85 of the Ontario Business Corporations Act, section 10.2 of the Quebec Securities Act and other provincial legislation govern the immobilisation and book-entry deliveries of corporate money market paper, government debt and corporate securities.

Under the Canadian Securities Administrators' National Instrument 81-102, CDS is an approved securities depository and clearing agency in Canada, with which a Canadian custodian of mutual funds may deposit securities.

Based on the CDS Report on Internal Controls and Safeguards 2005, management state that: "CDS co-operates with federal and provincial Superintendents of Financial Institutions, which regulate banks and trust companies (...) CDS abides by the terms of a Federal Oversight Agreement entered into with Canada's central bank, the Bank of Canada. (...) CDS

qualifies as an 'eligible foreign custodian' with the Securities and Exchange Commission in the United States, under Rule 17f-7 of the Investment Companies Act of 1940" and an eligible depository per the U.K.

Under the rules of the stock exchanges in Canada and the Investment Dealers Association of Canada, CDS is defined as the clearing corporation for each exchange; trades in listed securities are to be settled through CDS; and delivery of securities to settlement agents on behalf of clients is to be made through securities depositories (effectively, therefore, CDS).

An independent audit of the financial statements of CDS, in accordance with generally accepted auditing standards, takes place annually. In addition, an independent audit of certain specified internal control objectives and internal control procedures relating to the depository and clearing system is carried out by KPMG LLP. (Refer to Operational Risk section).

#### Internal controls and procedures for safeguarding investments

The control structure maintained by the management of CDS integrates management, financial, operational, data processing and business continuity control systems and mechanisms to protect the assets of participants. CDS has well-defined internal control objectives and related internal control procedures.

Operational controls are audited annually by internal and external auditors. Most of these controls and procedures have been described earlier in this evaluation.

CDS has an internal audit group responsible for independent appraisal of the adequacy and effectiveness of internal controls. All operations and computer systems relating to CDS itself and its participants' assets entrusted to CDS's care are subject to internal audit appraisal.

An Audit Committee of the board of directors exists. Members are elected annually by the board of directors of CDS. By-laws of CDS require at least four members to be independent of CDS and that one member must not be a shareholder. External auditors of CDS attend all Audit Committee meetings. The Audit Committee is responsible for reviewing all audited financial statements intended for circulation among the shareholders and reporting on these statements to the full board. In addition, the Committee is required to review the risk reduction and insurance programmes of CDS at least annually.

#### Other legal protection mechanisms

N/A

<b>About the Depository</b>			<b>Segregation of Assets at the Depository</b>		
<b>Name and Address</b> CDS Clearing and Depository Services Inc. 85 Richmond Street West Toronto, Ontario M5H 2C9 Canada			<b>Depository assets from participants</b> Yes		
<b>Website</b> www.cds.ca			<b>Participant assets from clients</b> Yes		
<b>Date of establishment</b> 9 June 1970			<b>Eligible Securities Depository under SEC Rule 17f-7</b>		
<b>Date commenced operations</b> 1973			<b>System of central handling of securities</b> Yes		
<b>Legal status</b> Incorporated under Section 181 of the Canada Business Corporations Act			<b>Regulated by a financial regulatory authority</b> Yes		
<b>Type of legal entity</b> Not-for-profit, private company			<b>Holds assets of all participants on equivalent terms</b> Yes		
<b>Regulated by</b> Ontario Securities Commission, Autorite des marches financiers (AMF) de Quebec and federally by the central bank through the Payments Clearing and Settlements Act.			<b>Identifies and segregates participant assets</b> Yes		
<b>Is use of the CSD required?</b>			<b>Periodic reports to participants</b> Yes		
	<b>Settlement</b>	<b>Safekeeping</b>	<b>Periodic examination by a regulator or independent accountant</b> Yes		
<b>By Law</b>	No	No			

<b>By Market Practice</b>	Yes	Yes
<b>How securities are held</b>		
Equities and some fixed income are immobilised, money markets and government debt are dematerialised		
<b>Domestic eligible participants</b>		
92 (Banks 11, Brokers 64, Central Bank 1, and others 16).		
<b>Foreign eligible participants</b>		
3 (Brokers - 1, Others - 2 JASDEC and DTC)		
<b>Ownership</b>		
CDS Limited (holding company) which is owned by the major Canadian chartered banks (1/3), the investment dealers/brokers (1/3), through the Toronto Stock Exchange and The Investment Dealers Association of Canada, and other investors under nominee (1/3).		

## Internal Safety Measures

## Services Provided

<i>Participant Eligibility Criteria</i>
Minimum Capital Standards Yes
<i>Financial Aspects</i>
Ability to raise capital/borrow Yes
Committed lines of credit in place Yes
Publish audit financials Yes
Take lien on stock held No
Central Bank Guarantee No
Other third party guarantee No
Third party insurance Yes
<i>Safeguard Facilities</i>
Offsite Backup Yes
<i>Disaster Recovery</i>
Disaster Recovery Plan Yes
Back-up power generator Yes
UPS (Uninterruptible power supply) Yes

<i>Matching</i>
Pre-matching services No
Matching services Yes
<i>Clearing</i>
Clearing services Yes
<i>Securities Settlement</i>
Book-entry settlement Yes
Fails management Yes
<i>Cash Settlement</i>
Internal cash settlement No
<i>Stock Lending</i>
Securities lending for fails coverage No
Comments Settled through CDS but CDS does not act as principal
<i>Asset Servicing</i>
Notifications Yes
Securities processing Yes
Paying agent No
Central registrar No
Proxy voting services No
Comments CDS is central registrar for some Book-Entry Only (BEO) issues
<i>Communications</i>
Electronic communications Yes
<i>Reporting Services</i>
Electronic reporting Yes
Reporting of every movement Yes
Regular statement of securities deposited Yes



## Definition

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### Publication Date

The publication date represented here is June 2007. This is the date that the assessment report has been reviewed by third parties including the CSD. The report is updated on an on-going basis throughout the year as new information is received and should be read in conjunction with the relevant newflashes issued since the publication date.

### RISK EXPOSURE DEFINITIONS

**Asset Commitment Risk - The period of time from when control of securities or cash is given up until receipt of countervalue.** This risk concerns the time period during which a participant's assets, either cash or stock, are frozen within the CSD and payment system pending final settlement of the underlying transaction(s). Following settlement, the risk period is extended until the transfer of funds and stock becomes irrevocable. It excludes any periods when assets, cash or stock, are committed to a market participant including brokers, banks and custodians, not caused by CSD processing.

**Liquidity Risk - The risk that insufficient securities and or funds are available to meet commitments; the obligation will be covered some time later.** This is where for certain technical reasons (e.g., stock out on loan, stock in course of registration, turn round of recently deposited stock is not possible) one or both parties to the trade has a shortfall in the amount of funds (credit line) or unencumbered stock available to meet settlement obligations when due. These shortfalls may lead to settlement 'fails' but do not normally lead to a default.

**Counterparty Risk - The risk that a counterparty (i.e., a participant) will not settle its obligations for full value at any time.** This is simply the total default of a direct participant of the CSD. This is the event when a participant is unable to meet its financial liability to other participants. This risk only goes as far as direct participants of the CSD and excludes clients of direct participants that default on liabilities to such participants, even if such a default should systemically cause the direct participant to subsequently default.

**Asset Servicing Risk - The risk that a participant may incur a loss arising from missed or inaccurate information provided by the depository, or from incorrectly executed instructions, in respect of corporate actions and proxy voting.** This risk arises when a participant places reliance on the information a depository provides or when the participant instructs the depository to carry out an economic transaction on its behalf. If the depository fails either to provide the information or to carry out the instruction correctly then the participant may suffer a loss for which the depository may not accept liability. The depository may provide these services on a commercial basis, without statutory immunity, or it may provide the service as part of its statutory role, possibly with some level of protection from liability. This risk is likely to become much higher when international securities are included in the service.

**Financial Risk - The ability of the CSD to operate as a financially viable company.** This risk concerns the financial strength of the depository and if its financial resources are sufficient to meet the on-going operation of the organisation. This risk also includes where the CSD may act as central counterparty, or otherwise acts in a Principal capacity.

**Operational Risk - The risk that deficiencies in information systems or internal controls, human errors or management failures will result in losses.** The risk of loss due to breakdowns or weaknesses in internal controls and procedures. Internal factors to be considered in the assessment include ensuring the CSD has formalised procedures established for its main services. The CSD should have identified control objectives and related key controls to ensure operation and proper control of established procedures. Systems and procedures should be tested periodically. There should be external audit processes in place to provide third-party audit evidence of the adequacy of the controls.

### RATING SCALE

AAA	Extremely low risk
AA+	Very low risk
AA	
AA-	Low risk
A+	
A	
A-	Acceptable risk
BBB	
BB	Less than acceptable risk
B	Quite high risk
CCC	High risk
N/R	No rating has been given due to insufficient information

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Names of analysts available on request.

Report Date  
Canada

7 August 2007