

#### **CSA STAFF NOTICE 21-306** NOTICE OF FILING OF FORMS 21-101F5 INITIAL OPERATION REPORT FOR **INFORMATION PROCESSOR**

#### I. INTRODUCTION

The Canadian Securities Administrators (CSA or we) are publishing this notice to seek comments from market participants on the summary of applications for the information processor role, included at Schedule A, and to solicit feedback on a number of specific issues.

#### II. **BACKGROUND**

#### 1. Transparency

National Instrument 21-101 Marketplace Operation (NI 21-101) imposes transparency requirements onto marketplaces, dealers and inter-dealer bond brokers (IDBs) for exchange-traded securities and fixed income securities. Transparency facilitates the price discovery process and compliance with regulatory requirements, such as best execution and short selling. Transparency also supports competition between marketplaces by enabling market participants to have access to information regarding securities being traded.

Part 7 of NI 21-101 requires that marketplaces that display orders of exchangetraded securities provide information regarding these orders to an information processor or, if there is no information processor, to an information vendor. Part 8 of NI 21-101 requires that marketplaces that display orders of corporate debt securities<sup>1</sup> provide order information for corporate debt securities to an information processor. In addition, marketplaces, IDBs and dealers executing trades of corporate debt securities are required to provide information regarding details of trades to an information processor or, in the absence of an information processor, to an information vendor. Further details on the information to be reported to the information processor are included in Part 10 of Companion Policy 21-101CP to NI 21-101 (21-101CP).

At this time, CanPX Inc. (CanPX) is the approved information processor for corporate debt. There is currently no information processor for the equity securities. However, order and trade information is provided to information vendors.

<sup>&</sup>lt;sup>1</sup> Part 8 of NI 21-101 also sets out the transparency requirements applicable to government debt securities, however, these have been postponed until December 31, 2011.

### 2. Regulatory requirements, multiple marketplaces and information consolidation

The CSA initially proposed the creation of a data consolidator in 1999 with the introduction of the ATS Rules.<sup>2</sup> However, based on recommendations by an industry committee struck to review data consolidation and market integration<sup>3</sup> for the equity markets, we accepted the industry committee's view that a market-based solution would develop to achieve consolidation and removed the requirements for data consolidation and market integration.<sup>4</sup> They also expressed views on market integration.

On July 14, 2006, we proposed several amendments<sup>5</sup> to the ATS Rules and their companion policies (together, the proposed amendments). One of the amendments<sup>6</sup>, which has since been adopted, clarified our expectation that, in order to comply with best execution obligations, dealers should take into account order information from all marketplaces where a security is traded and should not just consider information from marketplaces where a dealer is a participant, as appropriate. Comments received to the proposed amendments indicated that such requirements would be more feasible with a market integrator or data consolidator/information processor. While we disagreed that market integration or data consolidation was necessary in order for dealers to comply with the best execution obligations, we agreed that the existence of an information processor<sup>7</sup> that provides consolidated data could be a helpful tool for meeting best execution and other regulatory requirements. That is, an information processor would ensure the availability of a source of consolidated data that meets regulatory standards and which users, including dealers, could use, at their choice, to demonstrate how they met their best execution obligations. The existence of an information processor would not preclude marketplace participants from using data provided by other information sources such as data vendors or from obtaining direct data feeds from the marketplaces.

As stated above, the purpose of data consolidation is to facilitate the price discovery process and regulatory compliance in a multiple marketplace environment. It enables market participants to use one source to see all prices and trades of a particular security and provides a benchmark for market participants and regulators to evaluate compliance with certain regulatory requirements like best execution, short selling and "best price" obligations, especially in a multiple marketplace environment. An information processor

<sup>5</sup> The proposed amendments were published in Ontario on July 14, 2006, at (2006) 29 OSCB 5735.

<sup>&</sup>lt;sup>2</sup> NI 21-101 together with National Instrument 23-101 *Trading Rules* are the ATS Rules. First published at (1999) 22 OSCB ATS Supp (the ATS Supplement). A discussion about the "Consolidated Plan" can be found on page 93.

<sup>&</sup>lt;sup>3</sup> Market integration enables a buyer or a seller of securities to access any order on any other marketplaces, regardless of whether they are a marketplace participant of that marketplace. See the ATS Supplement for a detailed description of market integration.

<sup>&</sup>lt;sup>4</sup> See the industry report at (2003) 26 OSCB 4385.

<sup>&</sup>lt;sup>6</sup> These amendments have subsequently been implemented in subsection 4.1(8) of Companion Policy to NI 23-101.

<sup>&</sup>lt;sup>7</sup> An information processor is defined as a company that receives and provides information under NI 21-101 and has filed Form 21-101F5.

could ensure a central source of consolidated data that is consistent and meets standards approved by regulators.

For these reasons, we invited interested parties to apply for the role of the information processor and published a separate notice of request for this purpose. In response to our request, we received six filings of Form 21-101F5 for the information processor, as follows:

- Bourse de Montréal (MX) for fixed income and equity securities;
- CanPX for fixed income securities;
- CDS Inc. for fixed income and equity securities;
- Gmarkets Inc. (Gmarkets) for fixed income securities;
- TSX Inc. (TSX) in conjunction with CanDeal.ca Inc. (CanDeal) for fixed income securities; and
- TSX for equity securities.

On October 27, 2006, we extended CanPX's approval as the information processor for corporate fixed income securities from December 31, 2006 until December 31, 2007 in order to allow sufficient time for market participants to transition to a new information processor, in case a different entity is selected to perform this role. <sup>9</sup>

#### III. CRITERIA AND EVALUATION OF APPLICATIONS

#### 1. Criteria

Section 16.2 of 21-101CP states that the CSA will review Form 21-101F5 to determine whether it is contrary to the public interest for the filer to act as an information processor. We are considering a number of objective factors to evaluate the filings received. Specifically, we are looking for a financially viable entity that meets the following criteria:

a. Organization and governance – the applicant has a strong management team and board of directors with independent representation, if feasible; it has sufficient staff resources with adequate industry knowledge and expertise assigned to run the information processor business; if facing inherent conflicts of interest, such as those associated with the collection, handling and distribution of data provided by competing organizations, it has adequate processes to manage such conflicts.

<sup>&</sup>lt;sup>8</sup> CSA Notice 21-304 Request for Filing of Form 21-101F5 Initial Operation Report for Information Processor by Interested Information Processors (Request for Filing of Form 21-101F5), published in Ontario on July 14, 2006 at (2006) 29 OSCB 5757.

<sup>&</sup>lt;sup>9</sup> CSA Staff Notice 21-305 Extension of Approval of Information Processor for Corporate Fixed Income Securities, published in Ontario at (2006) 29 OSCB 8364.

#### b. Systems

- o <u>Development and implementation</u> staff assigned to develop and implement the system necessary to perform the role of the information processor have adequate technical capability; the time required to go live by the system, if not already operational, is reasonable and connectivity is easy, in terms of standards, cost and time; in addition, the system has an adequate Central Processing Unit, network performance and capacity, an adequate testing plan that includes capacity stress tests, as well as adequate customer contract and Service Level Agreements.
- Operations and data integrity it has, or can develop, a system that has adequate hardware, software and network redundancy, physical and logical security, customer support activities and data validation processes; it has adequate backup procedures and a disaster recovery plan that ensures that the feed is re-established within a reasonable timeline in the event of a significant disaster; problem resolution and change management are given adequate priority and are handled by staff with the necessary capability.

#### c. Commitment to transparency

- o <u>Fixed income securities</u> the applicant is committed to receiving data feeds of trade details for designated corporate securities reported by marketplaces, IDBs and dealers in accordance with the requirements of NI 21-101 and 21-101 CP,<sup>10</sup> and to provide a consolidated data feed of such information, as required by NI 21-101; in addition, it has adequate, timely and transparent criteria and processes to select the designated corporate fixed income securities.
- Equity securities it is committed to receiving data feeds for orders and trades in exchange-traded securities reported by marketplaces in accordance with the requirements of NI 21-101 containing, at a minimum, information such as the marketplace, time of entry, price, volume and appropriate regulatory identifiers; it can provide a consolidated feed of the bid and ask prices, as well as trade information transmitted to it.
- d. Fees and revenue sharing the applicant has a competitive fee structure and revenue sharing plan and, if sharing revenue with the data contributors, the allocation is fair.

<sup>10</sup> Subsection 10.1(3) of 21-101CP requires marketplaces trading corporate debt securities, IDBs and dealers trading corporate debt securities outside of a marketplace to provide details of trades of all corporate debt securities designated by the information processor, including: the type of counterparty, issuer, type of security, class, series, coupon and maturity, price and time of the trade and, subject to certain volume caps, the volume traded, within one hour from the time of trade.

The summary of the filings received included as **Schedule A** to this notice is organized under the four general criteria listed above.<sup>11</sup>

#### 2. Specific requests for comment

In addition to written submissions with respect to the summary of filings included in **Schedule A**, we request specific comments in a number of areas, set out below.

#### a. General

We are requesting feedback on the proposals received and the criteria developed for evaluation.

#### Question #1:

What are the advantages and disadvantages associated with each proposal summarized in Schedule A?

#### Question #2:

Are the criteria used for evaluation of the applications adequate? Should other factors be considered by the CSA in reviewing the applications?

#### b. Feed versus display

One issue we considered was whether an information processor should disseminate a standardized display of data that would ensure that all market participants view the same consolidated information in the same way. Discussions with marketplace representatives indicated, however, that the specific information needs of market participants may be better met if the information processor disseminates data feeds that can be acquired by users, directly from the information processor or through information vendors, and can be varied and customized to meet their needs.

#### Question #3:

Should an information processor be required to create and disseminate a standardized, consolidated display of data? Alternatively, should the information processor disseminate consolidated data feeds that may be accessed by market participants to create their own displays?

#### c. Multiple information processors

We note that, while NI 21-101 sets out the process to become an information processor and 21-101CP states that the CSA must make a determination whether it is contrary to the public interest for a filer to act as an information processor, there are no restrictions on the number of entities that may act as information

<sup>&</sup>lt;sup>11</sup> Note that the summary does not include proprietary and commercial information provided by the applicants.

processors, provided they meet the required criteria. Further, in CSA Notice 21-304 Request for Filing of Form 21-101F5, we recognize that an entity may apply to be the information processor for the fixed income market, for the equity market, or for both.

We acknowledge the synergies and advantages, both in terms of cost savings and ease of connectivity, associated with a single information processor. In addition, a single information processor would ensure the availability of a single source of consolidated information and uniformity of data distributed to the public. However, there may be advantages to having multiple information processors. For example, some believe that having different information processors for the fixed income and equity markets would ensure that the distinct needs of the participants of these two markets are better met. Further, there are views that the availability of multiple information processors may promote competitiveness and create efficiencies, both in terms of fees and operations.

#### Question #4:

What would be the advantages and disadvantages of having one versus multiple information processors? For example, how would each alternative impact market participants' ability to achieve best execution or comply with trade-through or other obligations? Should the information processors for the fixed income and equity markets be different?

#### IV. COMMENTS AND QUESTIONS

We are reviewing the filings received based on the criteria specified earlier. Subject to any comments received by *June 4, 2007*, we intend to make a final recommendation regarding the information processor to each Commission in July, 2007 and publish the results shortly thereafter.

You should send submissions to all of the CSA listed below in care of the OSC, in duplicate, as indicated below:

Alberta Securities Commission

British Columbia Securities Commission

Manitoba Securities Commission

New Brunswick Securities Commission

Securities Commission of Newfoundland and Labrador

Registrar of Securities, Department of Justice, Government of the Northwest Territories

Nova Scotia Securities Commission

Registrar of Securities, Legal Registries Division, Department of Justice,

Government of Nunavut

**Ontario Securities Commission** 

Prince Edward Island Securities Office

Saskatchewan Financial Services Commission

Registrar of Securities, Government of Yukon

c/o John Stevenson, Secretary
Ontario Securities Commission
20 Queen Street West
Suite 1900, Box 55
Toronto, Ontario M5H 3S8
e-mail: jstevenson@osc.gov.on.ca

Submissions should also be addressed to the Autorité des marchés financiers (Québec) as follows:

Madame Anne-Marie Beaudoin Directrice du secrétariat Autorité des marchés financiers 800, square Victoria, 22º étage C.P. 246, tour de la Bourse Montréal, Québec H4Z 1G3

e-mail: consultation-en-cours@lautorite.qc.ca

A diskette containing the submissions should also be submitted. As securities legislation in certain provinces requires a summary of written comments during the comment period be published, confidentiality of submissions cannot be maintained.

Questions may be referred to any of:

Shaun Fluker Alberta Securities Commission (403) 297-3308

Tony Wong British Columbia Securities Commission (604) 899-6764

Randee Pavalow Ontario Securities Commission (416) 593-8257 Serge Boisvert Autorité des marchés financiers (514) 395-0558 X 4358

Doug Brown Manitoba Securities Commission (204) 945-0605

Tracey Stern
Ontario Securities Commission
(416) 593-8167

	SCHEDULE A SUMMARY OF FILINGS RECEIVED									
Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX				
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)				
1. ORGANIZATION	ON AND GOVERNANCE									
1. Overview	CanPX is a for-profit, privately-held corporation.	Gmarkets is a for- profit, privately-held corporation.	The application is made jointly by TSX and CanDeal.	MX is a for-profit, privately-held corporation.	The IP services would be provided by CDS Inc., a wholly-owned subsidiary of The Canadian Depository for Securities Limited.	TSX Inc. (TSX) is a for- profit corporation and a wholly-owned				
			The vehicle pursuant to which TSX/CanDeal will deliver the functions of the IP (and	It proposes two alternative structures for the information processor:		subsidiary of TSX Group Inc., a public company.				
			consequently, the governance structure for the IP) has not been finalized at this time. TSX/CanDeal anticipate that the structure will facilitate the involvement of, and input from, various industry participants including those who are independent of	<ul> <li>1. The CSA could form a not-for-profit legal entity which would carry on its activities as an IP. The IP would:</li> <li>contract with MX to provide the technical service through its Information Technology Solutions business</li> </ul>						

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
			TSX/CanDeal.	unit (MX-ITS); and establish Policy and Technical Committees comprised of industry volunteers for each market (equity and debt) that would make all policy decisions applicable to the IP, as well as decisions on fees and revenue sharing.		
				2. MX could take on direct responsibility to operate as an IP and could establish a separate entity with an independent governance for this		

Description	CanPX (Fixed Income)	Gmarkets (Fixed Income)	TSX/CanDeal (Fixed Income)	MX (Equity and Fixed Income)	CDS Inc. (Equity and Fixed Income)	TSX (Equity)
2. Board of Directors <sup>12</sup>	The board of directors of CanPX is composed of eight directors. All are related to dealers or IDBs.	There are three shareholders, two of which are also directors of Gmarkets. While no directors are independent of the applicant, they have no relationship with any dealers, IDBs or marketplaces.	The governance model for the vehicle has not yet been finalized. TSX/CanDeal anticipate facilitating the involvement of, and input from, various industry participants, including those independent of TSX/CanDeal.	purpose. The composition of the Board will be determined once the optimal governance structure to perform the IP role has been determined between the CSA, the data contributors and the applicant.	The Canadian Depository for Securities Limited has a board of 15 directors; currently, 4 of these directors are independent.	The TSX board of directors has 14 directors, 12 of which are independent.
3. Key personnel	An Operating Committee composed of the President (a	Key personnel consists of the President and CEO, as well as the	Key personnel responsible for the services of the IP will include:	Key personnel will be comprised of the 120 individuals employed by the MX-ITS and 5	Selected staff of CDS Inc. will be responsible, among others, for the	Personnel will be employed by either TSX or an affiliate, and any personnel

<sup>&</sup>lt;sup>12</sup> For the purposes of this summary, we interpreted independence broadly to mean the lack of a direct or indirect material relationship with an applicant; a material relationship would be reasonably expected to interfere with the exercise of a director's independent judgement.

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
	representative of a dealer), Secretary-Treasurer (from the Investment Industry Association of Canada (IIAC) and one of the Directors (an IDB), is responsible for the ongoing operations of CanPX.  4 individuals employed by the IIAC are responsible for ensuring high-level compliance with corporate governance requirements, accounting, the day-to-day operations of CanPX, oversight of the technical	Secretary and Director.  In addition, there is a Client Services group responsible for data quality assurance, entitlements, administration and first level client support.	<ul> <li>Staff of TSX         Datalinx, the         market data         division of TSX;</li> <li>TSX and CanDeal         technologies staff;</li> <li>Staff of TSX         Markets, the         trading division of         TSX; and</li> <li>Senior staff from         TSX and CanDeal.</li> <li>The IP will leverage         TSX staff in Network         Operations/ Support,         Vendor Services,         Market Services and         Product         Management.</li> <li>The IP will also         leverage TSX staff in         Development, Quality</li> </ul>	of the Market Data Services divisions of MX.	operations of the IP. Such staff will include:  The Executive Director, CDS Inc.;  The Managing Director, CDS Inc. business, reporting to the Executive Director; and  A Business Manager, IP, reporting to the Managing Director, CDS Inc. Business.  The Business Manager, IP position will be created and dedicated full-time to the operations of the IP. This individual will be charged with	employed by an affiliate will be shared with TSX under a service agreement.  Core personnel that would be involved in the operations of the IP would be certain staff of TSX Datalinx, Market Services, Technology Operations, Technology Development, Product Management and Market Services.  IP products will share dedicated staff in Operations, Network Support, Vendor

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
	facilitator, monitoring		Assurance and		recommending and	Services and Product
	timeliness of data reported to and		Project Management on an "as needed"		executing strategies for the overall	Management and will share staff with
	displayed by the		basis.		management of the	other products on an
	system, and other				IP operations.	"as needed" basis in
	ongoing functions.				At their times of it is	Development, Quality
					At this time, it is anticipated that two	Assurance and in the Project Management
					business analysts,	Office.
					reporting to the	
					Business Manager, IP,	
					will be dedicated full-	
					time to the	
4. Management	As no directors are	The application	TSX/CanDeal will put	MX's conflicts of	operations of the IP. CDS Inc. does not	Data transmitted to
of potential	independent of a	indicates that	into place the	interest are specific to	compete at any level	the IP by
conflicts of	dealer or IDB, and	Gmarkets does not	necessary policies,	an exchange and	with any of the	marketplaces will not
interest <sup>13</sup>	some may serve on	have a conflict of	procedures and	relate to the inherent	providers of data to	be inappropriately
	Board of other parties	interest in pursuing	processes (both	conflicts from	the IP, nor with any of	manipulated by TSX.
	with an interest in the	the role of IP for the	system and non-	ownership of the	the potential users of	That is, data will not

<sup>&</sup>lt;sup>13</sup> While, as an information processor, the main conflict of interest is that related to the handling of data contributed by other entities, some of which may be competitors, this summary considers all potential conflicts of interests identified by applicants.

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
Description	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
	debt markets, CanPX has a number of measures to help preserve independence, as follows:  Broad share ownership with provision for others to become shareholders;  Secretariat services provided by a third party (the IIAC);  Declaration by directors of any known conflicts of interest during Board meetings;  Periodic guest participation of a Bank of Canada	Canadian debt markets, as it does not derive any income from trading in these markets, and none of its shareholders and directors are employed by a Canadian marketplace, dealer or IDB.	system) to manage potential conflicts of interest associated with the receipt of data from competitors of TSX or CanDeal. As a general matter, access to data will be on an "as needed" basis. Specifically:  • Employees of Shorcan Brokers Limited (an IDB subsidiary of TSX) will not be granted access by TSX/CanDeal to competitor IDB data;  • Employees of CanDeal's Revolution Trading	exchange shares. Such conflicts are managed through restrictions on share ownership.  In addition, the technical infrastructure for the consolidated data feeds will be separate from the MX infrastructure. Operational processes are automated, and only operational staff specifically required to maintain the service will be authorized to access the applications.	such data.  However, it has processes to manage potential conflicts of interest that it would face as an IP, due to receipt of data from competitors of its shareholders. For example, data received by CDS Inc. in its capacity as an IP will not be made available to its Board of Directors (or the Board of its parent, CDS Limited). New service strategy papers and business cases are reviewed and approved by the Board of Directors.	be modified, except to reformat it if required, to remove unnecessary data elements and add necessary new data elements. TSX staff who do not require knowledge of or access to competitor data or client information for purposes of operating the IP or carrying out TSX processes will not have access to the data or client information.  TSX is able to bill and collect other marketplace fees or coordinate

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
	representative; Shareholders do not acquire data directly from CanPX but from CanPX vendors at the same prices, time and terms as other parties; Quarterly communication to all data contributors of Board meeting minutes; Annual circulation to all contributors of audited financial statements; and Easy access to secretariat staff and access to		division will not be granted access by TSX/CanDeal to competitor IDB data; and  • Access to the contributed inbound sources will be restricted to those who require access for the purposes of the performing IP functions.  The existing safeguards that are put in place by TSX in order to ensure that the interests of competing equity marketplaces that provide equity	The reception, processing and dissemination of the data takes only a fraction of a second, therefore, potential conflicts of interest from human manipulation is virtually non-existent as the information is made public within milliseconds.  All MX employees and consultants sign a code of ethics with sections related to confidential and privileged information.	Similarly, status reports on various lines of business are presented to the Board of Directors from time to time for review and comment. However, management screens such documents for sensitive, competitive or confidential information prior to pre-mailing the documents to the Board members. In the event that such information must be tabled with the Board, the director with a conflict of interest is expected to declare same and	appropriate direct billing administration with them. In the latter case, as an additional control, vendors must report the numbers that access to marketplace subscriptions directly to marketplaces not administered by TSX.  The proposed fee schedule for the Consolidated Data Feed does not charge clients a second time for the same data-if they already subscribe to a marketplace's data feed.

#### **SCHEDULE A** SUMMARY OF FILINGS RECEIVED Description CanPX **Gmarkets** CDS Inc. TSX TSX/CanDeal MX (Fixed Income) (Fixed Income) (Fixed Income) (Equity and Fixed (Equity and Fixed (Equity) Income) Income) trading data for assistant recuse him/herself distribution by the TSX The fee model levels corporate from that portion of secretary (from a are not compromised the meeting. the playing field such third-party law will also be put into that clients do not firm) for all place by have incentive to TSX/CanDeal as the unsubscribe from a corporate IP. governance marketplace's feed when subscribing to matters. In addition, the Consolidated TSX/CanDeal will put Feed, and addition of into place dispute the Consolidated resolution Feed comes at a mechanisms to nominal price, \$5, ensure the which will not be a independence and barrier to access. fairness of the process for bond selection (described in section 3(a)). 2. SYSTEMS

The data will be

1. Systems

Technical services are | Bluesky System LLC

CDS Inc. proposes to

The primary system is

MX will create the

	SCHEDULE A SUMMARY OF FILINGS RECEIVED								
Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX			
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)			
overview	currently provided by Reuters Canada Limited (Reuters), which administers the CanPX Transparency System, as instructed by CanPX.	currently provides the systems and application software, maintenance and upgrades, as well as systems administration and second level client support.	collected through CanDeal, which has in place a network between itself and 12 primary dealers, and distributed through TSX's market data distribution platform.	SOLA® Canadian Consolidated Market Feed Technology Solution to receive, consolidate, disseminate and manage quote and trade information for fixed income and equity securities.	engage a software development firm (Tata Consultancy Services) to create the required system solution and to use CDS Inc. to operate and maintain the resultant system.	TSX's RTMD messaging middleware and distribution platform that manages the input, throughput, processing and distribution of data feeds and their related protocols.			
2. Development a	and Implementation								
a. Implementation timeline	The system is currently live.	It estimates that it can provide a production-ready system within 60 to 90 days.	The system is currently "live" in that CanDeal collects data from its dealer contributors and the data is subsequently distributed by TSX.	While the implementation timeline will depend on the final requirements and scope of the IP (i.e. equity, debt or both), it is currently anticipated that the timeline for development and	Currently, it is anticipated that the development and implementation timeline will be 18 months, including 12 months for system development work and 6 months for implementation, including community	A timeline for rolling out the feed will be established once specifications are determined.			

	SCHEDULE A SUMMARY OF FILINGS RECEIVED									
Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX				
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)				
				implementation for the system will be 12 months.	testing and readiness.					
3. Connectivity		_								
a. Connection method	Dealers  Dealers report via a page or item-based feed in a proprietary protocol.  The proprietary feed is transmitted to the CanPX system using redundant communication facilities including dedicated circuits, hardware and transmission points.  Several dealers have chosen a File Transfer Protocol (FTP) to	Participating firms reporting trades on an hourly basis  The applicant will implement redundant FTP servers to receive hourly Extensible Markup Language (XML) files.  Participating firms that will voluntarily report orders or trades on a real-time basis  The applicant will determine the most efficient language	Data files will be collected by CanDeal using a Secured File Transfer Protocol (SFTP) over the Internet.	Physical access to the system will be achieved by making use of the MX data network linking data centres, numerous points of presence (POP), and through third-party network providers. In addition to direct POP connections and connections through one of several supported third party network providers, connectivity would also be available over the internet,	The data transmitted will be in the standard industry protocol FIX format.  Data will be transmitted via secured Internet transport or SFTP (for smaller firms).  CDS Inc. will transform, in real time, the FIX format into a standard format for subsequent processing.	Information from the marketplaces can be transmitted to the IP in any format and will be reformatted if necessary. STAMP is preferred, however TSX can accommodate other formats.  Each marketplace will supply data via two identical feeds on dual independent lines to the IP.				

SUIVIIVIANT OF FILINGS RECEIVED								
Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX		
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)		
	transmit data.  IDBs  IDBs transmit proprietary feeds, on a voluntary basis, using redundant communications facilities including dedicated circuits, hardware and termination points.	protocol in consultation with each participating firm.		using a VPN connection.  The marketplaces providing the source feeds may connect to any of the POPs through direct connections to one of the MX POPs, through third party network providers or over the internet.  A single, industry wide protocol is envisaged, but the system can be extended to support additional protocols.				
b. Connectivity costs	Internal costs to establish a	Each participating firm is responsible for	The cost to connect to the IP is the	Marketplaces, dealers and IDB	CDS Inc. already has existing network	Each marketplace will be responsible at		

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
	connection to CanPX are borne by the participating firms.	their connectivity costs to transmit data.	responsibility of the participant, and there will not be a mark-up passed along by CanDeal/TSX. There will be no additional costs attributed to the 12 primary dealers currently connected to CanDeal.	providing information will pay their own connectivity fees.	connection with all stock exchanges and most bond dealers across Canada, therefore, there are unlikely to be any additional connectivity costs for data providers.  However, if a data provider does not have an existing network connection to CDS, such connection can be put in place through a service provider such as Allstream, at a monthly connection fee of \$500 plus a hardware fee of \$167 per	its own expense for installing, operating and maintaining connectivity lines to the IP.

#### **SCHEDULE A** SUMMARY OF FILINGS RECEIVED Description CanPX **Gmarkets** CDS Inc. TSX TSX/CanDeal MX (Fixed Income) (Fixed Income) (Fixed Income) (Equity and Fixed (Equity and Fixed (Equity) Income) Income) month. Gmarkets will charge TSX will charge an c. Fees to None None. None None. provide data participating firms inbound connection \$1,500 per month. fee of \$1,600 per However, firms month to each currently providing marketplace that information on a submits a feed to be voluntary basis will included in the consolidated feed to not pay this fee. cover costs incurred by TSX such as: ports, routers, processors and network connectivity, as well as upfront development to process feeds that are in the STAMP format. 4. Operations and data integrity **Gmarkets Client** Training and materials CDS currently a. Training and **Entities that supply** All external recipients The technical facilitator provides Services provides will include: the data or receive provides onsite of the consolidated support

• Specifications and

the consolidated

online help and

support and

training programs

service will receive a

Description CanP	ρχ	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
•	d Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
Clien visits client produ	at trainers make to educate ts on their lucts.  am of five sialists at Reuters available to ide customer port.	application training to subscribers free of charge. Additional development and technical consulting services from Gmarkets are available at \$150 per hour.  In addition, Gmarkets will provide an Extensible Markup Language (XML) Feed Specification Document to participating firms providing trade data on an hourly basis, and will provide a Feed Specification Document detailing required data fields	examples of inbound and outbound feeds;  Instructions regarding the content and context of the data provided from the IP to ensure that the retail audience and global (non-English native language) institutional participants will have an appropriate level of understanding of the data content;  Support to parties providing and	feed will be provided with specifications for the consolidated feed protocol and the required network connectivity.  MX will provide connectivity support to these external entities and an environment for testing.  In addition, MX-ITS will provide operations support and will make a help desk available for the operation of the SOLA® Canadian Consolidated Market Feed Technological Solution.	and publishes user manuals on its website to support the customers for existing services.  It will use the existing infrastructure to implement user training programs and publish user manuals to support the IP user community in the same manner as the other services. A help-desk program is currently in production.	functional specification and a Business Design Guide outlining the connectivity requirements as well as the Message Protocol.

	SCHEDULE A SUMMARY OF FILINGS RECEIVED								
Description	ption CanPX Gmarkets TSX/CanDeal MX CDS Inc. TSX								
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)			
		and connection information to firms choosing to report orders or trades in real time.	receiving information from the IP; • Online documentation and training materials to help explain the content of the data; and • Educational materials for the investing public and subscriber base.						
3(a) COMMITMEN	3(a) COMMITMENT TO TRANSPARENCY – FIXED INCOME								
1. Corporate	Trade data for	Trade data for	Trade data for	Trade data for	Trade data for				
bond information	designated	designated	designated	designated	designated				
to be provided	corporate bonds is transmitted by	corporate debt securities will be	corporate debt securities will be	corporate debt securities will be	corporate debt securities will be				

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
	dealers and marketplaces with a market share in excess of 0.5% within one hour of the trade. The following data fields are transmitted: • type of counterparty; • issuer; • security type*; • class*; • series*; • coupon; • maturity; • price; • time of the trade; and • volume traded, subject to volume caps.	transmitted by entities required to contribute such data by NI 21-101.	transmitted by entities required to contribute such data by NI 21-101. The following information will be reported, as required by 21-101CP:  • type of counterparty;  • issuer;  • security type;  • class;  • series;  • coupon;  • maturity;  • price;  • time of the trade; and  • volume traded, subject to volume caps.	transmitted by entities required to contribute such data by NI 21-101. The following information will be reported, as required by 21-101CP:  • type of counterparty;  • issuer;  • security type;  • class;  • series;  • coupon;  • maturity;  • price;  • time of the trade; and  • volume traded, subject to volume caps.  In addition, the	transmitted by entities required to contribute such data by NI 21-101. The following information will be reported, as required by 21-101CP:  • type of counterparty;  • issuer;  • type of security;  • class;  • series;  • coupon;  • maturity;  • price;  • time of trade; and  • volume traded, subject to volume caps.  In addition, the following information	

	SCHEDULE A SUMMARY OF FILINGS RECEIVED								
Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX			
•	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)			
	*Inserted from Reuters master file.		Based on the input from industry participants, other data fields, such as yield and type of trade (buy/sell), will also be transmitted.	applicant will collect any other information that may be required by NI 21-101.	will also be collected:  • type of trade (buy or sell);  • yield; and  • security cusip or ISIN.				
2. Corporate bon	d information to be disse	⊥ minated				<u> </u>			
a. Method of distribution	Information is displayed through Reuters front-end display products. CanPX data is made available on the internet.  Data is also redistributed by information vendors as feeds or via internet access.	Gmarkets will distribute the fixed income information via a desktop application called Gmarkets Pilot (prefabricated page displays) and through feed products (such as raw data for resellers), specifically: Gmarkets Feed API or Gmarkets Feed in	TSX/CanDeal will make the consolidated fixed income information feed initially available through the following distribution channels:  TSX's website; and A fully described, logical, recordbased feed from the existing TSX infrastructure on	MX will make available the consolidated feed with a published protocol for connection.  Internet access to post-trade data can be incorporated in the solution, if required.	CDS Inc. will make the consolidated data feed output from the IP available through various distribution channels that will include:  • Access via the Internet; and • Depending on requirements, message feeds over various				

Description	CanPX (Fixed Income)	Gmarkets (Fixed Income)	TSX/CanDeal (Fixed Income)	MX (Equity and Fixed Income)	CDS Inc. (Equity and Fixed Income)	TSX (Equity)
	CanPX benchmark yield data is also available on the CanPX website.	XML.	dedicated circuits.  In the future, TSX/CanDeal anticipate utilizing internet protocol to distribute the feed.		transport mechanisms.	
b. Information disseminated	CanPX consolidates the post-trade bond data and displays it every hour, on the hour.  The information published includes: • Issuer; • Coupon; • Maturity; • Trade price; • Trade yield date; • Volume (subject	Gmarkets will consolidate the post-trade bond data and display it in real time.	Data will be consolidated into the feed and displayed on a trade-by-trade basis.	Details of trades are required to be reported to the information processor no later than one hour from the time of the trade. The IP will not require a shorter timeframe, unless a future review indicates that this would be beneficial to the marketplace. The trade data will be	CDS Inc. will provide a consolidated feed in real time of all corporate fixed income trade data received. In addition to the data fields received, it will also display:  The moving average price by security; and A volume analysis by security.	

	SCHEDULE A								
	o nv		UMMARY OF FILINGS REC		ope i	TOV			
Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX			
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)			
	to volume caps);			published by the IP as					
	Trade date;			soon as it is received.					
	Trade time (to the								
	hour); and								
	Aggregate								
2 Dragge for an	volume.	leation oritoria and mat	had for communication						
a. Process	rporate bond selection, se		The selection will be	The list of designated	CDS Inc. will analyze	1			
a. Process	The selection is done on a quarterly basis.	The corporate bonds will be selected using	done in consultation	corporate bonds will	the data being				
	orra quarterly basis.	the same criteria as	with industry	be reviewed and	gathered and will				
	The list of corporate	the S&P/TSX	participants,	updated quarterly.	monitor the market				
	fixed income	Canadian Bond	including the Capital	apaaroa quarrony.	for changes that				
	securities is	Index.	Markets Committee	The first review would	need to be reflected				
	maintained by the		of the IDA, buy side	be done by the IP	in the data gathered				
	Corporate Bond		customers, issuers and	Policy Committee,	and distributed.				
	Working Group of the		retail participants,	based on the criteria					
	IIAC's Canada Debt		and based on the	described below.	CDS Inc. will meet on				
	Markets Committee		review of the most		a quarterly basis with				
	and reviewed and		actively securities list.	A process will be put	data providers and				
	approved quarterly		The selection will be	in place where	regulators to identify				
	by the CanPX		done on a quarterly	outside parties can	new securities that				
	Operating		basis. The final	request corporate	meet the established				
	Committee.		decision on the	bond additions to the	selection criteria that				

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
	New issues are added to, and issues may be removed (e.g. if not actively traded and prices are less accurate) from the list, subject to the constraints of the technical facilitator.  A proposed revised list is circulated to the Corporate Bond Working Group for comments and further revisions or approval.  The list is presented to the CanPX Board for approval by e-mail.		corporate bond securities to be included will be made by the IP. The IP will put into place appropriate dispute resolution mechanisms.  The list of designated bonds will be updated quarterly by the IP using the following process:  Based on the criteria described below, major dealers will be polled for corporate bonds to be added/deleted; and	list for the next quarterly review.  A proposed, revised list will be provided to applicable industry committee(s) for comments, modification and approval.  The list will be approved by the IP board, at which time MX-ITS (as the technology provider) would be advised of any changes, as well as the CSA and all affected vendors.	should be included in the service.	

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
·	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
	Other parties can suggest adding corporate bonds to the list via the internet.  Upon CanPX Board approval, the final list is sent to the technical facilitator for implementation and to vendors and to the OSC for information.		The list will be consolidated based on consensus (majority of the dealers polled).			
b. Criteria	Applicable criteria for corporate bonds include:  • Trading volumes;  • Whether bonds are included in domestic Canadian corporate bond	As set out above, the corporate bonds will be selected from the S&P/TSX Canadian Bond Index. The S&P/TSX Canadian Bond Index uses the following criteria for bond selection:	Applicable criteria for corporate bonds will include:  • Minimum total issue sizes (including reopenings) of \$250 million;  • Bonds will be	Applicable criteria for corporate bonds will include:  Issue size, with a minimum total issue size of \$250 million;  Bonds will be highly liquid;	Initially, CDS will follow the selection criteria currently used by CanPX, as follows:  • Minimum total issue sizes (including reopenings) of \$250 million;	

SUIVINAL OF HEINGS RECEIVED								
Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX		
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)		
	<ul> <li>indices;</li> <li>Minimum issue size of \$250 million;</li> <li>Bonds should be issued by issuers among the major industrial groups of issuers;</li> <li>Bonds should be highly liquid;</li> <li>Bonds should represent a majority of trade flow within the corporate bond markets;</li> <li>Bonds should, between themselves, include short-term maturities, midterm maturities and long-term</li> </ul>	<ul> <li>An S&amp;P rating of BBB- or better;</li> <li>Minimum par amount of \$50 million (or \$100 million for Government of Canada or federally-guaranteed);</li> <li>Minimum of two independent dealers providing bid prices each day to the TSX (available as a subscription from the TSX);</li> <li>Minimum term of 18 months to maturity at the time of inclusion.</li> </ul>	highly liquid relative to comparables;  • Bonds will represent a majority of trade flow within the corporate bond markets;  • Bonds will represent, among themselves, all major industrial groups of issuers (including financial, utility, telecom, and oil and gas);  • TSX/CanDeal will attempt to include at least 2 bonds from each industry	<ul> <li>Bonds will represent a majority of trade flow within the corporate bond markets;</li> <li>Bonds will represent major industrial groups of issuers (including, but not limited to: financial, utility, telecom, oil and gas);</li> <li>Bonds will be from each industry classification;</li> <li>Bonds will include all maturities including 0-5 years; 5-10 years; and 10 years and over; and</li> </ul>	<ul> <li>Bonds will be highly liquid relative to comparables;</li> <li>Bonds will represent a majority of trade flow within the corporate bond markets;</li> <li>Bonds will represent, among themselves, all major industrial groups of issuers (including financial, utility, telecom, and oil and gas); an attempt will be made to include at least 2 bonds from each industry</li> </ul>			

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
	bonds; and • Bonds should be from each industry classification (with at least two from each classification).		classification; Bonds will represent, among themselves, all maturity buckets, including 0-5 years, 5-10 years, and 10 and over years; and Bonds will include debt securities of broad interest to retail investors, including bonds issued by well known corporations, bonds represented in an industry standard corporate bond index, bonds with terms to maturity	Bonds will be those of broad interest to retail investors.	classification; Bonds will represent, among themselves, all maturity buckets, including 0-5 years, 5-10 years, and 10 and over years; and Bonds will include debt securities of broad interest to retail investors, including bonds issued by well known corporations, bonds represented in an industry standard corporate bond index, bonds with terms to maturity	

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
			of less than 5 years and bonds priced at a discount.		of less than 5 years and bonds priced at a discount.	
					Thereafter, CDS plans to update the selection criteria in consultation with the industry and regulators, and will	
					work to expand it on a quarterly basis.	
c. Method of communication	<ul> <li>Reuters posts the list on the CanPX website;</li> <li>The IIAC website posts a link to the list on the CanPX website.</li> </ul>	The rules for selection of bonds are published on S&P and TSX websites and all changes are published simultaneously to all market participants.	The list of addition/deletions will be published for all firms providing the information two weeks prior to the change taking effect.  The new list of	The information will be published on the IP web site.	CDS Inc. will report additions, deletions and changes to the bond list through an e-mail notification list that will be maintained by it.  In addition, CDS Inc.	
		Gmarkets will also	corporate bonds will		will publish	

Description	CanPX (Fixed Income)	Gmarkets (Fixed Income)	TSX/CanDeal (Fixed Income)	MX (Equity and Fixed Income)	CDS Inc. (Equity and Fixed Income)	TSX (Equity)
		publish the list on its website.	be distributed quarterly via email to designated individuals at each firm. It will be posted on TSX's website.		information on the additions, deletions and changes to the bond list in the news section on its website and also incorporate the changes into the complete bond list, which will be permanently displayed on the website.	
4. Other bond information that will be reported and disseminated14	CanPX collects bid/offer prices and trade information for Government bonds and Government of Canada T-bills voluntarily transmitted by IDBs.	Some participants currently report, and may continue to do so, government (such as Canadian T-bills or government debt securities) or corporate bond data	The IP may collect and disseminate data that is provided by parties that are not required to contribute or from those parties that contribute in order to supplement	The infrastructure will be designed to support consolidated pre- and post-trade information on government fixed income securities, and MX would	CDS, through its subsidiary CDS Innovations, offers a number of ancillary services that provide a cross section of information on bonds. These ancillary	

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<sup>&</sup>lt;sup>14</sup> Some participating firms are, or may be, providing other fixed income information (such as government fixed income data) to the entities applying for the position of the IP on a voluntary basis. This section describes the type of information that the applicants are or expect to collect and disseminate on a voluntary basis and is included for information purposes.

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
Description						
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed	(Equity and Fixed	(Equity)
				Income)	Income)	
		in real-time. Gmarkets	or enhance the	provide the	services include:	
	In addition, it collects	has proposed to	product.	consolidation and	<ul> <li>Security Masterfile</li> </ul>	
	and disseminates	support the	For example,	dissemination of this	<ul><li>– which, among</li></ul>	
	information relating	continued	TSX/CanDeal	information if and	other things,	
	to certain TSX-listed	aggregation and	proposes to initially	when this is made	provides details	
	fixed income	dissemination of	collect, aggregate	mandatory by the	on security	
	securities.	voluntary products.	and disseminate (all	CSA.	identification,	
			in real time) price		interest rate,	
	It disseminates the	The published fields	information for the	MX can accept and	maturity rate, and	
	following information	reported for these	following securities: all	publish this	security features	
	in real time:	securities will include:	Government of	information if it is	such as interest	
		issuer; coupon;	Canada bonds; all	provided during the	frequency, early	
	Government bonds	maturity; order price	Government of	current exemption	redemption etc.;	
	Bid price; offer price;	(buy/sell); order size	Canada T-bills;	period from	<ul> <li>Entitlement</li> </ul>	
	bid size; offer size; bid	(buy/sell); order yield	approximately 130	transparency	Products – which	
	yield; offer yield; bid	(buy/sell); bid price	Provincial Bonds; and	requirements for	provide various	
	price change from	(best price, for	50 corporate bonds.	government bonds.	degrees of	
	previous day's close;	multiple bids and			entitlement	
	bid yield change	offers, and where		The infrastructure will	coverage in	
	from previous day's	multiple best prices		be designed to	different formats	
	close; hit or take of	exist, the best price		support consolidated	and include CDS	
	last trade; last trade	will aggregate		pre-trade information	Entitlement	
	price; last trade size;	volumes); bid yield;		on corporate fixed	Bulletin (a web-	

Description	CanPX (Fixed Income)	Gmarkets (Fixed Income)	TSX/CanDeal (Fixed Income)	MX (Equity and Fixed Income)	CDS Inc. (Equity and Fixed Income)	TSX (Equity)
	last trade time or date; and aggregate volume of the day for the instrument.  Government T-bills Bid yield; offer yield; bid size; offer size; bid yield change from the previous day's close; hit or take of last trade; last trade yield; last trade size;	bid size; offer price; offer yield; offer size; trade price; trade yield; trade size; net change; and whether a security is benchmark.  The government bonds will be selected from the S&P/TSX Canadian Bond Index. The	(Fixed income)			(Equity)
	last trade time or date; and aggregate volume of the day for the instrument.  Provincial bonds Bid yield spread price; offer yield spread price; bid size; offer size; bid yield	S&P/TSX Canadian Bond Index uses the following selection criteria: (1) an S&P rating of BBB- or better; (2) minimum par amount of \$50 million (or \$100 million for Government of Canada or federally-			filings made by all issuers across Canada.	

#### **SCHEDULE A** SUMMARY OF FILINGS RECEIVED Description CanPX **Gmarkets** CDS Inc. TSX TSX/CanDeal MX (Fixed Income) (Fixed Income) (Fixed Income) (Equity and Fixed (Equity and Fixed (Equity) Income) Income) spread change from guaranteed); (3) previous day's close; minimum of two hit or take of last independent dealers trade; last trade providing bid prices spread; last trade each day; and (4) minimum term of 18 size; last trade time or data and aggregate months to maturity at volume of the day for the time of inclusion. the instrument. 3(b) COMMITMENT TO TRANSPARENCY - EQUITY 1. Pre-trade Marketplaces will Marketplaces will Marketplaces will information to be report the following report the following transmit all orders for information in real information in real reported every security (i.e. full time: time: depth of book). identification of name of the marketplace; marketplace; Each message will • time of order contain one order type (buy/sell); quote/order from a entry; volume; price; marketplace and will symbol; volume; include at least the price; and symbol; following information: time of the order. • cusip or ISIN. message type

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
Description	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
				Any additional information that may be required by NI 21-101 will also be reported.		(order); • IP sequence number; • marketplace identifier; • marketplace trading system time stamp; • IP time stamp; • broker number; • security type; • issuer; • symbol; • series; • class; • price; • volume; and • business action (buy or sell).
2. Post-trade information to be reported				Marketplaces will report the following information in real time:	Marketplaces will report the following information in real time:	In addition to the data elements included in the order information message

#### **SCHEDULE A SUMMARY OF FILINGS RECEIVED** Description CanPX **Gmarkets** TSX/CanDeal CDS Inc. TSX MX (Fixed Income) (Fixed Income) (Fixed Income) (Equity and Fixed (Equity and Fixed (Equity) Income) Income) (other than 'message identification of marketplace; type (order)'), each the marketplace; time of trade; volume; price; trade message will symbol; volume; include at least the price and security symbol; following information: • time of the trade. and message type security cusip or (trade); Any additional ISIN. broker number information that may (both sides); be required by NI 21trade number; 101 in the future will type of trade be reported. (marketplace, internal trade, etc.); and business action (trade). 3. Equity Information to be Disseminated a. Method of MX will distribute a The distribution The consolidated distribution consolidated data method will be the data feed will be feed with a published same as that used for delivered via an protocol for fixed income industry approved

Description	CanPX (Fixed Income)	Gmarkets (Fixed Income)	TSX/CanDeal (Fixed Income)	MX (Equity and Fixed Income)	CDS Inc. (Equity and Fixed Income)	TSX (Equity)
				connection.	securities.	standard protocol designated by the IP. Network protocol for the consolidated services will be disseminated via Multicast.
b. Information disseminated				Pre-trade Will provide, in real time, a consolidated feed of pre-trade data to five price levels.  Post-trade Will provide, in real time, a consolidated feed of post-trade market data.	Pre-trade Will provide a consolidated feed of the bid and ask prices received.  Post-trade Will provide a consolidated feed of each trade including the following fields:  marketplace; time of trade; price; and volume.	Will provide a consolidated feed of pre and post-trade information.  The information disseminated will have the same data elements as those received from the marketplaces (listed above).  TSX is prepared to offer a display of this

	SCHEDULE A SUMMARY OF FILINGS RECEIVED								
Description	CanPX (Fixed Income)	Gmarkets (Fixed Income)	TSX/CanDeal (Fixed Income)	MX (Equity and Fixed Income)	CDS Inc. (Equity and Fixed Income)	TSX (Equity)			
4. FEES AND REVE	NUIF SHARING					information if required by the market.			
	1								
1. Subscriber <sup>15</sup> fees	<ul> <li>Corporate bonds</li> <li>Reuters fee -         \$25/terminal/mont         h in addition to         base Reuters         service charge;</li> <li>G-Markets -         \$50/month;</li> <li>Other vendors -         fees to be         determined.</li> </ul>	Connection fee (per login Gmarkets Pilot) \$50 per month per user, with add-on charges for data subscriptions, as follows: • \$10 for corporate fixed income data; • \$10 for government fixed	Monthly institutional professional subscriber16 access fee \$75-100 per month  Non-professional17 usage-based fees  • \$0.02 per security instrument quote, capped at \$10 per month; or	The fees will be determined by the Policy Committees.	Data will be made available on its website at no charge. Users will only be able to view the information on this free website service. CDS will also offer a "security watch" product that would be delivered over the Internet to individual	Monthly professional subscriber fee  If the professional subscriber already subscribes to data feeds from marketplaces <sup>18</sup> , the charge will be a TSX administrative fee of \$5 that will cover the costs of			

<sup>15</sup> Generally, a subscriber is an individual or entity that has entered into an agreement to receive information from the information processor (directly or through a vendor).

<sup>16</sup> A securities professional means any broker, dealer, investment advisor or person employed by an organization conducting professional activities involving the buying and selling of financial instruments.

<sup>17</sup> A non-professional subscriber means an individual that is not a securities professional, cannot be a consultant, independent contractor, software developer or others that use market data for any purpose other than trading for their personal account.

<sup>&</sup>lt;sup>18</sup> Vendors and firms will be allowed to subscribe to marketplace feeds separately.

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
·	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
	<ul> <li>Reuters fee \$25/terminal/mont h on top of base Reuters service charge;</li> <li>G-Markets - \$50/month;</li> <li>Other vendors – to be determined.</li> </ul>	In addition, the charge for the end-of-day file (including last trade and/or price for each security) is \$1,500 per month.	data stream.  Snapshot data web access via tsx.com Free		\$35 per month.	processing and administering the feed; • If the professional subscriber does not subscribe to data feeds from marketplaces, the charge will be: the TSX administrative fee of \$5 + the current TSX charge (refer to TSX 2007 pricing schedule for all pricing details and tiers 19) + the fee(s) charged by each marketplace.  Monthly non-

<sup>&</sup>lt;sup>19</sup> Published at http://www.tsx.com/en/data/product\_sheets

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
						professional subscriber fee  If the non- professional subscribes to data feeds from marketplaces, the charge will be the TSX administrative fee of \$2.50;  If the non- professional subscriber does not subscribe to data feeds from marketplaces, the charge will be: the TSX administrative fee of \$2.50 + the current TSX charge (refer to TSX 2007 pricing

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
						schedule for all pricing details and tiers) + the fee(s) charged by each marketplace.
						The fees will be indexed to inflation
2. Vendor <sup>20</sup> fees	<ul> <li>\$2,000 per month for corporate bonds</li> <li>\$4,000 per month for government bonds</li> </ul>	Connection fee: \$1,500 per month per connection per site, with add-on charges as follows: • \$10 per user for corporate fixed income data • \$10 per user for government fixed income data. In addition, \$1,500 per	\$500 per month.	The fees will be determined by the Policy Committees.	An equity product containing all information on a daily, real time or batch basis will be made available at a price of \$25,000 per year. Segmented files by industry group will be made available at a cost of \$5,000 per year.	Note: this fee also applies to participant organizations (POs) with direct connection to the TSX consolidated feed.  If the vendor or PO already subscribes to data feeds from marketplaces, the charge will be a TSX administrative

<sup>&</sup>lt;sup>20</sup> Generally, a vendor is an individual or entity that enters into agreements to receive information from the IP in connection with the business or distributing this information to others.

SUIVINARY OF FILINGS RECEIVED							
Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX	
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)	
		month will be charged for the end-of-day file (last trade and/or price for each security).			A fixed income product containing all fixed income information on a daily, real time or batch basis will also be made available at a price of \$25,000 per year. Segmented files by type of fixed income will be made available at a cost of \$5,000 per year.	fee of \$500 per month.  If the vendor or PO does not subscribe to data feeds from marketplaces, the charge will be: the TSX administrative fee of \$500 + current TSX charge of \$3,000 (refer to TSX 2007 pricing schedule for all pricing details and tiers) + the fee(s) charged by each marketplace.	
3. Costs and	Net revenue will be	Data subscription	TSX/CanDeal does	A. Revenue	CDS Inc. will allocate	TSX currently provides	
Revenue sharing	allocated between	fees for the corporate	not anticipate sharing	determination	50% of net revenues	data distribution	
	shareholders based	fixed income and	revenues with the	Each market (fixed	(i.e. excess of	services for multiple	
	on the process	government fixed	dealer participants at	income and equity)	revenue over	marketplaces and	

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
Description	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
	outlined below:  First, the total net revenue is allocated between the IDB Market (defined as total dollar volume of trades in total market issues during a period by all IDBs as a group), Corporate Bond Market (total dollar volume of	income securities (\$10 per user or subscriber as described above) will be allocated as follows: 75% to the participating firms; and 25% to Gmarkets.	this time, as it believes that the IP will carry the cost associated with transparency, and the dealers will benefit from cost efficiencies.	will have its own revenue streams from sales of the consolidated market data specific to that market.  B. Cost determination A. Net Revenue Calculation The cost to develop, implement, operate and administer the	expenses) to data providers. Each data provider's share of the net revenue will be based on market activity (i.e. the relative volume of transactions submitted.	several asset classes. The TSX IP will leverage its established infrastructure including hardware, software, physical premises (raised floor, network services, operations monitoring stations and tools, etc.) resources as well as administration
	trades in corporate bonds during a period by all dealers as a group) and ATS Market (total volume of trades during a period by all ATS participants, if any, as a group).			SOLA® Canadian Consolidated Market Feed Solution will be a fixed annual cost based on a 5 year contract, CPI indexed. This annual cost will be allocated to each market (fixed income		(contractual, billing, reporting, auditing etc.), help desk and vendor services technical support, and legal, product and sales support. There will be additional development,

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
Description						
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
				income)	income)	—
	This allocation is			and equity, at the		hardware, and
	based on the			start of the service),		support resources
	percentage of			based on that		required which will
	trading volume			market's share of		depend on the
	attributable to each			total revenues for		number of
	of the separate			both markets for the		marketplaces and
	markets.			period (i.e. revenues		the bandwidth and
				from data distributors		structure of their
	After this initial			and subscribers for all		feeds however, TSX
	allocation, the net			services).		will absorb these
	revenues will be					costs upfront and
	distributed as follows:			C. Revenue sharing		expect to recoup
	<ul> <li>IDB market</li> </ul>			After deducting costs		them over a period of
	revenue will be			from revenues		time from the fees.
	split 50/50			associated with each		
	between dealers			market (A-B), net		Revenues will be
	and IDBs			revenue would then		shared back to the
	<ul> <li>Corporate Bond</li> </ul>			be distributed		marketplaces in the
	Market revenue			between the		amount that those
	will be allocated			contributors to the		marketplace chose
	to dealer market-			service for each		to charge vendors
	makers based on			market (fixed income		and subscribers. The
	proportionate			and equity).		administrative fee

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
	trading share of corporate bonds  • ATS Market revenue will be allocated to ATS participants based on proportionate trading share of total market issues in the ATS market.			For each market, excess revenues will be allocated based on each contributor's proportion of the total number of trades for that market, and also based on whether the entity contributes to both pre- and post-trade information, or only to post-trade information.  Contributors who supply both would receive a higher proportion.  In the model, contribution to post-trade information		and marketplace connection fees will be retained by TSX.

Description	CanPX	Gmarkets	TSX/CanDeal	MX	CDS Inc.	TSX
	(Fixed Income)	(Fixed Income)	(Fixed Income)	(Equity and Fixed Income)	(Equity and Fixed Income)	(Equity)
				would be worth 50% of the calculation of the revenue share of each entity, while the remaining 50% would be allocated to entities that are also providers of pre-trade information. However, the model could be revised with any weighting that would be reasonable for a specific market.		
				Contributor Proportion of net revenue = [(50% times the contributor's proportion of total trades for the market)+(50% times the contributor's		

#### SCHEDULE A **SUMMARY OF FILINGS RECEIVED** CanPX TSX Description Gmarkets TSX/CanDeal MX CDS Inc. (Fixed Income) (Fixed Income) (Fixed Income) (Equity and Fixed (Equity and Fixed (Equity) Income) Income) proportion of the total number of trades of all contributors supplying pre-trade information, if this information is also supplied)]. Contributor revenue share = net revenue

for the market times

proportion of net

contributor

revenue.