ANNEX C CSA Staff Report on Industry Compliance with NI 24-101

CSA STAFF REPORT ON

INDUSTRY COMPLIANCE WITH THE INSTITUTIONAL TRADE MATCHING REQUIREMENTS OF NATIONAL INSTRUMENT 24-101

Canadian Securities Administrators

CSA STAFF REPORT ON INDUSTRY COMPLIANCE WITH THE INSTITUTIONAL TRADE MATCHING REQUIREMENTS OF NATIONAL INSTRUMENT 24-101

Table of Contents

- I. Purpose
- II. Background
- III. Scope of the CSA Report
- IV. Overall Findings
- V. Quantitative Analysis
 - a. Methodology
 - b. Overall industry performance in achieving the ITM target
 - c. Progress of registered firms in achieving the ITM target
 - 1. Dealers equity trading
 - 2. Dealers debt trading
 - 3. Advisers equity trading
 - 4. Advisers debt trading
- VI. Qualitative Analysis
 - a. Methodology
 - b. Analysis of registered firms' discussion of "Reasons for non-compliance" and "Steps to address delays" in their exception reports
 - c. Discussions with stakeholders
- VII. Conclusion

I. Purpose

The Canadian Securities Administrators staff (CSA staff or we) have prepared this report to provide an update on the status of the industry's compliance with the institutional trade matching (ITM) requirements of National Instrument 24-101 – *Institutional Trade Matching and Settlement* (NI 24-101 or the Instrument).

II. Background

NI 24-101 came into force on April 1, 2007 and became fully effective on October 1, 2007. NI 24-101 was developed to encourage more efficient and timely settlement processing of trades in securities, particularly the pre-settlement confirmation and affirmation process – or matching – of an institutional trade.

The Instrument applies to registered dealers and advisers, and establishes certain ITM policies and procedures requirements. This includes the requirement for registered firms¹ to complete and deliver an exception report on Form 24-101 F1 (F1) for any calendar quarter in which less than 90% of their DAP/RAP² trades (ITM target) were matched by noon on the business day following the day of the trade (noon on T+1).

In addition, under the Instrument, clearing agencies (CDS Clearing and Depository Inc., CDS) and matching service utilities (MSUs) are required to submit quarterly data on the ITM activity of their participants.

CSA staff used the information required to be reported under the Instrument to assess the industry's ITM rates, including whether registered firms have been meeting the ITM target.

III. Scope of the CSA Report

This report examines:

- (i) the overall performance of the securities industry in matching 90% of their DAP/RAP trades by noon on T+1, and
- (ii) the challenges faced by the industry in meeting the matching requirements under NI 24-101 and how industry has assessed and resolved or addressed them.

IV. Overall Findings

Our review of the data showed that while the industry has made steady progress in meeting the ITM target since 2007, many market participants have reached a significant ceiling in their ability to meet the ITM target.

CSA staff recognize that market participants have made concerted efforts to address the challenges in meeting the ITM target. Based on the information provided by registered firms, it appears that the most important challenge in meeting the ITM target is the communication of trade details between trade-matching parties. This includes the means used by trade-matching parties to transmit trade orders and notices of execution, how the parties send and receive allocations, and the timing of the exchange of trade details between trade-matching parties.

A number of tools may be used to further improve ITM rates, such as the adoption of order management systems (OMS) or the use of MSUs, together with moving from end-of-day batch processing to more frequent intra-day or real-time processing.

For instance, to capture trade allocations from advisers into internal systems, a dealer could use electronic interfaces. An internal system would enrich the account information and trade details, then send the trade details for overnight processing into back office systems and on to CDS for clearing and settlement processing. Similarly, the nature of the money management business practically requires advisers to consider the full spectrum of connectivity to other trade-matching parties. Their ITM rates depend upon their ability to improve electronic communication among all trade- matching parties so that the exchange of information is accurate, timely and involves minimal human intervention.

The following are CSA staff's general findings:

- 1. Challenges remain in achieving the Instrument's current noon on T+1 matching target. In particular, small volume institutional equity dealers and some medium and small value debt dealers are well below the 90% ITM target.
- 2. For the past 15 months, CDS industry data shows that the average percentage of trades entered (submitted) at noon on T+1 into CDS has remained around 90% and the average percentage of matched trades fluctuated from 80% to 86%. This indicates that market participants have reached a significant ceiling in their ability to meet the current ITM target, or reaching the ITM target has become less of a focus.

¹ Part 1 of NI 24-101 defines registered firms as a person or company registered under securities legislation as a dealer or adviser.

² NI 24-101 defines a DAP/RAP trade as a trade (a) executed for a client trading account that permits settlement on a delivery or receipt against payment basis through the facilities of a clearing agency, and (b) for which settlement is made on behalf of the client by a custodian other than the dealer that executed the trade.

- 3. Dealers have made significant progress in entering their trades at CDS on a timely basis. However, more trades should be reported earlier in the day on T, giving counterparties additional time to match trades before noon on T+1 or to resolve any trade matching issues earlier. CSA staff noted the lack of progress made by small volume equity dealers in both entering their trades into CDS and matching their trades by the ITM target. Among all debt dealers that submitted exception reports, small value debt dealers had the most difficulties in reaching the ITM target.
- 4. In general, communication of trade details between trade-matching parties seemed to be a major challenge for all registered firms.
- 5. Many registered firms that submitted exception reports stated that the limitation of internal systems, such as lack of, or insufficient, automation of internal data processing systems, together with poor internal processes were other challenges they had to overcome. Some registered firms mentioned looking at alternatives to acquire new technologies (such as an OMS) or improving connectivity with other trade-matching parties.
- 6. Our review of the qualitative information provided by registered firms in their F1 exception reports indicates that market participants have made concerted efforts to address the challenges they faced in meeting the ITM rates. Most registered firms reported that they worked with counterparties, improved automation and hired and/or trained existing staff to address many of the challenges.
- 7. Based on our review of Exhibit B (*Reasons for non-compliance*) and Exhibit C (*Steps to address delays*) of the F1s, most registered firms took meaningful steps toward meeting the ITM target during the first two or three quarters after the implementation of the Instrument. However, responses by registered firms in Exhibits B and C in the last four quarters seemed to be repetitive.

V. Quantitative Analysis

We conducted quantitative analysis to assess:

- 1) Overall industry performance in achieving the ITM target, and
- 2) Progress of registered firms in achieving the ITM target.

a. Methodology

CDS data

To assess overall industry progress, CSA staff used data provided by CDS to monitor ITM rates since the implementation of the Instrument in 2007. CDS ITM rates are commonly accepted as the industry's benchmark. While CDS data does provide individual ITM information for registered dealers that are direct participants of CDS, it does not provide any ITM information for registered advisers.

Table A-1 in the Appendix provides overall CDS ITM rates for both equity and debt based on volume from April 2007 to December 2009.

F1 exception reports

We used F1 exception reports to assess the progress of registered firms (that were required to report) in achieving the ITM target. We structured our analysis by the type of registered firm that submitted the F1 exception report (i.e. dealer or adviser) and the type of security that was reported (i.e. equity or debt).

We created the following four categories of registered firms:

- 1) equity dealer
- 2) debt dealer
- 3) equity adviser
- 4) debt adviser

Each category was divided into three sub-groups, "large", "medium" and "small", based on specific criteria. To assign a subgroup to:

- an equity dealer, we used the average number of institutional equity trades entered into CDS for the review period;
- a debt dealer, we used the average value of institutional debt trades entered into CDS for the review period;
- an equity adviser, we used the average number of institutional equity trades matched during the review period; and
- a debt adviser, we used the average value of institutional debt trades matched during the review period.

Table 1. Dealer and adviser categories

Category	Large Volume (Equity)/ Value (Debt)	Medium Volume (Equity)/Value (Debt)	Small Volume (Equity)/Value (Debt)
Equity Dealer	40,000 trades or more	4,000 to less than 40,000 trades	Less than 4,000 trades
Debt Dealer	\$10 billion or more	\$100 million to less than \$10 billion	Less than \$100 million
Equity Adviser	5,000 trades or more	1,000 to less than 5,000 trades	Less than 1,000 trades
Debt Adviser	\$2 billion or more	\$100 million to less than \$2 billion	Less than \$100 million

For each category, we analyzed exception reports from January 2008 to the end of September 2009 (the period under review)³. This analysis is based on the accuracy of the information provided to us through different reporting means.

b. Overall industry performance in achieving the ITM target

Since the implementation of the Instrument in April 2007, CDS quarterly submissions showed that the industry made steady progress toward meeting the ITM target. CDS started measuring the ITM rates at noon on T+1 beginning in June 2007. At that time, the industry's ITM rate at midnight on T was 23.48% and at noon on T+1 was 61.89%.

Currently, the industry's ITM rate at midnight on T is 45.24% and at noon on T+1 is 84.65%. (see Table A-1 in the Appendices) The improvement in the ITM rates at midnight on T and at noon on T+1 is notable for both DAP/RAP equity and debt trades.

However, our review of the ITM data indicates that, despite significant progress since 2007, the industry is not achieving the Instrument's current noon on T+1 matching target of 90%. The data for equity shows that the ITM rate at noon on T+1 fluctuated from 82% to 87% during the past 15 months and the ITM rate for debt remained around 81% to 83% during the same time period. See Tables A-2 and A-3 in the Appendix.

Our review of the MSUs data indicates that the use of MSUs by registered dealers is limited in the existing institutional trading environment. Based on the information we received, MSU subscribers are currently using the services of an MSU for processing equity trades only. Since MSU reports began in October 2007, an average of more than 90% of equity trades processed through the MSU have been matched and sent to CDS by midnight on T. This suggests that using an MSU can significantly improve ITM performance.

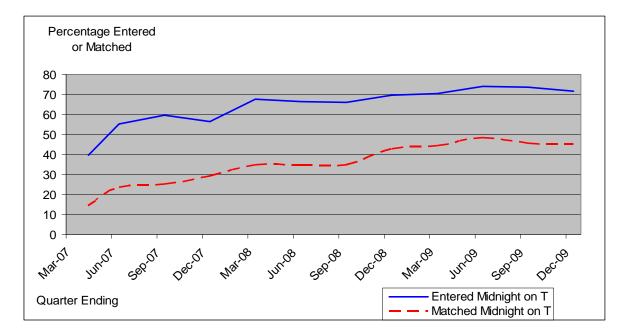
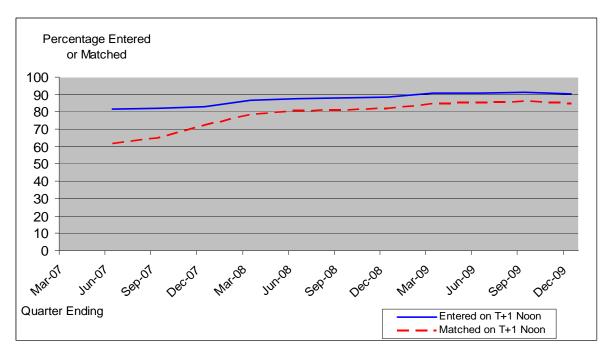


Chart 1. Overall equity and debt ITM rates from CDS data based on volume - entered vs. matched midnight on T

³ Prior to January 1, 2008 the ITM target was 80% of DAP/RAP trades matched by noon on T+1. Consequently, we decided not to include exception reporting data prior to January 1, 2008 into our analysis.

Chart 2. Overall equity and debt ITM rates from CDS data based on volume - entered vs. matched noon on T+1



c. Progress of registered firms in achieving the ITM target

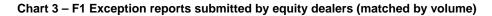
1. Dealers – Equity Trading

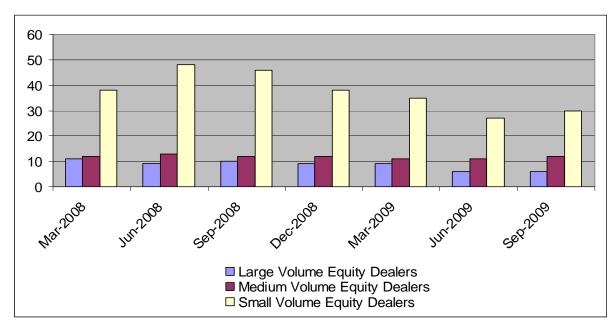
The size of the firm appears to have an impact when trades are processed and matched. However, size appears to have less of an impact on the submission of trades into CDS. CSA staff noted the lack of progress made by small volume equity dealers in both entering their trades into CDS and matching their trades by the ITM target.

Table 2. Equity dealers exception reports

The following table shows the number of F1 exception reports submitted by dealers for equity DAP/RAP trades during the review period.

F1s Submitted	Equity Dealers by Volume Entered					
	Large Volume Medium Volume Small Volume Total					
Total F1s Submitted	60	83	262	405		
Average F1/Quarter	9	12	37	58		





The data submitted by dealers that execute equity DAP/RAP trades shows that both large and medium volume equity dealers manage to enter (submit) into CDS a similar percentage of their total equity DAP/RAP trades. However, they do not match at similar levels. The matching levels of medium volume equity dealers are approximately 6 per cent less at noon on T+1 than the large volume dealers. Small volume equity dealers entered (submitted) into CDS approximately 83% of their equity DAP/RAP trades. Their matching levels are behind the first two categories, at approximately 62%.

Table 3. F1 ITM equity rates – equity dealers by volume⁴

	Large Volume Equity Dealers		Medium Volume Equity Dealers		Small Volume Equity Dealers	
	Entered	Matched	Entered	Matched	Entered	Matched
Average Entered by Noon T+1	88.14		88.44		82.70	
Average Matched by Noon T+1		82.17		76.43		62.25

Table B in the Appendix provides more details on the ITM equity rates for dealers, showing how the ITM rates changed from quarter to quarter during the review period.

2. <u>Dealers – debt trading</u>

Small and medium value debt dealers have difficulty meeting the noon on T+1 benchmark as their matching rates are well below the 90% ITM target. Among all debt dealers that submitted exception reports, small value debt dealers had the most difficulties in reaching the ITM target.

Table 4. Debt dealers F1 exception reports

The following table shows the number of F1 exception reports submitted by dealers for debt DAP/RAP trades during the review period.

F1s Submitted	Debt Dealers by Value Entered					
	Large Value Medium Value Small Value Total					
Total F1s Submitted	74	63	107	244		
Average F1/Quarter	11	9	15	35		

⁴ The Entered and Matched volumes are calculated as simple averages for the respective category.

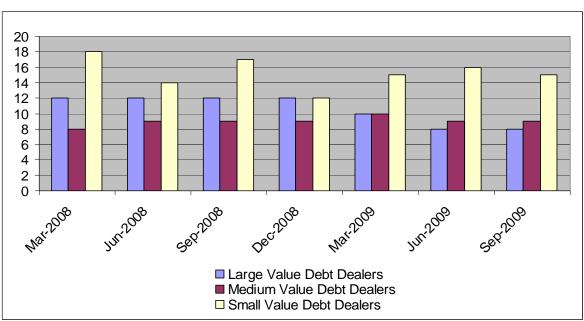


Chart 4 – F1 exception reports submitted by debt dealers (matched by value)

The data submitted by dealers that execute debt DAP/RAP trades shows that large value debt dealers entered (submitted) into CDS approximately 90% of their average dollar value traded, and matched approximately 77% of all debt DAP/RAP trades by noon on T+1.

The small and medium value debt dealers reported that approximately 75% of their debt DAP/RAP trades were entered (submitted) into CDS by the deadline. The medium value debt dealers matched approximately 61% of their debt DAP/RAP trades, while the small value debt dealers only matched 41.5%.

Table 5. F1 ITM debt rates – debt dealers by value

	Large Value Debt Dealers		Medium Value Debt Dealers		Small Value Debt Dealers	
	Entered	Matched	Entered	Matched	Entered	Matched
Average Entered by Noon T+1	90.48		75.00		74.19	
Average Matched by Noon T+1		77.03		61.21		41.56

Table C in the Appendix provides more detail on the ITM debt rates for dealers, showing how the ITM rates changed from quarter to quarter during the review period.

3. Advisers – equity trading

Table 6. Equity advisers F1 exception reports

The following table shows the number of F1 exception reports submitted by advisers for equity DAP/RAP trades during the review period.

	Equity Advisers by Volume Matched				
	Large Volume	Medium Volume	Small Volume	Total	
Total F1s Submitted	75	219	412	706	
Average F1/Quarter	11	31	59	101	

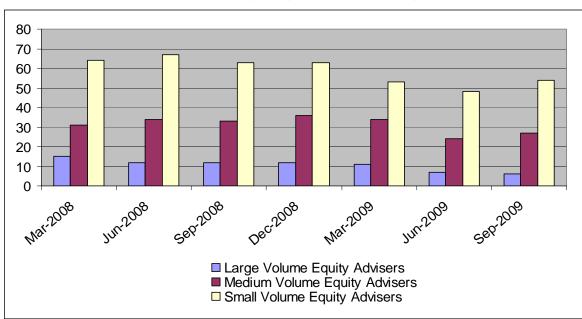


Chart 5 - F1 exception reports submitted by equity advisers (matched by volume)

The data provided by equity advisers shows that the ITM rates of large and medium volume equity advisers are around 80%, while the rates of small volume equity advisers are slightly under 70%.

Table 7. F1 ITM equity rates - equity advisers by volume

	Large Volume	Medium Volume	Small Volume Equity
	Equity Advisers	Equity Advisers	Advisers
Average Matched by Noon on T+1	83.99	80.67	68.11

Table D in the Appendix provides more detail on the ITM equity rates for advisers, showing how the ITM rates changed from quarter to quarter during the review period.

4. Advisers – debt trading

Table 8. Debt advisers F1 exception reports

The following table shows the number of F1 exception reports submitted by advisers for debt DAP/RAP trades during the review period.

	Debt Advisers by Value Matched				
	Large Value	Medium Value	Small Value	Total	
Total F1s Submitted	130	179	184	493	
Average F1/Quarter	18	26	26	70	

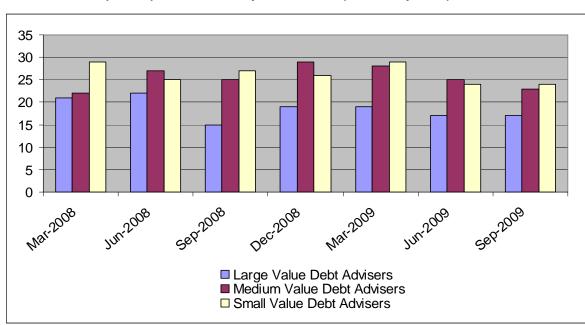


Chart 6 - F1 exception reports submitted by debt advisers (matched by value)

Table 9. F1 ITM debt rates - debt advisers by value

	Large Value	Medium Value	Small Value
	Debt Advisers	Debt Advisers	Debt Advisers
Average Matched by Noon on T+1	76.90	68.05	59.44

The ITM rates reported by large value debt trading advisers were around 77%, while medium and small value debt advisers were below 70%.

Table E in the Appendix provides more detail on the ITM debt rates for advisers, showing how the ITM rates changed from quarter to quarter during the review period.

VI. Qualitative Analysis

The qualitative analysis consisted of:

- 1) An analysis of the information registered firms provided in Exhibit B *Reasons for non-compliance* and Exhibit C *Steps to address delays* of their F1 exception reports, and
- 2) Discussions with stakeholders.

a. Methodology

The CSA used information provided in Exhibit B and Exhibit C of the F1 to conduct an in-depth analysis of the reasons why registered firms did not meet the ITM target and how they addressed any challenges relating to their internal and external processes. This analysis looks at the challenges faced by dealers and advisers, irrespective of the type of security reported. We also had discussions with some stakeholders to obtain additional information.

CSA staff developed criteria for categorizing the information in Exhibits B and C of the Form F1. The criteria categorize:

the reasons why the registered firm was unable to achieve the ITM target for the calendar quarter, and
the steps the registered firm took during the guarter to address the delays.

In categorizing the reasons why the registered firms were unable to achieve the ITM target, CSA staff considered internal and external processing issues, internal and external information technology issues and other concerns raised by registered firms in Exhibit B of the F1.

In categorizing the steps taken by registered firms to address delays, CSA staff considered internal and external measures and any other additional information provided by registered firms in Exhibit C of the F1.

This information provided to us in Exhibit B and Exhibit C of the F1 is subjective and may be interpreted subjectively by CSA staff.

b. Analysis of registered firms' discussion of "Reasons for non-compliance" and "Steps to address delays" in their exception reports

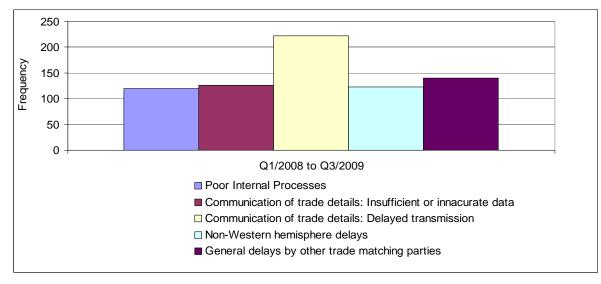
Dealers

Analysis of the "reasons for non-compliance"

In general, dealers indicated that a key challenge in meeting the ITM target is the communication of trade details between tradematching parties. Many dealers mentioned that the exchange of trade details between parties often contains insufficient or inaccurate data or is received too late to be processed within established timelines.

Another problem noted by dealers was the limitation of internal systems combined with poor processes and procedures that continue to be used within the firm. In particular, some equity dealers stated that the volume of non-western hemisphere trading they execute was an impediment in meeting the ITM target.





Analysis of the "steps to address delays"

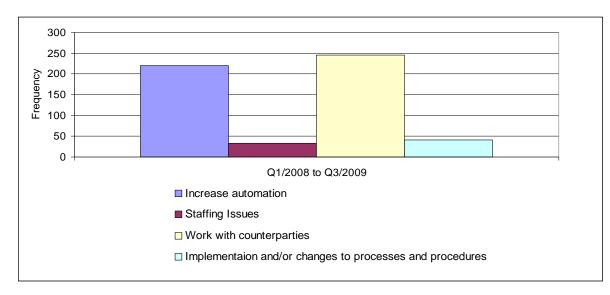
Dealers have taken similar steps to address the delays. Many have worked with counterparties to identify processes that could be improved through either changes in internal systems or in staff behaviour.

Other steps included:

- increasing automation within the firms to eliminate or replace previously manual processes
- training existing staff on NI 24-101 requirements or adding new dedicated staff members
- implementing and/or changing processes and procedures.

⁵ The title of Exhibit B of the F1 is "reasons for non-compliance". As discussed in the CSA Notice of Amendments, the title to Exhibit B is being amended to read instead as "reasons for not meeting exception reporting thresholds".

Chart 8 - Dealers - Exhibit C - main steps to address delays



Observations

Dealers consistently identified communication of trade details between trade-matching parties as an impediment in meeting the 90% matching on T+1 noon. Information they receive from counterparties is often inaccurate, insufficient or transmitted late when compared to their trade processing schedule. A dealer's counterparty is usually an adviser who needs to provide the details of the trade and, after the trade is executed, the allocations for the respective trade and the adviser's designated custodian who needs to confirm all trade details. Many advisers still send trade details and allocations by phone, fax or email. As a result, custodians are late in affirming trade details.

Dealers noted that their internal processes need to be automated. For instance, a firm should use electronic interfaces to capture trade allocations from advisers into internal systems. The internal system enriches the account information and trade details then sends the trade details for overnight processing into back office systems and on to CDS for clearing and settlement.

Another factor for some dealers is the amount of non-western hemisphere trading they execute. One of the concerns expressed is the inability to track or segregate DAP/RAP trades originating from non-western hemisphere clients or counterparties because CDS and back office services providers do not facilitate the tracking of this information. Also, many dealers believe that other trade-matching parties are generally responsible for trades not meeting the noon on T+1 matching threshold.

<u>Advisers</u>

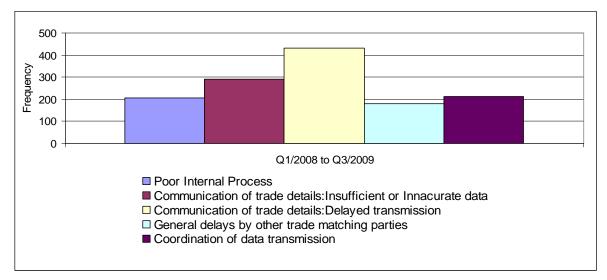
Analysis of the "reasons for non-compliance"

In general, advisers indicated that their main challenge was communication of trade details between trade-matching parties. They also noted that their ability to identify the bottlenecks in the institutional trade process depends on the quality of the information received from the trade-matching parties that provide their ITM performance data. Many advisers mentioned that without sufficient explanations, they could not investigate delays appropriately. Some stated that insufficient or unclear ITM information provided by counterparties makes it difficult to identify why the trade processing is obstructed.

Another challenge for advisers is the coordination of data transmission between trade-matching parties. They remarked that their ability to meet the ITM rate depends on the timeliness of the exchange of trade details between parties that are, in general, outside their control.

Advisers also mentioned that poor internal processes were an issue.

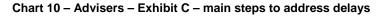
Chart 9 - Advisers - Exhibit B - main reasons for not meeting the ITM target

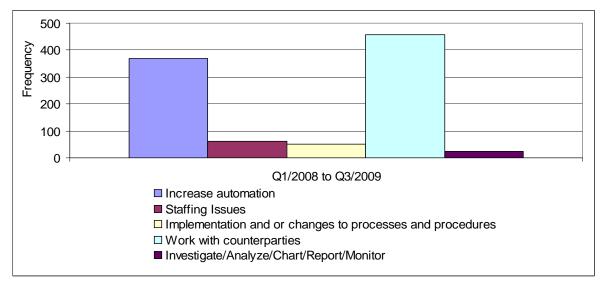


Analysis of the "steps to address delays"

Advisers reported working with counterparties to uncover the causes of the delays in the matching process. Some advisers initiated an investigative process where they would analyze the information provided by counterparties and monitor how the matching process takes place to discover any bottlenecks.

Other advisers encouraged counterparties to communicate and solve any issues related to the timeliness of data transmission. Many advisers noted efforts to improve automation through adoption of OMSs or enhancements in existing internal systems. They also reported the implementation of new policies and procedures or changes to existing ones and training or adding new dedicated staff (see Chart 4).





Observations

Communication of trade details was the most difficult challenge advisers faced. An important step in addressing this challenge was to increase automation of internal processes and improve connectivity with trade-matching parties.

Advisers also noted that identifying existing bottlenecks in data processing was an important item on their agenda. They worked with counterparties to clarify where trades are obstructed and encouraged counterparties or other third-party service providers to communicate and address any issues related to the timeliness of data transmission.

c. Discussions with stakeholders

CSA staff had discussions with market participants, service providers, industry groups and other stakeholders to obtain feedback on the challenges of meeting the ITM target, understand the efforts to improve their ITM performance rates, learn about any ongoing issues/problems with ITM requirements, and generally, to discuss broad issues associated with NI 24-101.

In general, we found that NI 24-101 has encouraged market participants to improve ITM middle and back office internal functions. For example, many market participants re-engineered and automated their processes.

However, less progress appears to have been made with external connectivity. Dealers noted that a recurrent issue is the high volume of trade information received by phone, fax or email. This may be related to the concern expressed by advisers about the cost of adopting an OMS. Another issue consistently raised by dealers was the delay in receiving allocation of trades.

Some advisers expressed concerns at the lack of use of MSUs, especially among dealers. Certain dealers also noted the high cost of using an MSU, which is similar to the concern of advisers about the high cost of acquiring an OMS.

VII. Conclusion

CSA staff recognize that market participants have made concerted efforts to achieve the Instrument's current noon on T+1 matching target. Our review of the data showed that since 2007, the industry has made steady progress in meeting the ITM target. However, despite these efforts many market participants have reached a significant ceiling in their ability to meet the ITM target. CSA staff will continue to monitor the industry's progress in achieving the ITM target.

APPENDIX

Quarter	Entere	ed	Match	ed
Ending:	Midnight T	Noon T+1	Midnight T	Noon T+1
Apr-2007	39.72	-	14.3	-
Jun-2007	55.32	81.7	23.48	61.9
Sep-2007	59.74	81.8	25.18	64.8
Dec-2007	56.34	82.9	29.28	72.3
Mar-2008	67.69	86.7	34.84	78.4
Jun-2008	66.48	87.5	34.62	80.6
Sep-2008	65.97	88.1	34.96	80.9
Dec-2008	69.78	88.3	42.72	82
Mar-2009	70.55	90.8	44.59	84.8
Jun-2009	73.96	90.7	48.24	85.2
Sep-2009	73.45	91.4	45.47	86.3
Dec-2009	71.43	90.2	45.24	84.7

Table A-1. Overall ITM rates (equity and debt) from CDS data based on volume – percentage entered into CDS and matched during the quarter

Table A-2. Overall ITM rates (equity only) from CDS data based on volume – percentage entered into CDS and matched during the quarter

Quarter	Entere	ed	Match	ed
Ending:	Midnight T	Noon T+1	Midnight T	Noon T+1
Apr-2007	39.5	-	13.1	-
Jun-2007	53.5	81.2	21.7	62.9
Sep-2007	58.2	81.2	22.4	65.1
Dec-2007	54.4	82.9	27.2	73.0
Mar-2008	66.5	86.4	32.3	78.4
Jun-2008	65.5	87.5	32.7	81.1
Sep-2008	64.1	87.8	32.0	80.1
Dec-2008	69.2	88.1	41.3	82.2
Mar-2009	69.6	90.9	42.5	85.4
Jun-2009	73.7	90.9	46.6	85.9
Sep-2009	73.0	91.6	43.5	86.8
Dec-2009	70.6	90.3	43.4	85.2

Quarter	Enter	ed	Matc	hed
Ending:	Midnight T	Noon T+1	Midnight T	Noon T+1
Apr-2007	41.0	-	20.9	-
Jun-2007	63.2	83.5	31.4	57.5
Sep-2007	67.0	84.8	38.6	63.5
Dec-2007	66.0	82.6	39.6	68.8
Mar-2008	74.1	88.4	49.1	78.1
Jun-2008	71.7	87.2	45.6	77.9
Sep-2008	76.5	90.1	51.8	83.0
Dec-2008	73.3	89.3	51.0	80.6
Mar-2009	75.4	90.1	55.4	81.8
Jun-2009	75.5	90.0	55.9	82.1
Sep-2009	78.9	90.8	56.3	83.2
Dec-2009	75.7	89.3	55.5	81.7

Table A-3. Overall ITM rates (debt only) from CDS data based on volume – percentage entered into CDS and matched during the quarter

Table B. ITM equity rates from F1s – equity dealers by volume⁶

Quarter Ending:	Large Volume Equity Dealers		Medium Volume Equity Dealers		Small Volume Equity Dealers	
	Entered by noon T+1	Matched by noon T+1	Entered by noon T+1	Matched by noon T+1	Entered by noon T+1	Matched by noon T+1
Mar- 2008	87.10	80.49	85.12	69.00	82.20	63.07
Jun- 2008	87.23	80.60	88.88	74.54	87.74	59.55
Sep- 2008	87.15	81.33	87.07	75.63	81.65	61.54
Dec- 2008	81.88	75.73	87.14	75.18	84.49	64.12
Mar- 2009	91.87	86.06	89.76	78.18	82.97	63.21
Jun- 2009	90.14	84.09	90.80	80.56	85.19	65.18
Sep- 2009	91.59	86.90	90.33	81.88	77.64	59.10
Average Entered	88.14		88.44		82.70	
Average Matched		82.17		76.43		62.25

⁶ The Entered and Matched volumes are calculated as simple averages for the respective category.

Table C. ITM debt rates from F1s – debt dealers by value

Quarter Ending:	•	Large Value Debt Dealers		Medium Value Debt Dealers		Small Value Debt Dealers	
	Entered by noon T+1	Matched by noon T+1	Entered by noon T+1	Matched by noon T+1	Entered by noon T+1	Matched by noon T+1	
Mar- 2008	89.68	73.27	72.77	59.50	76.96	49.67	
Jun- 2008	86.22	72.37	64.38	54.47	76.74	42.65	
Sep- 2008	90.74	78.25	83.71	58.40	77.57	53.09	
Dec- 2008	88.15	73.08	73.16	62.98	77.83	34.34	
Mar- 2009	93.34	78.03	80.09	65.62	80.29	45.74	
Jun- 2009	93.23	81.06	76.56	59.71	67.00	33.63	
Sep- 2009	92.01	83.16	74.29	67.82	62.98	31.77	
Average Entered	90.48		75.00		74.19		
Average Matched		77.03		61.21		41.56	

Table D. ITM equity rates from F1s - equity advisers by volume

Quarter Ending:	Large Volume Equity Advisers	Medium Volume Equity Advisers	Small Volume Equity Advisers	
Linding.	Matched by noon on T+1	Matched by noon on T+1	Matched by noon on T+1	
Mar- 2008	81.14	73.96	64.41	
Jun- 2008	84.00	77.95	67.35	
Sep- 2008	85.61	82.93	69.09	
Dec- 2008	86.07	80.11	65.14	
Mar- 2009	86.41	84.91	73.65	
Jun- 2009	80.69	79.73	66.34	
Sep- 2009	84.05	85.13	70.81	
Average Matched	83.99	80.67	68.11	

Table E. ITM debt rates from F1s - debt advisers by value

Quarter	Large Value Debt Advisers	Medium Value Debt Advisers	Small Value Debt Advisers	
Ending:	Matched by noon on T+1	Matched by noon on T+1	Matched by noon on T+1	
Mar- 2008	71.43	65.64	54.18	
Jun- 2008	72.16	62.73	52.09	
Sep- 2008	76.68	71.77	58.12	
Dec- 2008	76.21	66.07	61.01	
Mar- 2009	78.75	73.87	59.29	
Jun- 2009	80.86	64.65	66.87	
Sep- 2009	82.20	71.59	64.51	
Average Matched	76.90	68.05	59.44	