



Ontario
Securities
Commission

Commission des
valeurs mobilières
de l'Ontario

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**IN THE MATTER OF THE *SECURITIES ACT*,
R.S.O. 1990, c. S.5, AS AMENDED**

- AND -

IN THE MATTER OF OMEGA SECURITIES INC.

**STATEMENT OF ALLEGATIONS
OF STAFF OF THE ONTARIO SECURITIES COMMISSION**

A. ORDER SOUGHT

Staff of the Enforcement Branch of the Ontario Securities Commission (“**Staff**”) requests that the Commission make the following orders:

1. That the registration of Omega Securities Inc. (“**OSI**”) be suspended or restricted for such period as is specified by the Commission, or be terminated, or that terms and conditions be imposed on the registration, pursuant to paragraph 1 of subsection 127(1) of the Securities Act, RSO 1990, c S.5 (the “**Act**”);
2. That trading in any securities by OSI cease for such period as is specified by the Commission, pursuant to paragraph 2 of subsection 127(1) of the Act;
3. That OSI submit to a review of its practices and procedures and institute such changes as the Commission may order, pursuant to paragraph 4 of subsection 127(1) of the Act;

4. That OSI be reprimanded, pursuant to paragraph 6 of subsection 127(1) of the Act;
5. That OSI pay an administrative penalty of not more than \$1 million for each failure by the respective Respondent to comply with Ontario securities law, pursuant to paragraph 9 of subsection 127(1) of the Act;
6. That OSI be ordered to pay the costs of the Commission investigation and the hearing, pursuant to section 127.1 of the Act; and
7. Such other order as the Commission considers appropriate in the public interest.

B. FACTS

Enforcement Staff makes the following allegations of fact:

Overview

1. Omega Securities Inc. (“**OSI**”), a registrant operating two Alternative Trading Systems (“**ATSS**”) in Ontario, has disseminated and continues to disseminate false and misleading information about trading activity on its marketplaces.
2. If OSI disseminated accurate information in compliance with Ontario securities law, investors and regulators would receive a true reflection of the trading activity on its marketplaces. Instead, OSI has continued to disseminate false and misleading information to investors and regulators, particularly with respect to the time of receipt of orders and the time of execution of trades.

3. OSI has been aware since as early as 2012 that system limitations existed in their trading platform used to operate Omega ATS and Lynx ATS. As a result, OSI knew that it was disseminating false and misleading information with respect to the time of orders and trades, as well as inaccurate information about the identities of buy and sell brokers for certain transactions, and during these ensuing years, OSI made no efforts to correct these failures before Staff's investigation.

4. Furthermore, after Staff reviewed with OSI the particulars set out below and after OSI acknowledged to Staff in March 2017 that their systems operated in a manner that systematically erased original timestamp data created by OSI's matching engine and replaced it with other systems-generated "time stamps", OSI made no efforts to correct these failures. As a result, OSI continues to record and disseminate inaccurate data every day, impairing market participants' confidence in the fairness of Ontario capital markets.

5. Accurate and timely collection and dissemination of information is critical to the integrity of Ontario's capital markets and investor confidence. Accurate and timely information is also essential to regulators' ability to discharge their enforcement and regulatory mandates, and is vital to enabling market participants to achieve their investment objectives.

6. Marketplaces, which are for-profit business enterprises, are a core element of Ontario's capital markets and their proper operation facilitates fair and efficient markets and confidence in those markets. Because of this central role, marketplaces are required to satisfy some of the most significant regulatory responsibilities of any market participant, particularly with respect to the accurate and timely dissemination and storage of data regarding trading activity.

7. The audit trail record-keeping requirements for marketplaces set out in Part 11 of National Instrument 21-101 Marketplace Operation ("**NI 21-101**") form the basis of the ability of regulators to effectively monitor trading and market activity. Part 11 of NI 21-101 requires that marketplaces, including those operated by OSI, maintain accurate records respecting the actual time of orders and trades and the true identities of parties to trades.

8. The transparency requirements in Part 7 of NI 21-101 are a fundamental component of the regulatory framework governing marketplaces and public markets. These transparency requirements require that marketplaces, including those operated by OSI, disseminate accurate timely information relating to orders and trades to the public and further, that such information is not made available to any other person before it is disseminated to the public through the information processor.

9. During the period commencing in 2012 through to present (the “**Material Time**”), OSI has breached Ontario securities law in its dissemination of information about trading activity on its ATSS, and in particular, has violated Parts 7 and 11 of NI 21-101.

10. As a result of OSI’s ATSS’ serious errors and omissions:

- (i) Regulators are unable to ensure the integrity of the markets and protect investors;
- (ii) Capital markets are prevented from operating in a fair and efficient manner; and
- (iii) Investors’ confidence in the fairness of Ontario’s capital markets is impaired.

11. OSI has breached Ontario securities law and acted contrary to the public interest.

The Respondent

12. OSI is an Ontario corporation incorporated on May 31, 2007, that is based in Toronto. OSI’s regulation services provider is the Investment Industry Regulatory Organization of Canada (“**IROC**”).

13. OSI operates two ATSS: Omega ATS and Lynx ATS. Omega ATS began operations on or about December 6, 2007. Lynx ATS began operations on or about February 3, 2014.

14. Presently, Omega ATS has a market share of approximately 5% of Canadian equities trading. Lynx ATS presently has a market share of approximately 0.50% of Canadian equities trading.

OSI's Trading Platform

15. The establishment and operations of ATSS are governed by the regulatory framework set out in the Act as well as NI 21-101 and its related companion policies (collectively, the “**Marketplace Rules**”).

16. While the Marketplace Rules set out requirements for ATSS, including information transparency requirements, they do not dictate how an ATS implements these requirements. ATSS determine on their own the appropriate measures they will implement in order to meet the requirements of the Marketplace Rules, including the marketplace software and computer hardware they choose to make use of (commonly referred to as their “**Trading Platform**”).

17. The Trading Platform implemented by OSI to operate Omega ATS and Lynx ATS functions as follows:

- (i) An OSI subscriber sends an order instruction (*e.g.* a buy order);
- (ii) This instruction passes through one of two gateways at OSI;
- (iii) The primary gateway puts the message in a queue to be submitted to the “**Matching Engine**”, which is a software program designed to algorithmically match orders between buyers and sellers;
- (iv) The Matching Engine then submits this information to other OSI processes in preparation for dissemination;
- (v) OSI disseminates the information (*i.e.* messages) regarding trading activity (including orders and executions) that takes place on Omega ATS and Lynx ATS to multiple third parties using three data feeds:
 - (a) The “**ITCH Process**,” which is used to disseminate data on the “**ITCH Feed**” to the public, including to OSI’s information processor, TMX Information Processor (“**TMX IP**”).

- (b) The “**MRF Process**,” which is used to disseminate data on the “**MRF Feed**” to IIROC; and
- (c) The “**FIX Process**,” which is used to disseminate data on the “**FIX Feed**” that is sent to the following four destinations in real time:
 - (A) FIX 4.2 execution messages is sent to each OSI user’s trade execution system;
 - (B) FIX 4.2 “drop copies”, which certain OSI users request primarily to be able to maintain intra-day “state” on all their outstanding orders and trade executions;
 - (C) CDS file, the cumulative file of which is sent to CDS at end-of-day as the definitive record of all OSI trade executions for a trading day; and
 - (D) History database, which is OSI’s own database of all trade executions.

Particulars of Staff’s Allegations

18. Staff alleges that, due to the Trading Platform implemented by OSI, Omega ATS and Lynx ATS failed to comply with the Marketplace Rules and the Act during the Material Period in five respects:

- (i) Inaccurate identification of brokers participating in “mid-point peg transactions” (defined below);
- (ii) Time stamp deficiencies;
- (iii) Content discrepancies across OSI’s data feeds;
- (iv) Dissemination of data to persons or companies prior to TMX IP; and
- (v) Failing to fulfil the primary means to achieve the purpose of the Act.

19. While item (i), above, was corrected by OSI in June 2016, items (ii), (iii), (iv), and (v) are ongoing.

(i) Inaccurate identification of brokers participating in mid-point peg transactions

20. To meet Canadian regulatory requirements, a marketplace is required to provide “accurate and timely information regarding trades... to an information processor” (as set out in subsection 7.2(1) of NI 21-101), which includes properly identifying the buyer and seller broker IDs that were part of an execution. Paragraph 11.2(1)(d)(vi) of NI 21-101 requires all execution report details of orders to include “the identifier assigned to the marketplace participant on each side of the trade”.

21. In July 2013, OSI introduced a new order type that would allow investors to place “mid-point peg orders” on Omega ATS and Lynx ATS (a “mid-point peg order” is a dynamic hidden order which rests at the mid-point between the National Best Bid and Offer.).

22. During the Material Time, OSI’s Trading Platform systematically and repeatedly altered the data identifying the actual buyer and seller brokers for mid-point peg transactions. In particular, OSI reversed the buyer broker ID and the seller broker ID for mid-point transactions when the buyer was active (*i.e.* meaning the buyer’s order was matched with a previously entered sell order).

23. This misleading information was disseminated to TMX IP and the public via OSI’s ITCH Feed contrary to Part 7 of NI 21-101.

24. After being contacted by Staff during its investigation, OSI acknowledged that the company was aware of this reversal but believed that doing so was industry standard. After discussions with Staff, OSI admitted they had misinterpreted the way that the industry handled mid-point peg transactions.

25. This reversal of broker IDs occurred on over 65,000 mid-point peg transactions publicly disseminated by OSI via the ITCH Feed during the Material Time.

26. The error in more than 65,000 transactions had the effect of misleading members of the public. Market participants that reviewed OSI's trade execution data for trading or regulatory purposes (*e.g.* retail investors, institutional traders, high-frequency proprietary firms, and dealers' compliance) were factually misled as to the true identities of the parties to each side of the mid-point peg transactions reported by OSI, in breach of Parts 7 and 11 of NI 21-101.

27. After being notified by Staff of this error, OSI corrected their systems in June 2016. Since that time, messages regarding mid-point peg transactions disseminated by OSI for Omega ATS and Lynx ATS using the ITCH feed have reflected the accurate and proper buyer and seller brokers IDs.

(ii) Time stamp deficiencies

28. The proper recording and reporting of the time at which a message (*i.e.* order, order cancellation, order modification) is received by OSI from a market participant and the time at which two orders are matched (*i.e.* transactions, executions) by OSI's Trading Platform is critical to the proper functioning and integrity of Ontario's capital markets and ensuring market integrity.

29. OSI's Trading Platform has resulted in three types of time stamp deficiencies, all of which are ongoing:

- (a) Time stamp deficiencies for unmatched orders
- (b) Time stamp deficiencies for matched orders; and
- (c) Time stamp discrepancies for identical events on different feeds.

(a) Time stamp deficiencies for unmatched orders

30. Subsection 7.1(1) of NI 21-101 requires a marketplace to provide "accurate and timely information regarding orders... to an information processor". Paragraph 11.2(1)(c)(xi) of NI 21-101 requires marketplaces to record "the date and time the order is first originated or received by the marketplace".

31. OSI's Trading Platform does not record the unique time at which incoming messages (*i.e.* orders, order cancellations, order modifications) are first received by OSI.

32. Instead, OSI's Trading Platform subsequently creates a time stamp (or "time label", as described by OSI) at the time when the OSI processes create the various OSI data feeds (*i.e.* the ITCH Feed, MRF Feed).

33. Because OSI operates more than one gateway and does not record the time an order is actually received by OSI, market participants and regulators cannot be certain that order priority (*i.e.*, orders are matched in the priority in which they are received) is being maintained by Omega ATS and Lynx ATS. This creates concerns about the fairness of OSI's marketplace operations, as OSI processes are creating data relating to orders after these orders are processed by OSI's Matching Engine. This means that users of OSI's order data, both the public and regulators, have for many years been provided with inaccurate and unreliable data by OSI. This data creation activity by OSI risks impairing market participants' confidence in the fairness of Ontario's capital markets, particularly since OSI continues to disseminate inaccurate data today.

34. The failure of OSI to record and safeguard data concerning the actual time of the receipt of orders makes it impossible for regulators to assess and monitor whether OSI is, in fact, maintaining investors' order priority. By operating a Trading Platform in this way, and not maintaining mandated data, OSI is impeding effective regulatory oversight of its activities.

35. OSI failed and is failing to accurately capture and safeguard the actual time at which events occur, resulting in the dissemination of inaccurate information in breach of subsection 7.1(1) of NI 21-101 and the recording of inaccurate information in breach of paragraph 11.2(1)(c)(xi) of NI 21-101.

(b) Time stamp deficiencies for matched orders

36. Subsection 7.2(1) of NI 21-101 requires marketplaces to provide "accurate and timely information regarding trades". Paragraph 11.2(1)(d)(iv) of NI 21-101 requires marketplaces to record "the date and time of the execution of the order".

37. When a buy order is matched with a sell order on OSI's marketplaces, the resulting "trade execution message" is time-stamped by OSI's Matching Engine with the time of the actual trade.

38. However, OSI has advised that it alters this actual time stamp for an executed trade.

39. During the time period commencing from as early as 2012 and through to present, when the data for an executed trade is sent by OSI's Trading Platform to the ensuing internal processes that create OSI's various feeds, the actual original time stamp is systematically erased by OSI's Trading Platform and a new "time label", purporting to represent the time of the executed trade, is created. This occurs when the executed trade message is processed by the ITCH and MRF Feeds for dissemination to TMX IP and the public and IIROC. In other words, OSI's systems erases actual data and replaces that data with false time stamps which are then inaccurately recorded in OSI's audit trail records. The alteration of records by OSI impedes the ability of regulators to monitor and oversee OSI's operations, particularly since the actual data is being destroyed.

40. OSI does not erase and "time label" the original Matching Engine timestamp when its systems process data for dissemination on the FIX Feed. This means that recipients of data disseminated by OSI via the FIX Feed are the only persons to receive accurate data concerning executed trades during the Material Time. All other users of OSI's data, both the public and regulators, receive information about executed trades that report a trade time that is later than when it actually occurred.

41. Investors are entitled to accurate and timely information as to when their trades are executed, and regulators rely on this information to discharge their enforcement and regulatory mandates. However, a market participant or regulator viewing the ITCH Feed and MRF Feed is misled as to the actual time that the transaction took place on Omega ATS and Lynx ATS.

42. OSI failed and is failing to accurately capture and safeguard the actual time at which trades occur, resulting in the dissemination of inaccurate information in breach of section 7.2 of NI 21-101 and the recording of inaccurate information in breach of paragraph 11.2(1)(d)(iv) of NI 21-101.

(c) *Time stamp discrepancies for identical events on different feeds.*

43. In addition to the two scenarios described above, where the same inaccurate time data is disseminated across the ITCH Feed and the MRF Feed, OSI's Trading Platform also permits the same event to be assigned a different "time label" on the ITCH Feed and the MRF Feed.

44. In certain cases, due to errors in the feature used to synchronize the feeds, the internal clocks of the ITCH Feed and the MRF Feed are not synchronized. As a result, the "time label" that these processes stamp onto messages when processing data for dissemination onto the feeds is not always the same.

45. The variance between these timestamps across the feeds exceeds 50 milliseconds.

46. Investors are entitled to accurate information as to when their orders are received by a marketplace and when their trades are executed, and regulators rely on this information to discharge their enforcement and regulatory mandates.

47. OSI failed and is failing to accurately capture the time at which events (order, order cancellations, order modifications, trade executions) occur, resulting in the dissemination of inaccurate information, in breach of sections 7.1 and 7.2 of NI 21-101, and the recording of inaccurate information in breach of paragraphs 11.2 (1)(c)(xi) and (d)(iv) of NI 21-101.

48. Although OSI is aware that it is disseminating inaccurate information with respect to the time of trading activity of its market place, it has failed to correct this situation.

(iii) Content discrepancies across OSI's data feeds

49. OSI disseminates the ITCH Feed of Omega ATS from two different and independent computer ports: "Port 4005" and "Port 4006".

50. Given that market participants are able to receive and rely on the ITCH Feed from either computer Port when making trading decisions, it is important that the information disseminated from both Ports be identical.

51. However, from June 2013 through to June 2016, the information disseminated from OSI's two computer Ports was not always identical.

52. Specifically, the number of messages (*i.e.* orders and transactions) disseminated via Port 4005 was not the same as the number of messages disseminated via Port 4006. As a result, market participants accessing the ITCH Feed from the port that did not include certain messages did not receive full information about trading activity on OSI's ATs and were prevented from making informed trading decisions.

53. Market participants that relied on Omega ATs's direct data feed from one computer port versus the other computer port were misled as to the true trading activity conducted on Omega ATs, in breach of Part 7 and the recording of inaccurate information in breach of Part 11 of NI 21-101.

54. Also, the number of transactions disseminated on the MRF Feed was different from the number of transactions disseminated on either Port 4005 or 4006.

55. Incomplete and inaccurate data received via the MRF Feed compromises regulators' ability to identify individuals engaged in manipulative or fraudulent activity.

(iv) Dissemination of data to certain subscribers prior to TMX IP

56. Subsections 7.1(3) and 7.2(2) of NI 21-101 require that a marketplace not make available information regarding orders or trades to any person or company prior to the marketplace providing that information to their information processor. This provision is designed to ensure equal access to trade information to all investors. OSI failed and continues to fail with this essential principle of market integrity.

57. The information processor for Omega ATs and Lynx ATs is TMX IP. TMX IP receives OSI's ITCH Feed, consolidates it with feeds from other marketplaces, and disseminates the consolidated feed to market participants.

58. OSI's Trading Platform allows for the dissemination of information regarding transactions to trade execution systems prior to OSI providing that information to TMX IP.

59. As described above, transactions are timestamped by OSI's Matching Engine and passed to the ITCH Process, the MRF Process, and the FIX Process.

60. Also as noted above, the FIX Process preserves the original Matching Engine execution timestamp and disseminates the information on the FIX Feed. This information is sent to the four destinations described earlier, which includes each OSI subscriber's trade execution system.

61. As described in more detail above, commencing as early as 2012 and through to present, the ITCH Process alters data in two ways prior to disseminating that data to TMX IP:

- (i) Overwriting the timestamp from OSI's Matching Engine with a "time label"; and
- (ii) Reversing the buyer broker ID and the seller broker ID on more than 65,000 mid-point peg transactions.

62. These two alterations take time, and thus introduce latency into the dissemination of data on OSI's ITCH Feed. Because OSI's FIX Process does not engage in these alterations, the data on OSI's FIX Feed can be disseminated without this latency.

63. As a result, data on OSI's FIX Feed is being disseminated to certain persons prior to the same data being disseminated on OSI's ITCH Feed to TMX IP, in breach of subsections 7.1(3) and 7.2(2) of NI 21-101.

64. Improper early access to market data, even measured in milliseconds, in today's markets is a real and substantial advantage that disproportionately disadvantages certain investors – particularly retail investors.

65. A delay in the dissemination of data on OSI's ITCH Feed to TMX IP in contrast to the dissemination of data on OSI's FIX Feed means that an investor relying on the consolidated feed from TMX IP makes a trading decision based on a stale picture of current market conditions.

66. Because OSI's Trading Platform does not record and store all time data, Staff cannot determine the exact magnitude and frequency of errors involving the dissemination of data to certain subscribers prior to the TMX IP. OSI's systems limitations and deficiencies in these regards impede effective monitoring and oversight by regulators.

(v) **Failing to fulfil the primary means to achieve the purposes of the Act**

67. The fundamental purposes of the Act, as defined in section 1.1, are:

(a) to provide protection to investors from unfair, improper or fraudulent practices;
and

(b) to foster fair and efficient capital markets and confidence in capital markets.

68. Section 2.1 of the Act states that “The primary means for achieving the purposes of this Act” include “requirements for timely, accurate and efficient disclosure of information.”

69. As detailed above, OSI is failing to meet the “requirements for timely, accurate and efficient disclosure of information.” As a result, OSI is frustrating the fundamental purposes of the Act.

70. Regulators, including IIROC and the Commission, require “timely, accurate and efficient disclosure of information” in order to “provide protection to investors from unfair, improper or fraudulent practices.” OSI’s failure to meet its information transparency and audit trail requirements has meant that regulators are unable to properly protect investors.

71. The capital market requires “timely, accurate and efficient disclosure of information” in order to function in a fair and efficient manner. OSI’s failure to meet its information requirements has prevented the capital markets from operating in a fair and efficient manner.

72. Investors and other market participants require “timely, accurate and efficient disclosure of information” in order to have “confidence in capital markets.” OSI’s failure to meet its information requirements has harmed confidence in capital markets.

73. Any factor which puts into question accurate and timely information lessens the confidence of the investing public in the market and is, therefore, a matter of public concern.

C. BREACHES OF ONTARIO SECURITIES LAW AND CONDUCT CONTRARY TO THE PUBLIC INTEREST

Staff alleges the following breaches of Ontario securities law and conduct contrary to the public interest:

1. OSI captured and disseminated inaccurate post-trade information relating to mid-point peg transactions executed on Omega ATS and Lynx ATS, in breach of subsection 7.2(1) and paragraph 11.2(1)(d)(vi) of NI 21-101;
2. OSI is failing to accurately capture and disseminate the date and time an order is first originated or received by Omega ATS and Lynx ATS, in breach of subsection 7.1(1) and paragraph 11.2(1)(c)(xi) of NI 21-101;
3. OSI is capturing and disseminating inaccurate post-trade information relating to trades for exchange-traded securities displayed by Omega ATS and Lynx ATS to the information processor as required by the information processor, in breach of subsection 7.2(1) and paragraph 11.2(1)(d)(vi) of NI 21-101;
4. OSI is making information available regarding trades on Omega ATS and Lynx ATS to a person or company prior to it making that information available to the information processor, in breach of subsection 7.2(2) of NI 21-101; and
5. OSI is engaged in conduct contrary to the public interest by failing to fulfill the primary means to achieve the purposes of the Act, as set out in sections 1.1 and 2.1 of the Act.

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