

## **Amex Market Trade Notification Functionality as of Sep 22 2008**

### **Introduction**

The new NYSE AMEX Options Exchange will provide a high-speed electronic trading environment along with the ability to conduct crowd trading on the floor. Amex Market Makers will be encouraged to participate in trading in a variety of ways:

- MMs will be able to quote into the automated market electronically;
- MMs will be able to send order flow into the automated market electronically;
- MMs will be able to participate in or initiate open outcry trades in the crowd with electronic affirmation and trade delivery process.

This document describes the API that supports the reporting floor cross trades and affirming their involvement in such trades. Other interface specifications describe how market makers interface with the electronic system to submit quotations, orders, and receive drop copies of executions.

The plan is to use a simple FIX version 4.2 message set to communicate floor cross information between the exchange's system and market makers. Besides standard session logon messages, the interface will include 2 application messages to be used as follows:

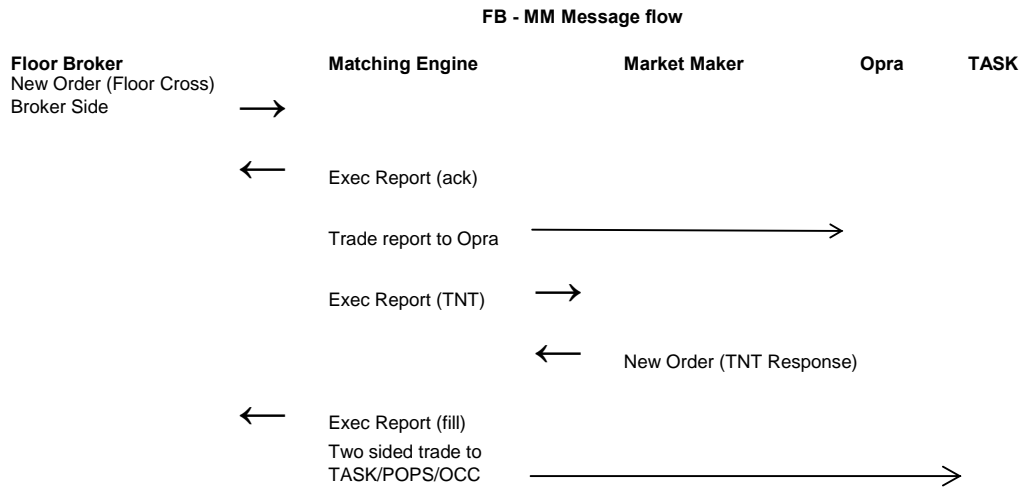
- 1) FIX execution report:
  - a. Used to report a Floor Cross or Open Outcry trade to the exchange's system;
  - b. Used by exchange to acknowledge receipt of a Floor Cross or Open Outcry trade;
  - c. Used by the exchange to deliver a Trade Notification (TNT) to the market maker's system to be affirmed.
- 2) FIX new order single: used by Market Makers to send a TNT Response to affirm participation in a trade that was sent via a TNT.

Market makers will be involved in trades with Floor Brokers counterparties as well as trade where other Market Makers are the counterparty. The processing flow for each scenario is described in the following sections.

### **When a Market Maker trades with a Floor Broker:**

- 1) Broker initiates entry, regardless of side.
- 2) Broker sends broker side of trade to exchange system as floor cross identifying contra side MM ID.
- 3) Exchange system sends ack back to broker to confirm receipt of broker side.
- 4) Exchange system will send message to OPRA immediately upon receipt of broker side of floor cross.
- 5) Exchange system recognizes that this is a FB-MM trade and sends FIX exec report TNT to MM or MM's clearing firm.
- 6) MM is expected to send FIX new order message to Exchange system to affirm TNT including the trade ID that was sent on TNT.
- 7) Exchange system will send data to clearing only message after MM response received. This will initiate downstream processes to send data to POPS and OCC.
- 8) If MM does not respond, this constitutes a DK on the trades and it will not settle. No explicit non-affirm message,
- 9) Exchange system will send FIX exec report fill message to broker.

- 10) Trading Official will have ability to manually affirm MM side of trade and record that affirmation was done manually. When this happens, Exchange system will send one FIX exec report trade confirm message to broker.
- 11) Trading Official will also have ability to bust trade.
- 12) Diagram:



**When a Market Maker trades with another Market maker:**

- 1) Sell side MM sends FIX exec report floor cross to Exchange system will have ID of contra side MM with unique trade ID. Exchange system sends exec report ack back to sell side MM to confirm receipt of floor cross order.
- 2) Exchange system will send message to OPRA immediately upon receipt of sell MM side of floor cross.
- 3) Exchange system recognizes that this is a MM-MM trade and sends FIX exec report TNT to buy side MM or MM's clearing firm.
- 4) Buy side MM is expected to send FIX New Order floor cross message to Exchange system in response to TNT FIX exec report including trade ID that was sent on TNT.
- 5) Exchange system will send one FIX exec report fill message to sell side MM, no report to buy side.
- 6) If buy side MM FIX floor cross side not received within N seconds of sell side, Exchange system will generate an alert. Trading Official will then follow up with market makers.
- 7) Trading Official will have ability to manually affirm buy MM's side of trade and record that affirmation was done manually. When this happens, exchange system will send FIX exec report fill messages to sell side MM only.
- 8) Trading Official will have ability to bust trade. No FIX exec reports sent. Trade will be manually busted in clearing system as well.
- 9) Diagram:

MM - MM Message flow						
Market Maker (seller)		Matching Engine		Market Maker (Buyer)	Opra	TASK
New Order (Floor Cross) Sell Side	→					
	←	Exec Report (ack)				
		Trade report to Opra	→			
		Exec Report (TNT)	→			
			←	New Order (TNT Response)		
	←	Exec Report (fill)				
		Two sided trade to TASK/POPS/OCC	→			

10) Notes on Market Maker connectivity to Exchange system:

- a. All MM's trading open outcry must have FIX connection into Exchange system via the FIX floor trading gateway.
- b. A dedicated FIX gateway will be available for all MM connections.
- c. The Market maker Direct quoting API will not be used for this type of messaging.

11) FIX message types used to support TNT functionality

- a. FIX execution report (see [http://www.nyse.com/pdfs/FIX\\_Specification\\_and\\_API.pdf](http://www.nyse.com/pdfs/FIX_Specification_and_API.pdf) ) Page 79
  - i. Use Tag 40 (ordertype) populated with value = R to represent floor cross trade coming from convergex
  - ii. Use Tag 128 (deliverToCompID) with value = MMID to send TNT to appropriate Market Maker.
- b. Market Maker TNT response – New Order Single (see [http://www.nyse.com/pdfs/FIX\\_Specification\\_and\\_API.pdf](http://www.nyse.com/pdfs/FIX_Specification_and_API.pdf)) page 75
  - i. Use Tag 1003 populated with value = Trade ID (Tag 1003) from execution report
  - ii. Use Tag 128 to identify OTPID of the ContraParty (the MM traded with).