

Market Data Operations

Date: February 28, 2008
Notice #: Q2008-044
Subject: **IMPORTANT REMINDER** -- FIX/FAST Market Data Format to Replace RLC Message Format by October 17, 2008

As we announced on October 23, 2007, all CME Group Quote Vendors that currently use the legacy RLC format of market data must convert to FIX/FAST by October 17, 2008.

In addition, we anticipate that all ITC message format users will need to convert to FIX/FAST in early 2009. More details will be sent by the end of March, 2008 to follow on this important conversion plan.

As a requirement to implement the FIX/FAST market data format, last October, CME Group's management determined that all Quote Vendors must conduct testing in CME Group's testing/certification environments to become officially "certified." This notice contains the following information related to this important decision:

- Benefits for Quote Vendors and CME Group's customers worldwide
- Description of CME Group's **two** testing/certification environments
- Information about *connectivity options* and establishing connections to the testing/certification environments
- Completion of *CME® Globex® Interface Development Agreement* and *Schedule B* forms
- CSET-provided assistance during development and testing/certification period
- Accessing and using the AutoCert+ testing/certification tool
- Round Table Developer Meetings next month in New York/Chicago
- List of certified FIX/FAST Quote Vendors to be added to CME Group web site

Benefits of FIX/FAST Certification

The decision to make certification mandatory was very carefully considered and was based on the following *key* benefits for Quote Vendors, their subscribers and our customers around the world.

- CME Group has assumed the responsibility of disseminating an ever-increasing amount of market data over its Market Data Platform, including CBOT, the Minneapolis Grain Exchange, Kansas City Board of Trade, as well as, additional market data for more CME and NYMEX products. With the conversion to the new FIX/FAST format from the legacy RLC message format by October 17, 2008, a greater need has been identified for ensuring the integrity of the data, as it is processed and displayed by Quote Vendors to CME Group customers worldwide.
- The new format offers expanded functionality and has more nuances than our existing legacy message formats. As such, this creates the need for *more extensive* testing to ensure that Quote Vendor FIX/FAST development efforts have meticulously accounted for our published FIX/FAST specifications.
- The responsibility for "maintenance of the order book" has been transitioned to our Quote Vendor community from CME Group, which is logic that must be thoroughly tested to ensure the results match CME Group's.
- The FIX/FAST suite of certification tests offered by CME Group will enable Quote Vendors to test their applications repeatedly using specific scenarios, such as simulation of system failures, forced rejects or even market state changes. It will also help to ensure that Quote Vendor applications properly receive and manage data related to instrument dictionary, order book representation, market state, market statistics and other functionality supported on Globex.

Two CME Group Testing Environments

CME Group offers two testing environments that are dedicated to the development needs of our Quote Vendors. Both environments, which are described below, are similar in size and scale to CME Group's production environment. Please note that only "one" network connection is required to access both testing environments.

- The ***New Release Environment*** offers the newest release of market data functionality that has or will be implemented by CME Group, including FIX/FAST. Quote Vendors may use this environment as soon as they ready to facilitate and validate their FIX/FAST development efforts. This environment will also be used for all upcoming new market data-related releases.
- The ***Certification Environment*** mirrors CME Group's production market data environment in terms of functionality but not speed, including current RLC functionality and messaging and FIX/FAST. This is used for testing and certification of all functionality and messaging that exists in production.

Quote Vendors must establish connectivity to both environments to certify (New Release = new functionality and Certification = Production).

NOTE: For those Quote Vendors that provide front-end trading systems, both of these environments are connected to CME Group's clearing test environments to facilitate front-end and back-end system testing simultaneously.

CME Group Testing and Certification Environments -- Connectivity Options

There are four options described below for connecting to the two certification environments that were mentioned above. However, it is important to note that the connection must be in addition to your "production" network connection. *Production network connections may NOT be used for testing/certification.*

- **VPN** – This is the most basic connectivity option available and is free of charge. Quote Vendors are able to manage their own network and hardware connected to CME Group's certification environment.
- **Client CERTLink** – This option enables Quote Vendors to manage their own network and hardware that connects to CME Group's certification environments within the ATM "clouds" of CME-certified Telecom vendors. This option is available worldwide.
- **CME CERTLink** – This option is a CME-managed solution available to customers within the United States.
- **BT Radianz** – This option, provided directly by the vendor, is fully managed and uses RadianzNet -- an IP-based extranet that connects financial institutions worldwide.

CME Globex® Interface Development and Testing Agreement and Schedule B

Completion of **both** the *Globex Interface Development and Testing Agreement* and *Schedule B* forms must be completed before access can be granted to CME Group's *New Release Environment* (or Certification Environment used for production certification). Please note that for those Quote Vendors, which do not offer front-end trading systems, **Schedules A.1 and A.2 need not be completed.**

Please contact **Market Data Operations, Quote Vendor Support** for the agreement and schedule. Upon execution of the forms, the forms should be sent to the following address; not to the address listed on the forms:

CME Group
Market Data Operations/Quote Vendor Support
20 S. Wacker Drive – 8 North
Chicago, Illinois 60606

Accessing and Using the AutoCert+ Testing/Certification Tool

The *AutoCert+* tool is CME Group's automated certification tool that is available via the Internet. To access *AutoCert+*, Quote Vendors must first obtain *Channel Definitions*, which can be done in one of two ways:

- Access this link: <http://www.cme.com/trading/get/files/MDPFFACPCChannelDefs.pdf>, or
- Download the XML file from our FTP site.

Additional information is provided in the *Automated Certification Tool (AutoCert+) Access Guide*. The link for this and other certification documentation is shown below under the *Reference Materials* caption.

FIX/FAST Development and Certification Process -- Support

Once you are connected to CME Group's *New Release Environment*, and you are ready to test and certify, you may contact our CSET (Customer Support of Electronic Trading) group at **312.930-2322**. CSET is available Monday through Friday, during regular trading hours. CSET is responsible for both CME Group's testing environments and can answer any questions related to these environments. If you have questions outside of the hours listed above, they should be e-mailed to csetgroup@cme.com. *Responses to all development questions received via email are sent within 24 hours.*

Developer Round Table Meetings Next Month

Next month, CME Group will offer Developer Round Table meetings in New York and Chicago. These meetings will address specific market data and trading system-related topics and will also be used as forums for Quote Vendor development staff to ask questions related to FIX/FAST and the new certification process.

If you are interested in attending one of these Developer Round Table meetings, please email Quotevendorsupport@cmegroup.com

Reference Materials

Documentation for the FIX/FAST market data format is available at <http://www.cmegroup.com/globex/resources/fix-fast-market-data-format.html>. This site includes format specifications as well as a Reference Code, for your convenience, in both a Java and C++ version.

The following is a list of essential and very informative CME Group Testing and Certification documentation that is available via <http://www.cmegroup.com/globex/resources/testing-and-certification-documentation.html>.

- *Certification Environments Overview*
- *Certification Connectivity Guide*
- *Automated Certification Tool (AutoCert+) Access Guide*
- *New Release MDP Channel Definitions*
- *Certification MDP Channel Definitions*

Action Items for Quote Vendors

To quickly get up to speed in preparation for both the conversion to FIX/FAST and mandatory certification testing, we've listed the following action items that should be completed as soon as time permits. Going forward, your CME Group contact for questions, form requests, AutoCert+ logins/passwords and IP addresses and ports will be Market Data Operations/Quote Vendor Support.

- Review this notice with other appropriate staff within your firm.
- Access and review the certification documentation via the link shown in this notice.
- Review the connectivity options, and choose your certification connectivity method.
- Contact Market Data Operations/Quote Vendor Support to obtain the *Globex® Interface Development and Testing Agreement* and *Schedule B* forms.
- Request AutoCert+ login and passwords.
- Review all FIX/FAST documentation published to-date.

- Establish connectivity to the *New Release* and *Certification* Environments.
- Complete the Market Data Test Suite in AutoCert+ for FIX/FAST.
- Request production IP's and ports for FIX/FAST channels after completing the testing/certification process from Market Data Operations/Quote Vendor Support

Summary

We realize that there is considerable amount of information in this notice to digest and many to-dos that must be completed within the coming months. We are here to assist you through every stage of testing, certification and migration to FIX/FAST. *Please be aware that as each of our Quote Vendors completes the certification process and converts to FIX/FAST, their name will be added to our CME Group web site indicating that they are a "CME Group-certified FIX/FAST Vendor."*

Market Data Operations/Quote Vendor Support Contacts

As always, please don't hesitate to contact the following individuals with any questions you may have:

- Kevin Brady, Manager, Quote Vendor Support – 312.648-3653 or kevin.brady@cmegroup.com
- Lakisha Speights, Project Manager, Quote Vendor Support – 312.338-7110 or lakisha.speights@cmegroup.com
- Marilee Radecki, Associate Director, Market Data Operations – 312.930-8193 or marilee.radecki@cmegroup.com
- Michele Ivanski, Associate Director, Client Management – 312.930-8504 or michele.ivanski@cmegroup.com

THANK YOU!