

Market Data Operations

Date: October 23, 2007
Notice #: Q2007-268
Subject: Announcing *Mandatory Certification* of All CME Group Quote Vendors for the FIX/FAST Market Data Format Migration

As previously announced, CME Group implemented the new [FIX/FAST market data format](#) in production on Sunday, October 14, 2007. All Quote Vendors that currently use the legacy RLC market data format must convert to FIX/FAST by **October 17, 2008**. At the present time, CME Group is determining the deadline for *conversion of the ITC 2.1 message format to FIX/FAST*, which is expected to be announced within the next several weeks.

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

- FIX/FAST Certification – 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
- Kick-off teleconference on Tuesday, October 30, 2007 from 2:00 to 3:00p.m. (CT) to answer questions concerning mandatory certification
- Round Table Developer Meetings in Early 2008
- 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 (and planned ITC 2.1 conversion shortly thereafter), a greater need has been identified for ensuring the integrity of the data, as it is processed and displayed by our Quote Vendors to CME Group customers worldwide.
- The new format is very different, 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.
- FIX/FAST market data is broadcasted using UDP protocol, which does not guarantee message delivery, and management of the dual feeds A and B is **crucial**. Certification testing guarantees the appropriate levels of management of the dual feeds to *reduce* the chance of missing messages, identifies if messages are missed and ensures recovery.
- 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 (RFQ...)

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 that was just implemented on October 14). Quote Vendors may use this environment today, if they are ready, to facilitate and validate their FIX/FAST development efforts. This environment will also be used for all upcoming new market data-related releases.

*In November 2007, the FIX/FAST market data format will be **moved** to the Certification Environment, which is described next. At that time, any Quote Vendors that are ready to test may do so in the Certification Environment, **instead of** the New Release environment. During the first quarter of 2008 new FX functionality will be added to the New Release Environment, so for those Quote Vendors that have not certified their FIX/FAST programs by that time, they may choose to do so in New Release while also testing the new FX functionality.*

- The **Certification Environment** mirrors CME Group’s production market data environment, including current RLC functionality and messaging, (and next month -- FIX/FAST) and 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. Only “one” network connection is needed to access the two environments. 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 and least expensive connectivity option available.* 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.

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.** Additionally, certain sections of the agreement may not be applicable to Quote Vendors that only *re-distribute market data* and do not provide front-end trading systems.

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. If you have questions outside of these hours, they should be e-mailed to csetgroup@cme.com. *Responses to all development questions received via email are sent within 24 hours.*

Mandatory Testing/Certification "Kick-off" Teleconference/FAQ

A teleconference will be held on October 30, 2007 to discuss the contents of this notice in further detail and to answer questions regarding the new mandatory certification process. Please review this notice

with other appropriate staff in your organization so that you have time to collectively formulate your questions. *It is our goal to make sure that all of our Quote Vendors have a comprehensive understanding of this new requirement and how it will impact their current processes for market data receipt and re-distribution.* The access information for the teleconference is as follows:

Conference Bridge

Domestic: 1-800-264-8432

International: 1-719-457-0337

Participant Passcode: 113507

The teleconference will be followed up with the distribution of an **FAQ** – Frequently Asked Questions – document to further assist our Quote Vendor community with the FIX/FAST conversion and implementation of the new mandatory testing/certification process.

Developer Round Table Meetings – Early 2008

In early 2008, CME Group plans to offer *Developer Round Table* meetings in Chicago, New York and London (tentative). 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. *Please stay tuned for details in the next few weeks.*

Reference Materials

The following is a list of essential and very informative CME Group Testing and Certification documentation that is available via www.cme.com/certsdk. If at all possible, please review this documentation prior to the teleconference scheduled on October 30 so that our Subject Matter Experts can answer any questions you may have.

- *Certification Environments Overview*
- *Certification Connectivity Guide*
- *Automated Certification Tool (AutoCert+) Access Guide*
- *New Release MDP Channel Definitions*
- *Certification MDP Channel Definitions*
- *FIX/FAST New Release 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, and compile your questions for our upcoming teleconference.
- 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 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 next year. 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 before or after our October 30 teleconference:

- 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!