SECURITIES INDUSTRY
BUSINESS CONTINUITY TEST
Saturday, October 27, 2012

Coordinated by

Securities Industry and Financial Markets Association
and
Financial Information Forum

VERSION DATE: 7/5/2012
TEST OVERVIEW

- Test Date: Saturday, October 27, 2012
- Objective: Exercise and verify the ability of firms, markets and utilities to operate through an emergency using backup sites, recovery facilities and backup communications capabilities across the industry
- This is a test of market connectivity that includes some processing interactions but is not a full test of internal systems of firms and exchanges
TEST SCOPE

- Test components
  - Equities
  - DTCC
  - FedWire
  - Futures
  - Fixed Income
  - Omgeo
  - CHIPS
  - Treasury Auctions
  - Options
  - Market Data
  - SWIFT
  - FX
  - Commercial Paper

- Firms will transmit dummy orders to markets and receive simulated execution reports and will conduct certain settlement and payment interactions.

- Firms will conduct test transactions with payment systems.

- Firms will receive and verify market data through connections at their backup sites.

- SIFMA will compile and publish aggregate test results based on input from exchanges. Results for individual participants will remain strictly confidential.
TEST FORMAT

- The testing window will be open from 9:00 a.m. to 1:00 p.m. Eastern Time on 10/27 but exchanges and markets will remain open for a reasonable period after 1:00 p.m. to resolve issues with individual participants if necessary. Exchanges and markets will announce their specific test windows within the 9:00 a.m. – 1:00 p.m. window.

- Exchanges and markets will provide time for pre-test setup on test day prior to the test windows. Setup schedules will be announced in the documentation for each exchange or market.

- Firms will submit two orders for each of several designated symbols on each exchange/market using real symbols and real accounts. Firms will receive execution reports from the markets.
TEST FORMAT (continued)

- Exchanges and markets may make their own specific modifications to the general test format.
- Firms will conduct specified interactions with payment entities.
- Firms will verify market data applications from backup sites.
- Price data and symbols to be used for each market will be provided to participants as test scripts prior to the test.
- Exchanges and markets will purge all test date from systems prior to Monday market opening.
PRE-TEST DATES

- Common pre-test dates will be established in August and September. The pre-test dates will be posted on the industry test Web site.

- Prior to the test, firms may test their connectivity with exchanges on these dates or on other dates as stipulated by each exchange in their documentation.

- Many of the participating exchanges, markets and utilities will offer pre-testing on the two common dates, but for technical reasons some may not be able to do pre-testing on those dates. In those case, other dates will be published.
# Participating Market Entities

## Equities
- BATS BZX
- BATS BYX
- Direct Edge EDGA
- Direct Edge EDGX
- NYSE/Euronext
- NASDAQ
- NYSE AMEX
- National Stock Exchange
- Chicago Stock Exchange

## Options
- BATS Options
- Boston Options Exchange
- Chicago Board Options Exchange
- NASDAQ OMX PHLX
- CDCC
- NYSE AMEX
- NYSE ARCA
- Options Clearing Corp.`

## Clearing & Settlement
- DTCC
- Omgeo (TradeSuite)

## Payment Systems
- Fedwire
- CHIPS
- SWIFT

## Fixed Income

### Alternative Trading Systems
- BondDesk
- Tradeweb Markets LLC
- MarketAxess
- The Municenter

### Inter-Dealer Brokers
- eSpeed (BGC Partners)
- ICAP
- Tullett Prebon
- Dealerweb

## Clearing Banks
- BNY Mellon
- JP Morgan Chase

## Market Data
- Bloomberg
- Interactive Data
- FactSet
- eSignal
- Fidessa
- OTC Markets Group
- SIX Financial Information
- Thomson Reuters

## Commercial Paper
- DTCC
- Bloomberg

## Service Bureaus
- Broadridge (BPS, ICI, SIS)
- Fidessa
- Lava Trading
- OTC Markets Group
- SunGard Phase 3
- SunGard Valdi
- Thomson Reuters BETA
- ReadQ

## Futures
- CBOE Futures Exchange
- CME Group
- Clearing Corp.
- ICE Exchanges
- KCBOT
- ICE Clear US
- IDEX/IDCG
- MEFF
- NFX

## Treasuries
- US Treasury Auctions
- GovEx

## FX
- Bloomberg Tradebook
- Bloomberg FXGO
- Hotspot
- CLS
GENERAL TEST REQUIREMENTS

WHO MAY PARTICIPATE?

The test is open to all securities firms providing they have pre-tested communications links from the backup locations they will use during the test through to the exchange and industry utilities sites.

WHAT BACKUP SITES ARE TO BE USED?

The objective of the test is to have all participants operate from their backup locations to the greatest degree possible. It is intended that firms will activate backup 1) data center, 2) operations and 3) trading sites.

In addition to the backup-to-backup test, in 2011 a change was put into place allowing that some markets may permit firms to test from the firms’ primary sites to those markets’ backup sites. These will be shown in the registration system and the Summary of Test Components. If a firm elects to test with these markets from their primary site, the firm must ensure that they test from their backup site to all other exchanges and markets at some other point during the year.
WHAT STAFF IS REQUIRED FOR THE TEST?

Each participating organization will determine the number of employees necessary to conduct the test. There is no minimum or maximum staff size but, in keeping with the intent of the test, it is suggested that each firm assign some staff to their backup 1) data center, 2) operations and 3) trading sites.

HOW DOES AN ORGANIZATION REGISTER FOR THE TEST?

An online registration system will be available on the SIFMA website in July. Registrations must be submitted through this system by close of business Friday, October 19.

CAN FIRMS PARTICIPATE IN THE TEST THROUGH SERVICE BUREAUS?

Yes. A number of service bureaus will participate. A list of participating services bureaus is shown in the overall list of participating market entities. Clients of these service bureaus may participate providing that they have tested connectivity to the service bureau backup sites prior to the October 27 test.
GENERAL TEST REQUIREMENTS
(Continued)

WILL REGULATORS AND THE PRESS BE INVOLVED IN THE TEST?

Regulators will not participate directly in the test but, of course, have a significant interest in the overall results. SIFMA will brief the regulators prior to, during and after the test regarding the test process and the aggregate results. The press is not permitted to observe the conduct of the test. SIFMA will issue press releases and conduct press interviews prior to and after the event.

WILL PARTICIPANT BRIEFING CALLS BE HELD?

There will be at two briefing calls prior to the test where participants may ask questions. Representatives of the exchanges, markets and utilities will be available on these calls. The briefing call schedule will be posted on the industry test Web site.
TEST DOCUMENTATION

Detailed documentation is posted on the SIFMA website at:
www.sifma.org/Services/BCP/Industry-Testing/

This site will be updated periodically as additional materials are finalized.

Participant instruction packages will include the following:

1. Test Overview (this presentation document)
2. Summary of Test Components
3. Test Scripts Package
4. Individual Instructions From Exchanges, Markets and Utilities
   (These will vary by exchange)
QUESTIONS

Questions regarding the overall test:

Karl Schimmeck (SIFMA), kschimmeck@sifma.org, 212-313-1183

Questions regarding Service Bureaus and the Market Data component:

Arsalan Shahid (FIF), fifinfo@fif.com, 212-422-8568

Questions regarding individual exchanges, markets and utilities should be directed to the contacts listed in the Summary of Test Components for each organization.