SECURITIES INDUSTRY BUSINESS CONTINUITY TEST
Saturday, October 24, 2015

Coordinated by

Securities Industry and Financial Markets Association
and
Financial Information Forum

VERSION DATE: 05/12/2015
TEST OVERVIEW

- Test Date: Saturday, October 24, 2015

- Objective: Exercise and verify the ability of firms, markets and utilities to operate through a crisis using a combination of primary sites, backup sites, recovery facilities and backup communications capabilities across the industry based on the needs of the participants.

- 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
  - Treasury Auctions
  - Fixed Income
  - Omgeo
  - CHIPS
  - FX
  - Options
  - Market Data
  - SWIFT

- 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 providers (exchanges, utilities, service providers). Results for individual participants will remain strictly confidential.
The testing window will be open from 9:00 a.m. to 1:00 p.m. EST on 10/24 but providers may remain open for a reasonable period after 1:00 p.m. to resolve issues with individual participants if necessary. Providers may announce specific test windows within the 9:00 a.m. – 1:00 p.m. window based on their individual situations.

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

Firms will follow the specific test scripts for each provider. Below is one example:

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)

- Providers may make their own specific modifications to the general test format per the scripts that they distribute ahead of the test.
- Firms will conduct specified interactions with payment entities.
- Firms will verify market data applications.
- 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.
The 2015 test per this presentation will be conducted in the same format at prior years, i.e. primarily a connectivity test.

Industry Test requirements per Reg SCI will take effect in 2016. At that time the scope and format of the industry test may be modified to account for this new rule.

The products and functions in scope per Reg SCI are:
- Equities
- Options
- Clearance and Settlement

In 2016 it is anticipated that the scope and format for products not within the scope of Reg SCI will continue as in prior years.

Additional work will be conducted in 2015 to provide greater clarity on the future scope and format of the Industry Test.
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 providers on these dates or on other dates as stipulated by each provider’s schedule and 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
- BATS EDGA
- BATS EDGX
- Chicago Stock Exchange
- NASDAQ
- NYSE ARCA
- NYSE MKT
- NYSE
- OTC Link ATS

#### Options
- BATS BZX Options
- BOX Options Exchange
- CDCC
- Chicago Board Options Exchange
- ISE
- MIAX
- Montreal Exchange
- NASDAQ OMX PHLX
- NYSE AMEX
- NYSE ARCA
- Options Clearing Corp.

#### Fixed Income
**Alternative Trading Systems**
- BondDesk
- Tradeweb Markets LLC
- MarketAxess
- TMC Bonds LLC
- Bloomberg TOMS

**Inter-Dealer Brokers**
- ICAP
- Tullett Prebon
- Dealerweb
- NASDAQ OMX eSpeed

#### Payment Systems
- Fedwire
- CHIPS
- SWIFT

#### Service Bureaus
- Broadridge (BPO, BPS, ICI)
- Fidessa
- LavaFlow ECN
- OTC Markets
- SunGard Phase 3
- SunGard Valdi
- Thomson Reuters BETA
- ReadQ
- Shadow Financial
- Flex Trade Systems
- Talisys
- SS&C Tech (Lightning)

#### Fixed Income
**Clearing Banks**
- BNY Mellon
- JP Morgan Chase
- CDCC

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

#### FX
- Bloomberg Tradebook
- Bloomberg FXGO
- Hotspot
- CLS
- Thomson Reuters Fxall
- Traiana

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

#### Treasuries
- US Treasury Auctions
GENERAL TEST REQUIREMENTS

WHO MAY PARTICIPATE?

The test is open to all securities firms.

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.

USING YOUR PRIMARY SITE INSTEAD?

If a firm elects to test with providers from their primary site, the firm must ensure that they test from their backup site at some other point during the year. The goal of the test is to provide all firms the opportunity to test their back-up to back-up connectivity with multiple providers on a single day.
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 June. Registrations must be submitted through this system **by close of business Friday, October 16**.

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 test.
WILL REGULATORS AND THE PRESS BE INVOLVED IN THE TEST?

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

WILL PARTICIPANT BRIEFING CALLS BE HELD?

There will be at three 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 calls are scheduled for:

- September 10, 2015, 2:00pm – 3:00pm EST
- September 24, 2015, 2:00pm – 3:00pm EST
- October 8, 2015, 2:00pm – 3:00pm EST

The briefing call schedule will be also be posted on the industry test website.
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 available.

Participant instruction packages will include the following:

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

Questions regarding the overall test:

Karl Schimmeck (SIFMA), kschimmeck@sifma.org, 212-313-1183
Charles De Simone (SIFMA), cdesimone@sifma.org, 212-313-1262

Questions regarding Service Bureaus and the Market Data component:

Darren Wasney (FIF), fifinfo@fif.com, 212-655-2935

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