



HEALTHY MARKETS

AN INDUSTRY PREPARED: CYBER THREATS ON THE FOREFRONT

In 2016, FIA continued our work to support the mission of the Financial Services Sector Coordinating Council to strengthen the resiliency of the financial sector against attacks and other threats to the nation's critical infrastructure by identifying threats and promoting protection and ultimately coordinating crisis response. FSSCC has 70 members consisting of major financial trade associations, financial utilities and the most critical financial firms. FSSCC has built and maintains relationships with the U.S. Treasury and Homeland Security Departments, and all the federal financial regulatory agencies including the Securities and Exchange Commission and the Commodity Futures Trading Commission.

During the year, FSSCC members met regularly with these government officials as part of a public-private partnership, which was initiated under President George W. Bush and built on by every succeeding president. >>

As a trade association, our particular focus during the year was on the ongoing work FSSCC supported in collaboration with the U.S. federal government on crisis response, including joint FSSCC and Financial Services Information Sharing and Analysis Center (FS-ISAC) work with the government on a series of cybersecurity exercises. The purpose of the exercises was to better prepare the financial sector to address significant cybersecurity incidents.

As part of this program, a U.S. Treasury-sponsored exercise was held in November at the CFTC to simulate a cyber attack on trading platforms operated by futures exchanges. FIA and FIA PTG member firms participated in the cyber attack simulation and provided comments on the potential for market disruption, the channels of communication and coordination, the data recovery process and the role of the exchange in notifying regulators and market participants of their operational and business process decision-making. A formalized role for FIA during market disruptions (cyber and non-cyber related) was also discussed during the November exercise and will be explored further in 2017 with FS-ISAC and regulators.

Information on communication during this and other exercises is aiding the development of an improved *FS-ISAC All Hazards Crisis Response Playbook* (The Playbook). FS-ISAC, its members and critical infrastructure partners have developed the Playbook to guide how the financial sector will respond during a crisis event, how the sector will coordinate partnership

activities and how and where the sector will make decisions.

FIA and the trade associations working as part of FSSCC have also supported the NIST Cybersecurity Framework as a model for all future cybersecurity endeavors both in the U.S. and elsewhere.

FIA and FIA PTG member firms participated in the cyber attack simulation.



FIA'S BUSINESS CONTINUITY AND DISASTER RECOVERY TESTING

In October 2016, FIA and a broad cross-section of market participants, exchanges and clearinghouses administered their thirteenth annual continuity of business and disaster resilience test.

Organized by the FIA Market Technology Division's Business Continuity Committee, the test is an industry-wide effort to prepare for potential market disruptions, including natural disasters and cyber attacks.

Preparations for test day began during the first quarter of 2016, and from May to October, the committee held regular calls, including two symposiums, and

pre-testing in September and October. Key service providers and independent software vendors were also involved.

The test, which focused on disaster recovery back-up connectivity and functionality, was successfully conducted among 31 domestic and international futures exchanges, clearinghouses and swap execution facilities as well as 62 clearing/non-clearing firms. Participation involved firms that handle the vast majority of volume on the participating exchanges, indicating that the test covered a critical mass of the industry. >>

FIA's Worldwide Disaster Preparedness Exercise



Up to **93%**

Market volume and order flow represented

Participant firms represented the majority of worldwide derivatives order flow and liquidity.

31

Major global futures exchanges, swap execution facilities, clearinghouses

62

FCMs and Intermediaries participated

The 2016 test was highly successful, in large part due to the excellent working relationship between exchanges and firms. Participants demonstrated that their systems, processes and procedures worked well, communicating from back-up systems and sites. Organizations also indicated that the exercise helped them identify single points of failure, better understand the need for cross-training, and to tighten up and improve documentation of business continuity procedures. The continuation of this practice creates familiarity with running operations from these sites and systems, promoting industry composure during a real world event.

As the threat landscape expands to new variants of attack, such as cyber, we are reminded of the importance of this coordinated industry effort. Going forward, testing may also incorporate additional scenario-based elements. In its coordinating role, FIA will continue to work to increase participation.

MARK YOUR CALENDAR

- **2017 Disaster Recovery Test: Saturday, October 14**
- **Test registration will open approximately in mid-June. Please contact Steve Proctor at sproctor@fia.org, to be added to the distribution list for upcoming calls and related announcements.**
- **[FIA DR Test page](#)**



OPERATIONAL EFFICIENCY, STANDARDIZATION AND LOWER COSTS

FIA Technology Services, a wholly owned subsidiary of FIA, serves as an innovative force to make derivatives market infrastructure more efficient and scalable. During 2016, FIA Tech launched its Ownership and Control Reporting system, which is designed to help firms comply with the Commodity Futures Trading Commission's OCR reporting rules.

2016 was also a successful year for improving industry performance. Utilizing FIA Tech's Electronic Give-Up System (EGUS), 95% of give-up transactions were executed electronically, a major milestone.

FIA Tech continues to work with the industry to address outstanding brokerage payments going forward resulting in more than a 52% reduction of pre-2016 balances since July.

FIA Tech plans to go live with its new brokerage platform during the first quarter of 2017.

Additionally, FIA Tech is evaluating certain fintech technologies going forward such as a cloud infrastructure. FIA Tech is implementing a secure, scalable cloud with Amazon Web Services, which will allow a reduction in operational costs, and improved services for users.

Another area where FIA Tech sees the potential for applying fintech is in its EGUS system. At present EGUS agreements are highly structured, with more than 95% based on standard terms. As FIA Tech migrates EGUS onto its new technology platform, the new system will ultimately include smart contract technology.

FIA TECH



500+ Customers

This includes FCMs, brokers, investment managers, proprietary traders, commercial hedgers, end-users and more.



COLLABORATING THROUGH FIA DIVISIONS

Throughout 2016, the Market Technology, Operations Americas and Law & Compliance Divisions increasingly worked together on various industry issues to ensure that FIA served as an efficient vehicle for discussion, advocacy and implementation. Trading, technology,

operations, legal and compliance participants worked together on exchange audit trail requirements, block trading rules, average pricing workflows and establishing forums with exchanges to discuss upcoming initiatives.



FIA Market Technology Division
The FIA Market Technology

Division hosted three events during 2016: a panel discussion educating members on the topic of “Communicating to Influence;” the Annual Meeting and a panel on “Transformative Trends in Technology;” and a holiday party and networking event for members. The division also hosted a webinar showcasing three of the top fintech innovators from Expo 2016. Numerous working groups also met throughout the year including the Business Continuity Management Committee, Event and Communications Committee, IRS 871(m) Working Group and Market Access Working Committee.



FIA Operations Americas Division
The FIA Operations

Americas Division concluded the 2016 membership year with almost 400 members. During the year, the division hosted numerous events including its Annual Meeting and Washington Update, two events with CME Clearing leadership in New York and Chicago and several social events for members. The Division also hosted a successful webinar featuring “An Introduction to Bitcoin & Blockchain” as the topic. Five active committees met on a regular basis including Brokerage, Clearing, Deliveries, Financial Management and Events & Communications. For the 11th consecutive year, 10 \$2,500 scholarships were awarded to children of division members with funds raised from memberships and division events.



FIA Law & Compliance Division
During 2016, The FIA Law &

Compliance Division collaborated on dozens of regulatory responses to regulators around the world. Comments were on a range of regulations proposed and being implemented by the Commodity Futures Trading Commission, the Internal Revenue Service, the Securities and Exchange Commission and several international regulators.

During 2016, the division launched its webinar series to educate members and market participants on key regulatory issues.

More than 600 industry professionals are members of the FIA L&C Division.



A FOCUS ON FINTECH

In the new regulatory landscape, operational efficiency and innovation have become even more critical. FIA's internal Fintech Committee worked to develop a strategy to ensure FIA members have the resources they need to understand the impact of new technology on their business. Fintech has also been featured heavily within our conference programming and was highlighted in the Innovators Pavilion featured at FIA Expo.

Throughout the year, FIA worked to ensure that new regulatory frameworks being created for emerging technologies fell in line with the specific needs of our members and our markets. We continued building relationships with key players, with a focus on distributed ledger technology, smart contracts and other next-gen technologies with the potential to reduce costs and transform business practices in the exchange-traded and cleared swaps industry. We invited fintech experts to participate in our flagship conferences, division meetings and other events, and encouraged fintech firms to focus on delivering solutions that meet the needs of our membership. In addition, an increasing number of fintech firms are becoming members as they look to become providers of market infrastructure, regulatory compliance and other technology solutions.

Going forward, FIA will work to develop and execute plans in four areas:

- Regulatory engagement and advocacy
- Member communications and events
- Working groups/division engagement
- FIA Tech as applied POC and implementation opportunity



At our second annual Innovators Pavilion, 18 fintech startups demonstrated their products and services to market participants attending the FIA Expo.



FIA AFFILIATES



FIA European Principal Traders Association

2016 marked the fifth anniversary of the FIA European Principal Traders Association, a group affiliated with FIA that represents traders in Europe that trade their own capital.

As the European regulatory landscape continued to be very dynamic, FIA EPTA worked as an industry voice toward improving regulation that creates better functioning markets.

Among key areas of interest during the year were provisions in MiFID, Basel Committee capital reforms, Brexit and a range of reforms related to automated trading. Another focus for FIA EPTA was on clearing-house recovery and resolution issues and the impact the regulatory framework would have on firms that trade their own capital.



FIA Principal Traders Group

2016 was an active year for FIA PTG, with members drafting 13 regulatory comments over the course of the year. The Commodity Futures Trading

Commission's proposed regulation of automated trading was the dominant issue of 2016, prompting two comment letters, congressional testimony and a variety of media interviews. FIA PTG members' advocacy for principles-based risk controls and our work on the issue of source code access earned the group a reputation as a valuable thought leader on the proposed regulation.

On the equities front, 2016 was the year of the speed bump. FIA PTG presented comprehensive and detailed arguments against allowing intentional delays in protected quotes. After establishing the group as a thoughtful voice on liquidity in Treasury markets in 2015, FIA PTG continued this work in 2016, submitting detailed comments to the Treasury Department on the challenges and opportunities presented by the evolution of Treasury market structure.

