

2019 FIA Industry-Wide Disaster Recovery Test

Summary Report

December 11, 2019

A. Background

- On October 26th, 2019, the futures industry completed its sixteenth (16th) annual continuity of business and disaster resilience test, also referred to as the FIA Disaster Recovery Test. The annual exercise, an initiative of the FIA Market Technology division, was established soon after the events of September 11th, 2001, and has remained as an extraordinary example of collaborative efforts across the industry.
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- From the outset, the scope of the disaster recovery test has focused on testing business continuance, process recovery, disaster resilience connectivity, and functionality between exchanges, clearinghouses, and member firms by:
 - Verifying firms' ability to test their business continuance from alternate work recovery sites (the people side)
 - > Testing firm back-up to exchanges and clearinghouses back-up sites (DR-to-DR)
 - Verifying connectivity and process recovery
 - Testing round-trip communications capabilities
- The exercise remains a coordinated industry effort, and from day one, participation has been open to members and non-members alike, including:
 - Exchanges
 - Clearinghouses
 - Futures Commission Merchants (FCMs)
 - Clearing firms
 - ➤ Non-clearing firms
 - Key service providers
 - Independent software vendors
- As technology and the industry evolve, the annual disaster recovery test remains a valuable apparatus for the industry to assess its response to potential disaster scenarios.

B. Executive Summary

- The 2019 FIA annual industry-wide disaster recovery test was considered a success. The primary objective, to test the connectivity and operation of systems under a simulated disruption scenario, was fulfilled, and the exercise remains an effective method of practicing resilience and learning from issues that arise during such conditions. Participants develop a sort of muscle memory that leaves them better prepared for future real-world incidents, and they learn to continually improve and learn from the successes and failures of these tests.
- In 2019, between 83% and 100% of firms tested successfully, depending upon the exchange, meaning that firms were able to successfully fulfill, from end-to-end, the instructions outlined within test scripts provided by exchanges/clearinghouses
- Representatives from <u>19 major U.S. and international futures exchanges and clearinghouses</u>, participated in the 2019 disaster recovery test

- Representatives from <u>71 FCMs</u>, clearing firms, non-clearing firms, key service providers, and other supporting entities, also participated
- The exchanges and clearinghouses demonstrated that their systems, processes, and procedures simultaneously worked well, communicating from back-up systems and sites. Firms and exchanges also tested the "people side" of their business continuance capabilities, as well as, the disaster resilience and recovery of their systems infrastructure

- Overall test orchestration, facilitation and order entry was conducted from alternate work sites, as well as DR data centers
- Working from alternate work sites was an option for numerous participants, and some firms had test staff working remotely from home
- Reported alternate work sites were geographically dispersed within United States and Canadian Provinces, as well as, internationally:
 - United States and Canadian Cities/Provinces:
 Colorado / Connecticut / Florida / Illinois / Kansas / Minnesota / Missouri / New Jersey
 New York / North Carolina / Tennessee / Texas / Virginia.
 Montreal (Quebec) / Toronto (Ontario) / Vancouver (British Columbia)
 - International Countries:
 Brazil / Colombia / France / Germany / Hungary / India / Israel / Poland / Singapore
 Spain / United Arab Emirates / UK
- Firms have indicated that the Test helps them:
 - Exercise their business continuance/disaster resilience plans (BCPs)
 - Identify internal and external single points of failure
 - > Test other in-house applications and systems at the same time
 - > Tighten up and improve the documentation of their business continuity procedures
 - Better understand the need for cross-training
 - ➤ Test connectivity to exchange/clearinghouse and/or SEFs DR sites
- The success of the DR Test is largely a reflection of the coordination and working relationships between exchanges/clearinghouses, firms, and service providers, as well as, the forum provided for participants to discuss respective responses to a systemic market disruption.

C. 2019 Test Overview:

- On April 24th the planning committee met to plan, discuss and agree on activities, goals, and objectives for the 2019 exercise. The committee consisted of personnel from an array of Exchanges, Clearinghouses, and FCMs.
- Following the initial planning committee meeting, all past participants were invited to attend a May 15th kickoff call, for an overview of the 2019 test, and to announce a schedule of events leading up to the test in October
- Past participants, including representatives from major FCMs, Exchanges, Clearinghouses, and service providers, were encouraged to add new colleagues to the distribution list.
- Conference calls were scheduled on a monthly basis, and then a bi-weekly and weekly basis, from May to November, including a post-mortem in December
- Anticipated release dates for test scripts were listed on the FIA website, as provided by each individual Exchange and Clearinghouse
- A webinar-style briefing was held on August 14th, as a way for the Exchanges and Clearinghouses to present details about their tests, including options for pre-testing and trade dates
- Test registration opened on June 28th. Participants were encouraged to register early, to ensure that they received all pertinent communications from the Exchanges and Clearinghouses
- The FIA, once again, set a registration deadline. In turn, online registration was shut down on Friday, October 18th and those seeking to register after this date were required to register manually
- On October 26th, the FIA Disaster Recover Test was conducted, and an all-day conference bridge was provided to facilitate communication. Although, the test officially started at 9:00 AM Eastern time for most entities, the test was already underway in earlier time zones
- A survey was distributed to participants on November 11th, which was designed to capture thoughts and feedback regarding issues, in order to improve various aspects of testing. Survey results and feedback are included on Page 11 of this report
- A post-mortem call was held on December 11th to present the feedback provided by participants, and to have a discussion on how best to improve and support the Test going forward

D. Continuity of Operations:

- The scope of additional business continuance activities by participants, in conjunction with the exercise, includes:
 - Relocating staff and test management to alternate work sites
 - Managing the test from alternate sites or home locations
 - > Failing-over mission critical systems and remaining in back-up mode for longer than the test duration
 - Conducting other BCM activities such as cross training and updating relevant documentation and procedures
- As in prior years, respondents indicated that multiple departments were involved with the
 planning and execution of the test, and that separate teams also staffed the SIFMA Disaster
 Recovery Test, which occurred on the same day in 2019

E. Overall Test Results:

- The following futures exchanges and clearinghouses participated in the 2019 Test:
 - BGC Partners Inc.
 - Cámara de Riesgo Central de Contraparte de Colombia
 - Canadian Derivatives Clearing Corporation
 - Cboe Futures Exchange
 - CME Group
 - Dubai Mercantile Exchange
 - Eurex
 - ICE Clear Credit
 - ICE Clear Europe
 - ICE Clear US
 - ICE Exchanges
 - ICE eConfirm and Trade Vault
 - LCH Clearnet
 - Minneapolis Grain Exchange
 - Montreal Exchange
 - Nodal Exchange
 - OneChicago
 - Options Clearing Corporation
 - Traiana
- Test participants also included 71 FCMs, clearing firms, non-clearing firms, trading participants, and service providers.
- Between 7% and 87% of member futures clearing firms participated, across the various exchanges/clearinghouses
- Participating firms represent a significant critical mass of derivatives order flow and liquidity at the major exchanges; 10% to 100% of exchanges' volume

- The National Futures Association successfully received regulatory file uploads from an exchange for which it performs outsourced regulatory compliance
- Traiana successfully performed credit checking services with FCMs via its Limit Hub
- The test was also supported by a number of the major service providers:

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- CQG
- Fidessa
- FIS Global
- ION Trading
- Trading Technologies

F. Participant Feedback

- Post-mortem feedback was provided through the following three mechanisms:
 - ➤ DR Test Results Form completed by the Exchanges
 - Post-mortem conference call feedback and discussion
 - Direct participant feedback from the post-mortem survey
- Responses from these mechanisms, are categorized in the following sections.
 - Problems Encountered
 - Lessons Learned
 - Suggested Next Steps
- Although the sections mentioned above sometimes tend to focus on unfavorable aspects from testing, there are a number of positive comments and reflections pointed out in survey feedback. Survey results and feedback are included on Page 11 of this report.

G. Problems Encountered:

- Problems commonly encountered and resolved, occur in the following categories:
 - Access to back-up sites
 - Application software
 - Communications
 - Log in
 - Order entry / Fill reporting
 - Staffing / Lack of technical or domain knowledge
 - System operations
 - System software

The following are a list of specific issues that were encountered, as reported by participating entities. The breadth and type of issues experienced, vary each year, and are documented in the results from previous years, listed on the FIA DR Test website.

Two firms had issues connecting to the backup server, as they had the incorrect IP address. Once they updated to the correct IP address, their connectivity and retrieving of files was successful

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- One firm did not allocate enough technical resources for test day. They did not reach the exchange before the testing window was over
- One firm wrote a script to connect that failed. They did not allocate staff to manually connect to the exchange in case of problems
- Staff not aware of updated system password in DR
- Vendor availability, to address a specific firm's connectivity issue
- Lack of knowledge with regard to test concept (trading only, clearing out of scope, DR specific URLs, DR specific multicast addresses, etc.)
- Test went well, but we always seem to have front-end connectivity issues with one specific exchange
- Were able to put through test trades, but vendor had system issues and by the time the issue was resolved, the testing window was over
- The schedules for the markets create confusion, because they are not in sync. With all of the activity and resources put into getting this right, to also need to track and address what markets are in DR status and which are falling back early adds to the confusion and stress
- > Staffing was good except that it was almost impossible to reach anyone from one exchange, after the test, to validate. I waited on their line for one hour and then was disconnected

H. Lessons Learned:

Participants stated that there were a number of ways in which they could improve their test experience going into 2020 (and beyond).

- Provide failover IP addresses/hostnames to participants well in advance of actual test
- Next year we will write our testing script with the expectation that non-trading staff will be conducting the trading tests
- Some communications can always be improved and/or made clearer
- Further promote DR concept which is published on FIA webpage, as well as, on exchange webpage

- Double check contact lists prior to testing
- ➢ Be ready to assist individuals with lack of technical knowledge, and/or individuals new to a firm's department
- Reiterate to firms that personnel who are testing should know how to use the trading front-end

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- Pre-testing is important for test preparation; Firms should be mandated to connect during the pre-test, prior to the DR Test date; This ensures that some preliminary issues are addressed and hopefully remedied prior to test day; If all test connections can be established and tested prior to test day, it helps focus the actual test on transaction processing needs
- Test accounts should be properly set up
- This is a very complex test for many participants. Granted we have a four-hour window to complete all tasks, but many systems and touch points need to be tested to ensure a valid DR fail over scenario is tested. Issues impacts the testing of all items in scope, with the possibility of some items not being tested due to time and resource limitations
- ➤ I feel we have enough resources available to assist late arrivals, but understand the perspective of those that did pre-test as having a priority over those that didn't pre-test
- Most test-day issues are connectivity-related. However, some FIA member firms which said they'd test connectivity, did not show up on connectivity test day

I. Suggested Next Steps:

Participants noted changes they would like to see on future tests. In some cases, the following suggestions are already implemented, but likely need to be communicated better.

- I'm hoping that specific clearing houses can reduce their test window again to be more in line with other clearing houses. By the time they fail back and we can re-test, it's usually close to 5:00pm EST
- Having DR Testing on a weekend when the time changes for Europe made it very challenging
- Satisfied with Test Day window, though, a little more time would have helped resolve any unforeseen system issues on the day
- Wish test scripts were available across the board and clear on requirements
- Please have every exchange/clearing house describe in clear, consistent language, whether their testing is optional, mandatory, for whom, and why
- There should be multiple dates for pre-tests, all should test on the first date, if successfully completed, no further pre-test. If unsuccessful, make adjustments for the next pre-test date. This eliminates test day issues that could abnormally extend testing

- In regard to making pre-testing a strict requirement, my only concern is that there are truly organizations that do not have resources to allocate to this task. Within large organizations it is difficult to coordinate the efforts required to properly execute DR testing as well as pre-testing.
- If pre-testing becomes a strict requirement, exchanges should participate on both Saturday one and two. When exchanges have offered two pre-test dates, we have had more flexibility in case of an issue with the first
- The scenario of PROD to DR seems to dominate. In the past, folks really did DR to DR which is useful since this is the only time of year we can do that.
- Registration emails should be sent to all participants. It currently only goes to the primary email contact, but not to the secondary email listed on the registration form
- Clearly indicate status of mandatory participation, for whom and why, at each exchange
- Would be nice to know the DR testing contacts at other firms in case you wanted to do more cross-firm testing (give-ups) or give testing feedback to each other
- Email distribution of registration is acceptable, but not especially efficient, and more liable than most to overlook participants. Better distinction between pre-test and live test registration fields is needed.
- Regarding post-registration information, I didn't receive much feedback apart from the mail from FIA and invites to meetings
- Earlier publication of test scripts would make mid-August webinar call more valuable
- Seem to have same issue year-to-year. Everyone should strive to identify issues and revisit the pre-test, so they don't occur in the following year
- Provide a way for exchanges to update their own status on the DR Test status page
- Provide support contact phone numbers on the DR Test status page, so that firms may know whom to call for updates, or to report issues
- Additional contacts should be required, in addition to the high-level contacts given through the registration process. For example, correct contact lists flowing down to each firm's operations team and DR testing team
- While it is not possible to have all test scripts be the same, it should be possible to have them be similar, or be somewhat standardized across participating exchanges/clearing houses; Standardization would make the process more efficient
- While having a persistent chat on Test day may be beneficial to some, it would require identifying a communication protocol or product that is compatible and permitted across organizations industry-wide
- Test registration should be populated with the prior year's information so that only changes need to be entered

- All requirements for pre-testing and Test day should be communicated to the registrant, once a Test registration has been submitted and confirmed
- We should allow participants to set up their own Test registration login, without having to use a default username and password beforehand
- Prefer a list of all member firms that have registered to test with my exchange, rather than having to read through multiple registration email notifications
- > Should have an option on the registration form, regarding which parts of the test that firms will participate, as not all firms participate in every part of the test at certain exchanges
- It would be helpful in running a full DR test, if software providers allowed testing into back office environments, instead of viewing the test as purely a test of exchange connectivity, from a front and middle office perspective
- Prefer trade dates to be the same; It is challenging when various exchanges have different trade dates, as tests need to be stopped and then restarted accordingly
- Would like to be able to process all types of trades in testing, even EFP transactions

J. 2020 and 2021 FIA Disaster Recovery Tests

- The 2020 FIA DR Test will be on Saturday, October 24th.
- The 2021 FIA DR Test will be on Saturday, October 23rd.
- These are also the expected SIFMA and IIROC Test dates, although, these may or may not have been officially communicated yet by SIFMA or IIROC

K. Acknowledgements:

We would like to thank all participants from the FCMs, exchanges, clearing houses, key service providers, and other supporting entities, for their participation throughout the year, and for the great feedback on our conference calls, the test results form, and on the post-mortem survey. We would also like to thank those who were on the planning committee who contributed their time and resources to improve our test going forward.

Please submit additional feedback/questions to Steve Proctor at sproctor@fia.org.

Survey Results and Feedback

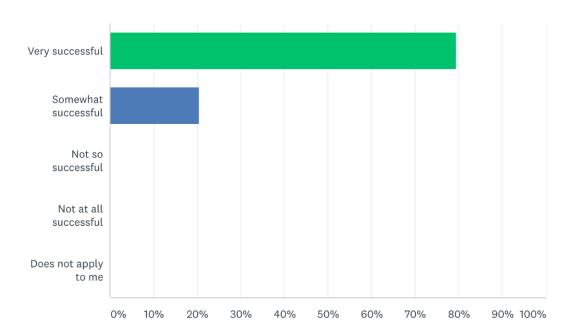


L. Survey Results and Feedback:

A post-mortem survey was distributed to participants on November 11th. The following are the survey questions and corresponding responses. Thank you to all who participated and provided feedback!

Question 1 & 2

To what extent would you consider your Test Day a success/non-success?



ANSWER CHOICES	▼ RESPONSES	•
▼ Very successful	79.41%	27
▼ Somewhat successful	20.59%	7
▼ Not so successful	0.00%	0
▼ Not at all successful	0.00%	0
▼ Does not apply to me	0.00%	0
TOTAL		34

Comments:

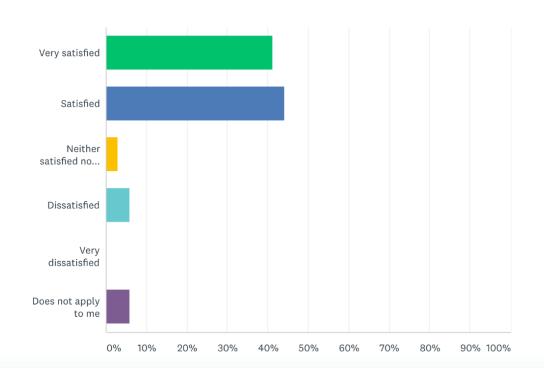
- Tested our connected application from our DR site and all work[ed] properly without any issue
- Only encountered minimal issues entirely within our own system
- > Details and timelines were well explained, all parties were open and willing to help

- Gave us an opportunity to test with multiple vendors
- Went well but we always seem to have front-end connectivity issue[s] with [a specific Exchange]
- Identified an issue as customer could not connect via FIX after fail-over, [was] identified on our end & resolved
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- We were able to complete all aspects of the test
- All facets were well coordinated
- ➤ We were able to put through test trades, but our vendor had system issues and by the time the issue was resolved, the testing window was over

Question 3 & 4

To what extent were you satisfied/dissatisfied with Test Day windows (Testing availability)?



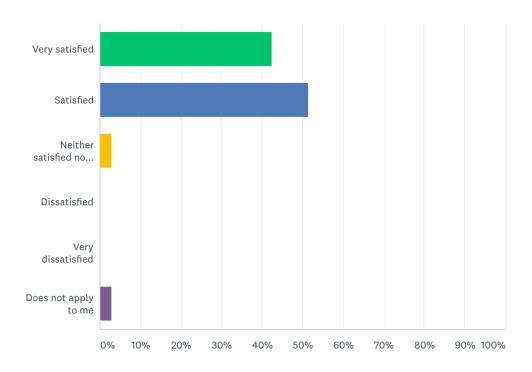
ANSWER CHOICES	▼ RESPONSES	•
▼ Very satisfied	41.18%	4
▼ Satisfied	44.12%	15
▼ Neither satisfied nor dissatisfied	2.94%	1
▼ Dissatisfied	5.88%	2
▼ Very dissatisfied	0.00%	0
▼ Does not apply to me	5.88%	2
TOTAL	3	4

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- Time windows have been working fine for us for many years now
- First scenario could go 30 minutes longer
- Wish the test window had been longer
- I'm hoping CME can reduce their test window again to be more in line with other clearing houses. By the time they fail their MQ back and we can re-test it's usually close to 5PM EST
- Timeframes worked well. Outside of business hours is key
- ➤ The schedules for the markets create confusion because they are not in sync. With all of the activity and resources put into getting this right to also need to track and address what markets are in DR status and which are failing back early adds to the confusion and stress
- Having DR Testing on a weekend when the time changes for Europe made it very challenging
- > Ample time to complete testing
- Satisfied though a little more time would have helped resolve any unforeseen system issues on the day

Question 5 & 6

To what extent were you satisfied/dissatisfied with Test Day staffing levels and preparedness, of corresponding participant organizations?



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ANSWER CHOICES	•	RESPONSES	•
▼ Very satisfied		42.42%	14
▼ Satisfied		51.52%	17
 Neither satisfied nor dissatisfied 		3.03%	1
▼ Dissatisfied		0.00%	0
▼ Very dissatisfied		0.00%	0
▼ Does not apply to me		3.03%	1
TOTAL			33

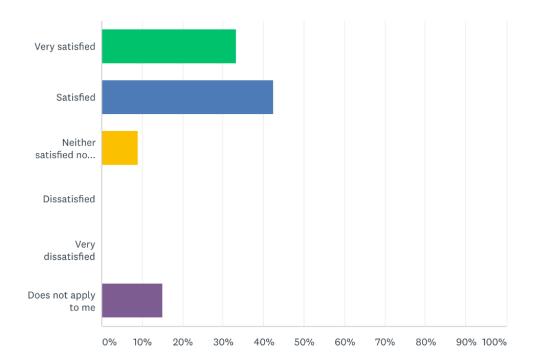
- Response when required was nearly immediate. Met expectation
- ➤ All questions and requests were take[n] care of quickly
- Staffing was good except [that] it was almost impossible to reach anyone from [one specific Exchange] after the test to validate MQ. I waited on their line for [one] hour and then was disconnected
- [Specific service provider] missed their ICE Europe test window

- Overall all participants played well together
- Could have been more responsive on Ping test day

Question 7 & 8

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To what extent were you satisfied/dissatisfied with the format of, and information contained in Test Scripts?



ANSWER CHOICES	▼ RESPONSES	•
▼ Very satisfied	33.33%	11
▼ Satisfied	42.42%	14
▼ Neither satisfied nor dissatisfied	9.09%	3
▼ Dissatisfied	0.00%	0
▼ Very dissatisfied	0.00%	0
▼ Does not apply to me	15.15%	5
TOTAL		33

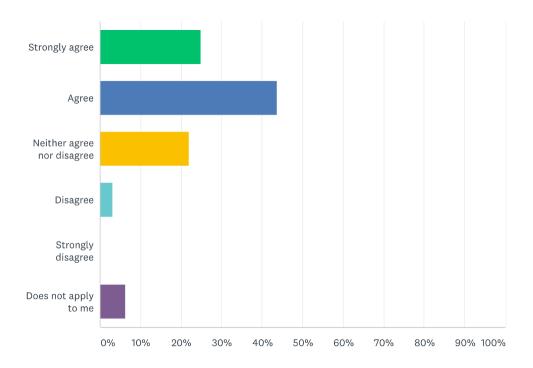
- Wish scripts were available across the board and clear on requirements
- It['s] a general script which may need tweaking by individual players

Major request: please have every Exchange/Clearing house use in clear, consistent language, whether their testing is optional, mandatory, for whom, and why

Question 9 & 10

To what extent do you agree/disagree that pre-test participation should be a strict requirement for Test day participation?

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ANSWER CHOICES	•	RESPONSES	•
▼ Strongly agree		25.00%	8
▼ Agree		43.75%	14
▼ Neither agree nor disagree		21.88%	7
▼ Disagree		3.13%	1
▼ Strongly disagree		0.00%	0
▼ Does not apply to me		6.25%	2
TOTAL			32

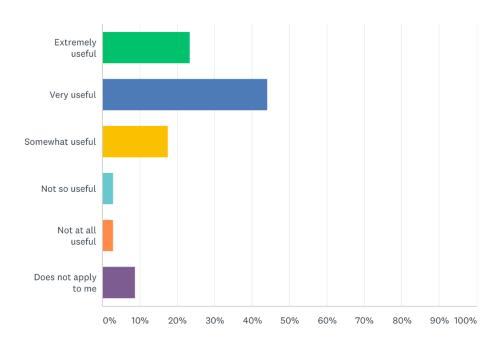
Comments:

There should be multiple dates [for] pre-test[s], all should test on the first date, if successfully completed no further pre-test. If unsuccessful, make adjustments for next pre-test date. Eliminates test day issues that could extend the testing abnormally

- While extremely helpful, I don't think it should be required
- My only concern on this would be that there are truly organizations that do not have resources to allocate to this task. Within large organizations it is difficult to coordinate the efforts required to properly execute DR testing as well as pretesting
- Pre-testing is essential as it eliminates many of the unknown
- If it is mandatory, exchanges should participate on both Saturday one and two. [One specific Exchange] offered two date windows, [which] gave us more flexibility in case of an issue on day one
- To allow the firm to fix any connectivity issue if pre-testing fails

Question 11 & 12

To what extent do you feel that the 2019 version of the Test Status page was useful/not useful?



ANSWER CHOICES	•	RESPONSES	•
▼ Extremely useful		23.53%	8
▼ Very useful		44.12%	15
▼ Somewhat useful		17.65%	6
▼ Not so useful		2.94%	1
▼ Not at all useful		2.94%	1
▼ Does not apply to me		8.82%	3
TOTAL			34

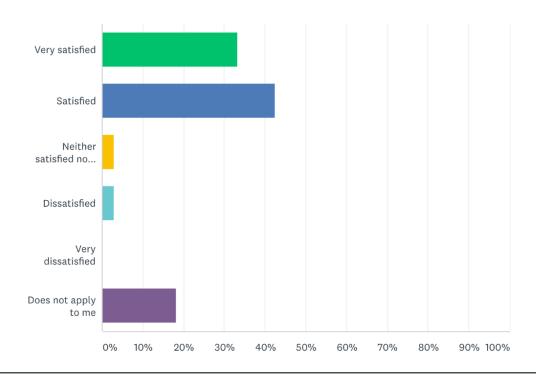
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Comments:

- > The scenario of PROD to DR seems to dominate. In the past, folks really did DR to DR which is useful since this is the only time of year you can do that
- ➤ I didn't see the Test Status page this year -- maybe the link changed?
- Not relevant to the concerns of my organization
- Very useful, because it allowed firms to see status of each Exchange

Question 13 & 14

To what extent were you satisfied/dissatisfied with Test Script availability, prior to Test Day?



ANSWER CHOICES	•	RESPONSES	•
▼ Very satisfied		33.33%	11
▼ Satisfied		42.42%	14
▼ Neither satisfied nor dissatisfied		3.03%	1
▼ Dissatisfied		3.03%	1
▼ Very dissatisfied		0.00%	0
▼ Does not apply to me		18.18%	6
TOTAL			33

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Comments:

- Love that scripts are on your page
- ➤ Ideally the test scripts could all be available on the website 2-3 weeks in advance
- Not all test scripts were easily accessible or made available

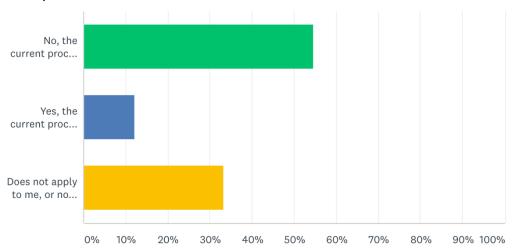
Question 15

What would you improve about the test registration process and/or system? What information is not currently being captured that should be, to make Test prep and Test day better?

- Email should be sent to all participants. It currently only goes to the [primary] email ID, but not the [secondary] email ID listed on the registration form
- Registration is great!
- Some type of visual dashboard / Pie or Bar graph showing progress. Not sure how easy / difficult it would be to display on FIA site
- Clearly indicate status of mandatory participation, for whom and why, at each exchange
- > It would be nice to know the DR testing contacts at other firms in case you wanted to do more cross firm testing (giveups) or give testing feedback to each other
- Email distribution of registration is acceptable but not especially efficient, and more liable than most to overlook participants. Better distinction between pre-test and livetest registration fields is needed
- It would be nice if the new tests were pre-loaded with information so we can just modify rather than re-type everything

Question 16 & 17

Should FIA change the way that registration and coordination is handled with third-party service providers?



ANSWER CHOICES	•	RESPON	SES 🕶
 No, the current process of handling registration and coordination with third-party service providers should not be changed. 		54.55%	18
 Yes, the current process for handling registration and coordination with third-party service providers should be changed. 	9	12.12%	4
▼ Does not apply to me, or no opinion		33.33%	11
TOTAL			33

Comments:

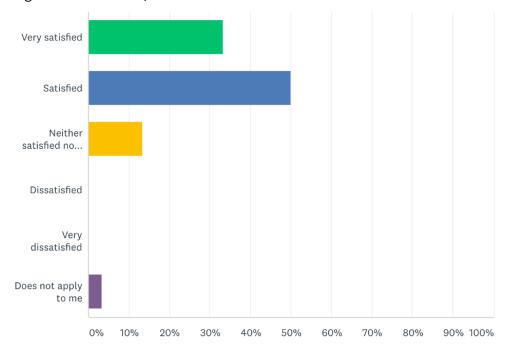
- > It seems that the registration should be more consistent and that they should engage and commit
- > It should be done online with a simple yes/green, no/red, or blue for all participant status, horizontal bar graph displayed on the FIA website
- Have 3rd parties confirm their level of participation (steps being performed) in testing

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Question 18 & 19

To what extent were you satisfied/dissatisfied with post-registration information and follow-up? (Did you receive timely and appropriate information, after registering for the FIA Test?)

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ANSWER CHOICES	▼ RESPONSES	~
▼ Very satisfied	33.33%	10
▼ Satisfied	50.00%	15
▼ Neither satisfied nor dissatisfied	13.33%	4
▼ Dissatisfied	0.00%	0
▼ Very dissatisfied	0.00%	0
▼ Does not apply to me	3.33%	1
TOTAL		30

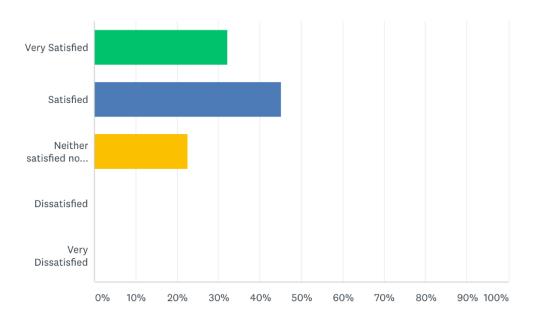
Comments:

▶ I didn't receive much feedback apart from the mail from FIA and invites to the meetings

Question 20 & 21

To what extent were you satisfied/dissatisfied with the webinar/presentation that was given by Exchanges and Clearinghouses on August 14th?





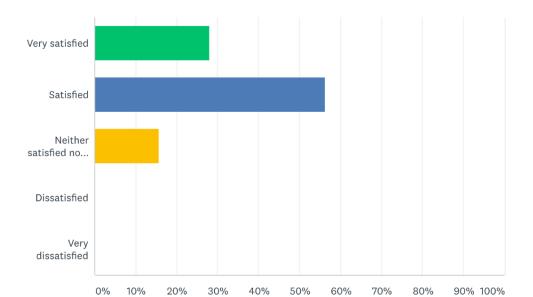
ANSWER CHOICES	▼ RESPONSES	•
▼ Very Satisfied	32.26%	10
▼ Satisfied	45.16%	14
▼ Neither satisfied nor dissatisfied	22.58%	7
▼ Dissatisfied	0.00%	0
▼ Very Dissatisfied	0.00%	0
TOTAL		31

Comments:

➤ Earlier publication of test scripts would make 14-Aug (webinar) call more valuable

Question 22 & 23

To what extent were you satisfied/dissatisfied with the content and structure of the main DR Test webpage located at https://bcp.fia.org/events/2019-fia-disaster-recovery-test?



ANSWER CHOICES	•	RESPONSES	•
▼ Very satisfied		28.13%	9
▼ Satisfied		56.25%	18
▼ Neither satisfied nor dissatisfied		15.63%	5
▼ Dissatisfied		0.00%	0
▼ Very dissatisfied		0.00%	0
TOTAL			32

Comments:

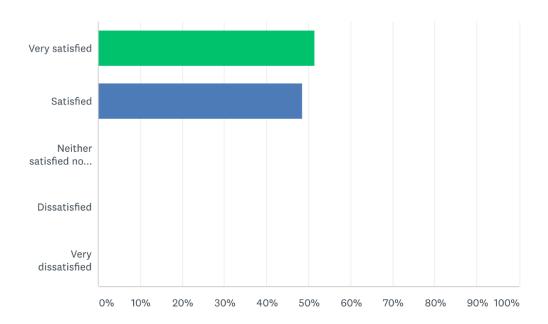
General information - Not sure how it can be improved - as specific are unique and different for each participant

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Question 24 & 25

To what extent were you satisfied/dissatisfied with the amount and quality of communications that you received from FIA, regarding DR Test information and activities?

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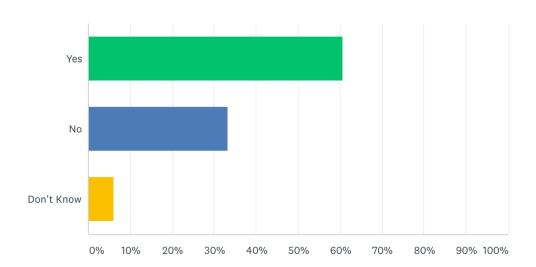


ANSWER CHOICES	•	RESPONSES	•
▼ Very satisfied		51.52%	17
▼ Satisfied		48.48%	16
▼ Neither satisfied nor dissatisfied		0.00%	0
▼ Dissatisfied		0.00%	0
▼ Very dissatisfied		0.00%	0
TOTAL			33

- [FIA] has always done an outstanding job.
- Planning starts at the right time, meetings are good, registration is easy. Look forward to the post-mortem

Question 26

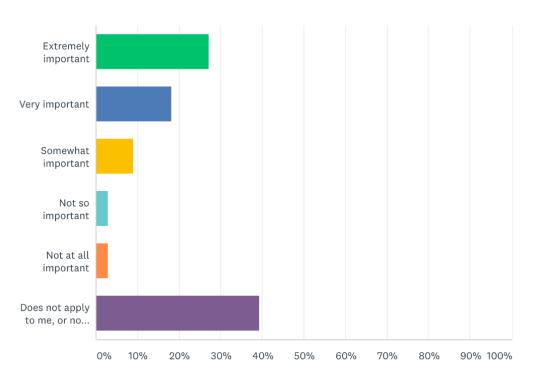
Did your organization also participate in the annual SIFMA test (also on October 26^{th})?



ANSWER CHOICES	▼ RESPONSES	•
▼ Yes	60.61%	20
▼ No	33.33%	11
▼ Don't Know	6.06%	2
TOTAL		33

Question 27 & 28

To what extent is it important that FIA and SIFMA test on the same date?



ANSWER CHOICES	•	RESPONSES	•
▼ Extremely important		27.27%	9
▼ Very important		18.18%	6
▼ Somewhat important		9.09%	3
▼ Not so important		3.03%	1
▼ Not at all important		3.03%	1
▼ Does not apply to me, or no opinion		39.39%	13
TOTAL			33

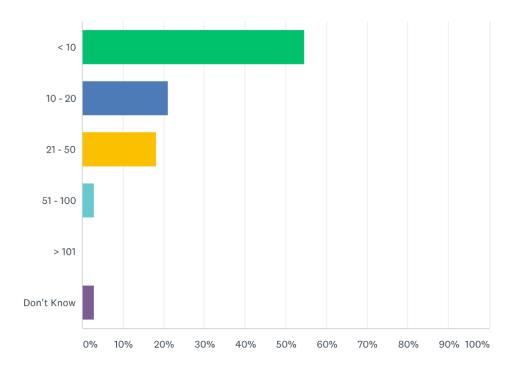
Comments:

- ➤ If you participate in both tests it is a good simulation of an actual DR situation
- Critical
- We participate in FIA test and don't want to mix up things
- ➤ It really simplifies things for our 3rd party testing team and reduces duplication of effort for some applications
- Same resources and same systems used. Thus, no duplication or extra work required

This encourages more participation to have it on the same date

Question 29

Approximately how many staff were involved with your test initiative this year (e.g., pre-test planning, support, help desk, failover, test management, test execution)?



ANSWER CHOICES ▼	RESPONSES	•
▼ <10	54.55%	18
▼ 10 - 20	21.21%	7
▼ 21 - 50	18.18%	6
▼ 51 - 100	3.03%	1
▼ > 101	0.00%	0
▼ Don't Know	3.03%	1
TOTAL		33

Question 30

How would you rate the effectiveness of the annual FIA DR Test (on a scale of 1-5 where 1 = Somewhat Effective)

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	•	1- SOMEWHAT ▼ EFFECTIVE	2 •	3 •	4 •	5 - VERY EFFECTIVE ▼	TOTAL ▼	WEIGHTED → AVERAGE
•	Effectiveness of annual FIA Disaster Recovery Test	0.00%	3.03%	12.12% 4	51.52% 17	33.33% 11	33	4.15

Additional comments and suggestions, including topics not listed on this survey.

> Seem to have same issues year-to-year. Everyone should strive to identify issues and revisit the pre-test, so they don't occur in the following year