

THE SISE-NET CROSS-SECTOR VIRTUAL TABLETOP EXERCISE

Conducted 7/15, 7/22, 7/29 and 8/12, 2022

Abstract

A virtual cross-sector, multi-state discussion-based exercise to enhance operational coordination and operational information sharing for the upcoming hurricane season.

Release Date: September 7, 2022







Exercise Name: SISE-Net Tabletop Exercise – 2021 Hurricane Ida

Exercise Time(s) & Date(s):

Session 1: 9:00am – 11:00pm EDT on July 15, 2021, Education Session

Session 2: 9:00am – 12:00am EDT on July 22, 2022, Tabletop Exercise

Session 2+: 9:00am – 11:00am EDT on July 29, 2022, After-Action Session

Session 3: 9:00am – 11:00am EDT on August 12, 2022, Training Session

Mission Area(s):

The mission areas for this tabletop exercise include Phase 0 & 1, referred to as "Before" and Phases 3, 4 & 5, referred to as "After" from the six Phases listed below:

- BEFORE
 - Phase 0 Monitoring: Planning (-7 to -4 days before impact)
 - Phase 1 Preparedness: Planning (-72 to -24 hours before impact)
- Phase 2 Incident: Impact/Landfall
- AFTER
 - Phase 3 Response: Assessment & Restoration (+12 to +24 hours)
 - Phase 4 Response: Restoration (+48 to +72 hours)
 - Phase 5 Recovery: Restoration & Resume (+5 days)

Core Capabilities:

- Public and Private Sector Coordination
 - Government (States), FMCSA and Private Sector
 - Cross-Sector (e.g., Communication, Electric, Food, Fuel, Medical/Pharma, Retail, Transportation (Rail/Trucking) and Water)
- Utilization of:
 - SISE-net Data During a Significant Event
 - Current System Data
 - Identification of Available and Desired Data
 - Identification of systems of records
 - Other data from potential data partners
 - o Cross-Sector Operational Information Sharing Playbook
 - o SISE-net Operational Information App & Dashboard





Objectives:

Identify opportunities to improve operational coordination and communications between Sectors and Government (FMSCA & States) by:

- Process
 - Understanding What Government and Sectors Did to <u>Prepare for, Respond to, and</u> <u>Recover from</u> Hurricane IDA 2021
 - Using & Identifying Improvements to the Cross-Sector Operational Information Sharing Playbook

• People

- Identifying Individuals in State EOCs, Sector Operations Departments, Trade Groups, & Federal Agency Partners who will be involved in a hurricane response
- Technology
 - Using the SISE-net Operational Information App and SISE Executive Dashboard for trusted crowdsourcing of data
 - Identifying Additional SISE-net related
 - Data/Information Needs
 - Data Available
 - Data Sources
 - Identifying systems of records (i.e., TEAMS, WebEOC, etc..)

Scenario:

Hurricane Ida was a deadly and destructive Category 4 Atlantic hurricane that became the second-most damaging and intense hurricane to make landfall in the U.S. state of Louisiana on record, behind Hurricane Katrina in 2005. In terms of maximum sustained winds at landfall (150 mph), Ida tied 2020's Hurricane Laura and the 1856 Last Island hurricane as the strongest on record to hit the state. The remnants of the storm also caused a tornado outbreak and catastrophic flooding across the Northeastern United States. The ninth named storm, fourth hurricane, and second major hurricane of the 2021 Atlantic hurricane season, Ida originated from a tropical wave in the Caribbean Sea on August 23. On August 26, the wave developed into a tropical depression, which organized further and became Tropical Storm Ida later that day, near Grand Cayman. Amid favorable conditions, Ida intensified into a hurricane on August 27, just before moving over western Cuba. A day later, the hurricane underwent rapid intensification over the Gulf of Mexico, and reached its peak intensity as a strong Category 4 hurricane while approaching the northern Gulf Coast, with maximum sustained winds of 150 mph and a minimum central pressure of 929 millibars. On August 29, the 16th anniversary of Hurricane Katrina making landfall, Ida made landfall near Port Fourchon, Louisiana, devastating the town of Grand Isle. Ida weakened steadily over land, becoming a tropical depression on August 30, as it turned northeastward. On September 1, Ida transitioned into a post-tropical cyclone as it accelerated through the Northeastern United States, breaking multiple rainfall records in various locations before moving out into the Atlantic on the next day. Afterward, Ida's remnant moved into the Gulf of St. Lawrence and stalled there for a couple of days, before being absorbed into another developing low-pressure area early on September 5.



AHC SISE-net Exercise After-Action Report



The precursor to Ida caused catastrophic and deadly flash flooding in Venezuela. Ida knocked down palm trees and destroyed many homes in Cuba during its brief passage over the country. Throughout its path of destruction in Louisiana, more than a million people in total had no electrical power. Widespread heavy infrastructural damage occurred throughout the southeastern portion of the state, as well as extremely heavy flooding in coastal areas. New Orleans' levees survived (unlike during Katrina), though power line damage was extensive throughout the whole city. There was also substantial plant destruction in the state. Numerous tornadoes were spawned by Ida as it moved over the Eastern United States. The remnants of the storm produced unexpectedly severe damage in the Northeastern United States on September 1–2. Several intense tornadoes and catastrophic flash flooding swept through the entire region, which had already been impacted by several tropical cyclones, Elsa, Fred, and Henri during July and August. The flooding in New York City prompted the shutdown of much of the transportation system.

Ida is the fifth-costliest tropical cyclone on record, and the fourth-costliest Atlantic hurricane in the United States, having caused at least \$75.25 billion (2021 USD) in damages. Of this total, at least \$18 billion was in insured losses in Louisiana, \$250 million was in Cuba, and \$584 million was from agriculture damage in the U.S., surpassing Hurricane Ike of 2008. CoreLogic estimated that Ida caused an estimated \$16 to 24 billion in flooding damage in the Northeastern United States, making it the costliest storm to hit the region since Hurricane Sandy in 2012, with an estimated \$44 billion in Insured loss.

A total of 107 deaths were attributed to Ida, including 87 in the United States and 20 in Venezuela. In the United States, 30 deaths were in Louisiana, 29 in New Jersey, 17 in New York, 5 in Pennsylvania, 2 in Mississippi, 2 in Alabama, 1 in Maryland, and 1 in Connecticut.^[4] There was also a remarkable number of hospitalizations and deaths in the Greater New Orleans Area as a result of carbon monoxide poisoning while using portable gas generators with inadequate ventilation, including a family of three in Marrero, Louisiana on September 1, 2021.

Participating Organizations: A total of 23 panelists participated in the Sensitive Information Sharing Environment Network (SISE-Net) Tabletop Exercise.

- Industry sectors (Electric, Transportation, Fuel, Communications, Retail, Healthcare, Water, Food, and Finance)
- State emergency management (Florida, Illinois, Louisiana, Mississippi, North Carolina, and Texas)
- US DOT / Federal Motor Carrier Safety Administration (FMCSA)

See Appendix A for the full list of panelists.





Executive Summary

On July 22, 2022, a cross sector (Government & Private), multi-state virtual Tabletop Exercise (TTX) was conducted by the All-Hazards Consortium (AHC), noted as Session 2.

This exercise, referred to as the Sensitive Information Sharing Environment Network (SISE-Net), was a virtual TTX discussion facilitated by Greg Grillo of Incident Preparedness & Response Solutions.

The TTX was designed to improve and synchronize operational information sharing during large scale, multi-state disasters and to identify needed and available data that could be added to SISE-net framework.

Exercise panelists for this TTX exercise included government and industry stakeholders from multiple industry sectors, multiple state emergency managers, federal agencies, and invited observers (See Appendix A for list of panelists).

The exercise was conducted on AHC's Zoom platform utilizing the chat and questions features to capture participant input, along with a recording of all discussions which have been made available (See Replay Links in Appendix D).

The TTX consisted of three sessions:

- Session 1 was conducted on July15, 2022, which was designed for beginners to be educated on AHC, the SISE, the SISE-net initiative, and some of the tools to be used during the exercise. The agenda for Session 1 is listed in Appendix B.
- Session 2 was conducted on July 22, 2022. This session featured a live, facilitated, tabletop exercise. This session utilized actual data and a GIS dashboard from Hurricane IDA to provide a visual context for panelists and observers and to drive the conversation at various phases of the hurricane
- Session 3, conducted on August 12, 2022, trained participants on the use of the Cross-Sector Operational Information Sharing Playbook, use of the SISE-net, use of the SISEnet Operational Information App, and SISE-net Executive Dashboard (See Appendix B for agenda).

At the recommendation of the private sector and states, there was an addition session added (Session 2+) after the actual exercise on July 29 to conduct an After Action Review (AAR) of the exercise to identify the following:

- 1) Operational issues identified during the TTX
- 2) Cross-sector use cases (problems or issues) to work on that could be resolved within 12 months
- 3) Suggestions for improvements to the TTX
- 4) Additional opportunities for further exploration of data partners and
- 5) Additional participants for future TTX's

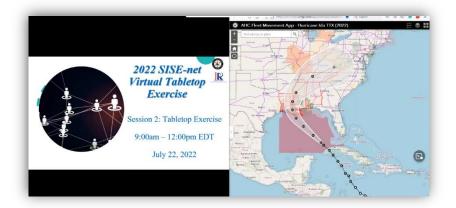


AHC SISE-net Exercise After-Action Report



"Before" (-48 Hours)

"After" (+48 Hours)



This 2022 exercise utilized a "Before" and "After" impact approach, broken down into two parts from the previously defined six phases:

- BEFORE LANDFALL
 - Phase 0 = Monitoring: Planning (-7 to 4 days before impact)
 - Phase 1 = Preparedness: Planning (-72 to -24 hours before impact)
- LANDFALL
 - Phase 2 = Incident: Impact/Landfall
- AFTER LANDFALL
 - Phase 3 = Response: Assessment & Restoration (+12 to +24 hours)
 - Phase 4 Response: Restoration (+48 to +72 hours)
 - Phase 5 Recovery: Restoration & Resume (+5 days)

The cross-sector discussions primarily focused on 48 hours prior to impact, and 48 hours after the impact of Hurricane Ida. "Mock" Cross-Sector calls were conducted to simulate information sharing between government and private sectors in accordance with six major items in the Cross-Sector Call Agenda(s) which are contained in the Cross-Sector Operational Information Sharing Playbook and described in Section IX.

During the exercise, both government and industry participants were presented the same four questions to capture the cross-sector and multi-state processes and information needed before and after Hurricane Ida impact as shown below:

- What were you doing to prepare at this time?
- What additional data do you need?
- What additional data can you share?
- What system(s) of record do you utilize?

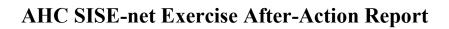
This approach provided unique perspectives into each sector's preparation and response processes, the activities they conduct "Before" and "After" landfall and the information they monitor in response to the impact of Hurricane Ida.





The following Appendices contain useful information regarding the SISE-net Tabletop Exercise:

Appendix A: SISE-net TTX Panelists Appendix B: SISE-net TTX Agenda(s) Appendix C: Cross-Sector Call Agenda(s) Appendix D: Session(s) Replay Links







Key TTX Take Away's

On August 12, 2022, an After-Action session was conducted to test the "Before Landfall" and "After Landfall" Cross-Sector Operational Coordination Call agendas, gather recommendation for improvements, and identify any additional information or data that could be incorporated into the SISE-net.

1) Cross-Sector Operational Coordination Calls

After several discussions, it was decided to script the calls more tightly by developing a list of pre-described Critical Points of Interest (CPIs) for each call participant.

This will help in the following ways:

- 1) Keep the call focused only on the "six things" identified from the 2021 TTX (see table below)
- 2) Help each participant be better prepared for the (CPIs) they need to answer during each call
- 3) Keep the call to 30 minutes and prevent long winded answers on other issues or topics

Call Duration

All agreed for these calls to last no more than 30 minutes and to conduct these calls at 12:30pm ET.

Call Recording

All agreed that these calls will be recorded on the ZOOM platform w/closed captions for users to watch in the future incases they missed the call or need to watch it again. These recordings will only be made available to vetted SISE users and accessed through the SISE via MS TEAMS via the "AHC Working Groups TEAM".

Call Purpose

It was also agreed that the AHC and its work groups would not be tracking issues and reporting out on results on future calls. The role of this call would be to connect people together to work out their issues offline and to capture information or data that can be shared in the future to support the operational coordinating efforts.

Problem Solving After the Call

Call Additionally, it was agreed that after the 30-minute coordination call, the SISE-net work group would invite participant to stay on the ZOOM call and conduct any problem solving efforts live with participants.





Sectors Need This Before Landfall	States Need This After Landfall
Declarations (Signed Emergency Declarations or Executive Orders related to the current hurricane OR that can be extended for use with the current hurricane)	Facility Status – Open/Closed (Status of a specific facility(s) in the impacted area for food, fuel, retail, medical, manufacturing, distribution)
Waivers (Waivers for transportation, fuel, <u>food</u> or other sectors that require movement of critical resources beyond normal operating conditions or regulations)	Information Requests (Industry request for government support on expediting the flow of information, removing obstacles, clarifying decision, and other hurricane related situational awareness)
Guidance/Alerts/Updates (Written guidance, alerts or updates on government actions within a state on transportation, curfews, wind restrictions, debris removal, construction, closures major events, <u>etc</u>)	Infrastructure Disruptions (Disruptions, interruptions, and/or limitations to normal business operations of critical infrastructure in the electric, communications, transportation, fuel, water, <u>food</u> and medical sectors)

2021 TTX Six Areas of Focus for Cross Sector Operational Information Sharing within SISE-net

2) Develop and Maintain a TTX Contact Directory

The TTX participants recommended that a contact directory be developed and maintained within the SISE for use during future hurricanes or exercises. The AHC commissioned is SISE-net work group to develop the processes to meet this objective and have it available for the 2022 hurricane season. All users will need to be vetted by the SISE and agree to have their contact information placed in the directory (name, title, organization, email, cell, LinkedIn URL)



AHC SISE-net Exercise After-Action Report



The table on the following pages captures displays the after-action items identified which includes item number, individual who identified the issue, suggestion/comment, action/response and assigned individual. These items will be pursued to make improvements to the Cross- Sector operational coordination and communication for monitoring, planning for, responding to, and restoring after, major disasters.





After-Action Items

Item #	Individual	Suggestion/Comment	Action/Response	Assigned
34	Tom Moran	Tom Moran, Exec Director, All Hazards Consortium	Information Only. Make sure included in contact spreadsheet.	John Molnar
36	Ryan Williams	Ryan Williams, Director of Risk Management, Associated Grocers, rwilliams@agbr.com	Information Only. Make sure included in contact spreadsheet.	John Molnar
37	Dave Jones	These exercises are so critical as we are on a pathway to experience more hazards, including heat. Heatwaves are silent and do not provide as sexy a visual as hurricanes. Heatwaves are also impacting the electric infrastructure.	Get additional details from Dave on After Action Call. What capability can AHC provide when dealing with heat.	Parking Lot Review In Future
38	Wendy Panella	Wendy Panella, Director, AT&T	Information Only. Make sure included in contact spreadsheet.	John Molnar
39	Dave Jones	Dave Jones, CEO Storm Center Communications, Inc/ GeoCollaborate /	Information Only. Make sure included in contact spreadsheet.	John Molnar
40	Del Roehrick	Under the heading of mass evacuation of hospitals, senior care, & at-risk communities Wonder if there are data/lessons learned from post-Covid databases that may be applicable to track/display near real-time movement of evacuees from impact zone hospitals to out-of-area hospitals taking surge in patients, especially in long recovery time events?	Get additional details from Del R. on After Action Call. Can we pull information regarding spare capacity in hospitals - migration do evacuation?	Parking Lot Review In Future





Item #	Individual	Suggestion/Comment	Action/Response	Assigned
45	Sasha Jones	To begin the economic recovery process, we would activate the Business Damage Assessment Survey on www.floridadisaster.biz and encourage as many businesses as possible to complete the survey. Depending upon the response to the survey, the Governor may activate the Florida Emergency Bridge Loan, which is designed to provide businesses access to capital within days of an emergency and bridge the gap between the disaster and insurance payment or SBA loans. In addition, we would work with city and county partners to identify locations for Business Recovery Centers. In addition to the data mentioned earlier, we will be asking businesses what they need to re-open. We would continue to share opportunities for loan programs, funding sources, and resources with our distribution list.	Information Only. Where should this be posted (i.e., Playbook, SISE-net, ????)	John Molnar
48	Ryan Williams	I was more referring to the order. I think the info for the most part was good	Make sure you follow the order established in the agenda.	Grillo
50	Bob Crow	Have "Open Forum" on dashboard to post information or questions.	Pursue potential to post in "Open Forum" dashboard	John Molnar
51	Sasha Jones	Have people log into TTX with their name and company/agency/association	Include in next TTX rules.	Grillo
52	John Molnar	Working on getting names/contacts for PSAs to get engaged	Get input on PSAs from BEOCs	John Molnar
53	George Giangi	Do states have read only access to other states WebEOC application?	Not at this point. State BEOCs working together to better coordinate. Possible process for States similar to Fleet Movement.	Tom Moran
54	Tom Farmer	Access to restricted areas by personnel is inconsistent. CISA is pilot testing something soon.	Tom Farmer to share his approach. Send to Tom Moran for distribution.	Tom Moran





Item #	Individual	Suggestion/Comment	Action/Response	Assigned
55	Tom Farmer	Challenge with coordinating goods needed but capacity is available.		Parking Lot Review In Future
56	Greg McShane	To Tom Farmer and folks - I'll follow up with CISA Integrated Operations Center - Emergency Response Operations - ESF2 &14 (Dana Ahrens and Bob Rutledge) for an update on the access letters.	Follow-up on DSH CISA Access Letters	Greg McShane
57	Dave Jones	How might our SISE video weather updates talking with State Liaisons help? Example of recent video update in the GeoCollaborate dashboard w/Jim Williams in LA: <u>https://youtu.be/wnY0SxQfAwQ</u>	Please review and provide feedback to Dave Jones on the value of the videos.	Participants





Appendix A: SISE-Net TTX Panelists

SISE-Net Tabletop Exercise Panelists (Alphabetically)		
First Name	Last Name	Company/Agency
Doug	Baker	Food Marketing Inst.
Edie	Casella	Illinois Emergency Management
Scott	Cashwell	Mississippi Power Company
Christopher	Cowart	Wells Fargo
Robert	Crow	AmerisourceBergen
Todd	DeMuth	Mississippi Emergency Management
Tom	Farmer	AAR
Richard	Fimbel	South Florida Water Mgmt. District
Sash	Jones	Florida Emergency Management
Alex	Keenan	FMSCA/DOT
Kent	Kildow	Verizon
Kevin	Morley	AWWA
Doug	Morris	OOIDA
Faith	Newton	Walmart
Wendy	Panella	AT&T
Jeff	Partin	Home Depot
Persia	Payne-Hurley	North Carolina Emergency Management
Larry	Sigler	Waffle House
Tom	Smith	Comcast
Sherrie	Stone	Energy Marketers Association
Randy	Vivian	Texas Emergency Management
Ryan	William	Associated Grocers
Jim	Williams	Louisiana Emergency Management
James	Wood	Entergy Corporation





Appendix B: SISE-Net TTX Agenda(s)

Schedule for Session 1: Education - July 15, 2022	
Time (EDT) Activity	
9:00 - 9:10	Welcome, Participants & Housekeeping
9:10 - 9:30	Cross-Sector Operational Information Sharing Playbook
9:30 - 9:50	Introduction – SISE-net Overview
9:50 - 10:15	The SISE-net Operational Information App & Exec Dashboard
10:15 - 10:45	2022 AHC Tabletop Exercise Overview
10:45 - 11:00	Recap and Next Steps

Schedule for Session 2: Tabletop Exercise, July 22, 2022		
Time (EDT)	Activity	
9:00 - 9:10	Welcome, Participants & Housekeeping	
9:10 - 9:30	AHC Cross-Sector Call – Mock "Before" Hurricane Ida	
9:30 - 10:25	"Before Hurricane Ida" Data & Systems Identification	
10:25 - 10:30	Break	
10:30 - 10:55	AHC Cross-Sector Call – Mock "After" Hurricane Ida	
10:55 - 11:35	"After Hurricane Ida" Data & Systems Identification	
11:35 - 11:50	11:35 – 11:50 After Action Session	
11:50 - 12:00	Recap & Next Steps	

Schedule for Session 2+: After-Action Session – July 29, 2022		
Time (EDT) Activity		
9:00 - 9:10	9:00 – 9:10 Welcome, Participants & Housekeeping	
9:10 - 9:30	9:10 – 9:30 Tabletop Exercise Critique	
9:30 – 10:15 Review/Agree/Assign Items Identified on Spreadsheet		
10:15 - 10:50	10:15 – 10:50 Identify/Agree/Assign Additional After-Action Items	
10:50 - 11:00	10:50 – 11:00 Recap & Next Steps	





Schedule for Session 3: Education – August 12, 2022		
Time (EDT) Activity		
9:00 – 9:10 Welcome, Participants & Housekeeping		
9:10 – 9:40 Cross-Sector Operational Information Sharing Playbook		
9:40 – 10:10 Use of the SISE-net		
10:10 – 10:40 Use of the SISE-net Operational Info App & Exec Dashboard		
10:40 - 11:00	Recap and Next Steps	





Appendix C: Cross-Sector Coordination Call Agenda(s)

Before Landfall Agenda

Purpose: To provide operational situational awareness between the public and private sectors to sync situational awareness, promote information sharing, and support a clearer operating picture on the following six basic issues:

Sector Needs	State Needs
Declarations	Facility Status – Open/Closed
Waivers	Information Requests
Guidance/Alerts/Updates (Transportation/Curfew/Wind	Infrastructure Disruptions
Restrictions/Debre Removal)	(Interruptions and/or limitations to normal business
	operations)

Ground Rule: This call is to be conducted in 30 minutes or less, so report on an exception basis.

Call Agenda – Before Landfall

- 1. Overview & Expectations
- 2. State:
 - a. Declarations/Executive Orders
 - b. Waivers
 - c. Shelters Open or Opening
 - d. Road/Bridge/Tunnel Closures
 - e. Evacuation Mandates & Routes
 - f. Contraflow
- 3. Updates/questions/comments/input from private sector partners and any limitations, warning or needs:
 - a) Communication (Cable/Telecom) N/A
 - b) Electric Resource Movement
 - c) Food N/A
 - d) Finance Cash Availability (ATMs)
 - e) Fuel Shortages, Waivers & Supply Chain Issues
 - f) Pharma N/A
 - g) Transportation Aviation Status
 - h) Transportation Maritime Status
 - i) Transportation Rail N/A
 - j) Transportation Trucking N/A
 - k) Water N/A
- 4. Any impacts from other events?
- 5. Parking Lot Review & Decisions
- 6. Final Comments & Next Call
- 7. Post Call: Parking Lot Discussion





After Landfall Agenda

Purpose: To provide operational situational awareness between the public and private sectors to sync situational awareness, promote information sharing, and support a clearer operating picture on the following six basic issues

Sector Needs	State Needs
Declarations	Facility Status – Open/Closed
Waivers	Information Requests
Guidance/Alerts/Updates (Transportation/Curfew/Wind	Infrastructure Disruptions
Restrictions/Debre Removal)	(Interruptions and/or limitations to normal business
	operations)

Ground Rule: This call is to be conducted in half-hour or less, so report on an exception basis.

Call Agenda - After Landfall

- 1. Overview & Expectations
- 2. State:
 - a. Declarations/Executive Orders
 - b. Waivers
 - c. Shelters Open or Opening
 - d. Road/Bridge/Tunnel Closures
 - e. Boil Advisories, Shortages & Outages
 - f. Re-Entry
- 3. Updates/questions/comments/input from private sector partners and any limitations, warning or needs:
 - a) Communication (Cable/Telecom) Outages & Fiber Cuts
 - b) Electric Outages and Estimated Time to Restore
 - c) Food Supply Chain Issues & Food Store Closures
 - d) Finance Cash Availability (ATMs)
 - e) Fuel Shortages, Waivers & Supply Chain Issues
 - f) Pharma Shortages, Supply Chain & Delivery Issues
 - g) Transportation Aviation Airport Status
 - h) Transportation Maritime Port Status
 - i) Transportation Rail Rail Status
 - j) Transportation Trucking Status
 - k) Water Not Previously Covered Items of Importance
- 4. Any impacts from other events?
- 5. Parking Lot Review & Decisions
- 6. Final Comments & Next Call
- 7. Post Call: Parking Lot Discussion





Appendix D: Session(s) Replay Links

Session 1: Education Link

Topic: 2022 Cross-Sector TTX IDA Education Session

Date: July 15, 2022, 08:50 AM Eastern Time (US and Canada)

Meeting Recording:

https://us02web.zoom.us/rec/share/4QSR_GTtjI8cw9g0S_g22taZ2yDpPi2Ji0t7MDT6UXv8wzY yqJHizOwWdi57nGw3.eVc6jfv2KUv-2mP2

Session 2: Tabletop Exercise Link

Topic: Cross Sector TTX Session 2 LIVE TTX

Date: July 22, 2022, 08:44 AM Eastern Time (US and Canada)

Meeting Recording:

https://us02web.zoom.us/rec/share/anYJYkaEIoTM1EexpeRh501KWo1kDbXiGqMR1GvRBQ9 74qi_3GbUW0tkUXEXRRZd.4o_bA5Jvf7E0zM2N

Session 2+: After-Action Link

Topic: Cross Sector TTX Session 2+ After Action Review

Date: July 29, 2022, 08:47 AM Eastern Time (US and Canada)

Meeting Recording:

https://us02web.zoom.us/rec/share/-BagVAziEdnXQoMz96n49vtfeIZhmFpR24eXGlldv9ZCO5mXWCtE5G5Ku3S4CJ16._ZfK6H1 KFhtkAtcY

Session 3: Training Link

Topic: Cross Sector TTX Session 3

Date: August 12, 2022, 08:46 AM Eastern Time (US and Canada)

Meeting Recording:

https://us02web.zoom.us/rec/share/e6eJrrm3hNdisAgPZQH_ExdaMCCuMmR3HCcsgMMX5IC bQGLC-5zYTuKWOi24eetc.swqGaZkOnvh6AnOK