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# PLANNING PLAYBOOK

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JACK VOLTAIC®

Version 1.1

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## Table of Contents

Administrative.....	2
Planning Playbook.....	3
<b>STAGE 1: DESIGN (12-24 months prior)</b> .....	6
Checklist #1: Prior to Concept Development Workshop .....	9
Checklist #2: Conduct Concept Development Workshop.....	10
Checklist #3: Actions Prior to Initial Planning Meeting.....	10
<b>STAGE 2: PLANNING (4-14 months prior)</b> .....	11
Checklist #4: Conduct Initial Planning Meeting .....	13
Checklist #5: Actions Prior to Mid Planning Meeting .....	14
Checklist #6: Conduct Mid Planning Meeting.....	14
<b>STAGE 3: PREPERATION (1-4 months prior)</b> .....	15
Checklist #7: Actions Prior to MSEL Development Workshop.....	16
Checklist #8: MSEL Development Workshop.....	16
Checklist #9: Actions Prior to Law and Policy Table-Top Exercise .....	17
Checklist #10: Law and Policy Table-Top Exercise .....	17
Checklist #11: Actions Prior to Final Planning Meeting .....	18
Checklist #12: Conduct Final Planning Meeting.....	18
Checklist #13: Actions After Final Planning Meeting .....	18
<b>STAGE 4: EXECUTION</b> .....	19
Checklist #14: Actions Prior to Start .....	19
Checklist #15: Actions During the Exercise.....	19
<b>STAGE 5: FEEDBACK (1-3 months after)</b> .....	20
Actions After the Exercise (1-3 months after) .....	20
References .....	21

## Administrative

History. This is Version 1.1 of the Army Cyber Institute (ACI) Planning Playbook for JACK VOLTAIC®.

General. This publication replaces numerous exercise planning documents the ACI Critical Infrastructure and Key Resources (CIKR) Research Group previously published.

Applicability. This publication is primarily focused on JACK VOLTAIC® exercise planners at the village/town/city, county, and garrison level. It will also provide planners at county, state, and federal level guidance on how they can plan and support their own JACK VOLTAIC® events for villages/towns/cities. To view a product or example of applying this playbook, please see chapters 4 and 5 of the [JACK VOLTAIC® 3.0 Research Report](#). For more information on the [JACK VOLTAIC Project](#) see the [ACI website](#).

Proponent and Tailoring. The proponent for this publication is the ACI CIKR Research Group. Planners may tailor the events outlined in this playbook as needed.

Suggested Improvements. The ACI CIKR Research Group invites all users to email comments and suggested improvements to this publication to [ACI\\_jack\\_voltaic@westpoint.edu](mailto:ACI_jack_voltaic@westpoint.edu).

## Planning Playbook

This planning playbook is an integrated, requirements based, five-phased methodology for developing a JACK VOLTAIC® tabletop or exercise. The Army Cyber Institute's (ACI's) JACK VOLTAIC® (JV) project enables the institute to study incident response gaps alongside assembled partners to identify interdependencies among critical infrastructure and provide recommendations derived from research and the lessons learned from the exercises. One key difference between JV and other cybersecurity and national preparedness exercises is that JV focuses on areas of interest that are nominated by the participants. Although the JV exercises have included national-level capabilities and resources, the exercises have been conceptually driven by the concerns of the cities and their infrastructure partners. This "bottoms-up" approach is valuable to all parties concerned; it allows the ACI, the Army, and the DoD to harvest different, local perspectives about potential roles, dependencies, partners, and support requests, while cities and participants can discover potential capability gaps, rehearse their cyber incident response, and expand their information sharing networks before a potential disaster strikes.

To maximize effectiveness, the "bottoms-up" approach requires identifying many of the stakeholders and participants very early in planning. It is critical that the key stakeholders, which includes (but not limited to) the city, fully participate in the Concept Development Workshop (CDW). Therefore, the lead organization must identify and confirm their participation soon after receipt of the mission.

This playbook provides guidelines on when events should occur based on the speed the lead organization can build relationships with the target participants. For purposes of completeness and detail, the playbook includes several workshops and meetings leading up to executing a JV event. The critical path of events to capture all requirements for successful execution includes the Concept Development Workshop, the MSEL Development Workshop, the Law and Policy TTX, and the Final Planning meeting. The timelines in Table 1 propose several different planning timelines for lead organizations. These timelines are flexible to allow the lead organization to change based on progress toward planning goals.

The timelines in Table 1 place events based on the speed the lead organization can build relationships with the target participants. A "short" planning cycle is one where the lead organization either already has the target stakeholders and participants or can rapidly assemble them. The Mid Planning Cycle is where the lead organization requires 30-60 days upon receiving the mission to assemble the target stakeholders and participants within 30-60 days of receiving the mission. A "long" planning cycle is when the lead organization needs additional time to establish connections with the target stakeholders. The timing of the events use the day mission was received (ROM) as the base, adjusting by the number of months after ROM.

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Table 1: Proposed Planning Milestones for JACK VOLTAIC® Event

<b>Short Planning Cycle</b>	<b>Mid Planning Cycle</b>	<b>Long Planning Cycle</b>	<b>Key Event</b>
0 Months	0 Months	0 Months	Receipt of Mission (ROM)
ROM + 1 months	ROM + 2 Months	ROM + 6 Months	Concept Development Workshop
	ROM + 4 Months	ROM + 13 Months	Initial Planning Meeting
ROM + 3 months	ROM + 5 Months	ROM + 16 Months	Mid Planning Meeting
	ROM + 7 Months	ROM + 17 Months	MSEL Development Workshop
ROM + 4 months	ROM + 9 Months	ROM + 20 Months	Law and Policy TTX
ROM + 5 months	ROM + 11 Months	ROM + 22 Months	Final Planning Meeting
ROM + 6 months	ROM + 13 Months	ROM + 24 Months	Event Execution

The phases of planning include Design, Planning, Preparation, Execution, and Feedback. Although the foundation is the bottom-up approach to objective design and the process is deliberate in concept, we have purposefully designed the process as outcome-based to provide planners maximum flexibility in execution. The planning playbook uses an Inputs, Tools & Techniques, and Outputs (ITTO) progression in which the outputs from one phase typically provides inputs to the next phase in the system. The Tools and Techniques highlight methods by which the lead organization can utilize the inputs to generate the outputs. A key point is that some of the tools and techniques may require planning efforts to begin prior to the phase. Planners should review their timelines and ensure that planning for each meeting and workshop begins 2-3 months prior to the event. Table 2 depicts the ITTOs typically associated with each phase.

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Table 2: ITTOs for all Planning Phases

	DESIGN	PLANNING	PREPARATION	EXECUTION	FEEDBACK
<b>I N P U T S</b>	<ul style="list-style-type: none"> <li>• Mission Statement</li> <li>• Senior Leader Guidance</li> <li>• JV Reports</li> <li>• Historical Documents</li> <li>• Previous Agreements</li> </ul>	<ul style="list-style-type: none"> <li>• Exercise Charter</li> <li>• Stakeholder Registry</li> <li>• Planning Timeline</li> <li>• Assumption Log</li> <li>• Historical Documents</li> <li>• Agreements</li> </ul>	<ul style="list-style-type: none"> <li>• Draft Exercise Plan</li> <li>• Final Stakeholder Registry</li> <li>• Draft Participant Objectives</li> <li>• Scenario Concept &amp; Timeline</li> <li>• Draft MSEL</li> <li>• Draft Data Collection Plan</li> <li>• Draft Feedback POAM</li> </ul>	<ul style="list-style-type: none"> <li>• Exercise Management Plan</li> <li>• Exercise Feedback Plan</li> <li>• Exercise Staffing Documents</li> <li>• Exercise Support Plans</li> <li>• Scenario</li> <li>• MSEL</li> <li>• Draft Mini-Exercise Rehearsal Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Exercise Charter</li> <li>• Stakeholder Register</li> <li>• Exercise Feedback Data</li> <li>• Issue Log</li> <li>• Observations</li> </ul>
<b>T O O L S &amp; T E C H N I Q U E S</b>	<ul style="list-style-type: none"> <li>• Networking</li> <li>• Knowledge Management</li> <li>• Data Analysis</li> <li>• Concept Development Workshop</li> <li>• Site Surveys</li> </ul>	<ul style="list-style-type: none"> <li>• Networking</li> <li>• Knowledge Management</li> <li>• Data Analysis</li> <li>• Initial Planning Meeting</li> <li>• Site Surveys</li> </ul>	<ul style="list-style-type: none"> <li>• Middle Planning Meeting</li> <li>• MSEL Development Workshop</li> <li>• Legal and Policy Tabletop Exercise</li> <li>• Final Planning Meeting</li> </ul>	<ul style="list-style-type: none"> <li>• Onboarding</li> <li>• Communications Exercise</li> <li>• Mini-Exercise Rehearsal</li> </ul>	<ul style="list-style-type: none"> <li>• Data Analysis</li> <li>• Knowledge Management</li> <li>• Information Management</li> <li>• Executive Out Brief</li> <li>• Interpersonal and Team Skills</li> </ul>
<b>O U T P U T S</b>	<ul style="list-style-type: none"> <li>• Exercise Directive / Charter</li> <li>• Stakeholder Registry</li> <li>• Planning Team Structure</li> <li>• Planning Timeline</li> <li>• Assumption Log</li> <li>• Draft Agreements</li> </ul>	<ul style="list-style-type: none"> <li>• Draft Exercise Plan</li> <li>• Final Stakeholder Registry</li> <li>• Draft Participant Objectives</li> <li>• Scenario Concept &amp; Timeline</li> <li>• Draft MSEL</li> <li>• Draft Data Collection Plan</li> <li>• Draft Feedback POAM</li> </ul>	<ul style="list-style-type: none"> <li>• Final Exercise Plan</li> <li>• Approved and integrated MSEL with supporting Participant Objectives</li> <li>• Final Data Collection Plan</li> <li>• Exercise Feedback POAM</li> <li>• Rehearsal Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Exercise Feedback Data</li> <li>• Issue Log</li> <li>• Observations</li> </ul>	<ul style="list-style-type: none"> <li>• Deliverables</li> <li>• Lessons Learned Register</li> <li>• Exercise Management Plan Updates</li> </ul>

## STAGE 1: DESIGN (12-24 months prior)

### Design Discussion

Upon receipt of mission to conduct a JACK VOLTAIC® event, the Lead Organization will begin the Design stage of planning; the Design stage ends with the start of the Initial Planning Meeting. Decisive to this stage is the completion of the Exercise Charter and the identification of stakeholders. There are three parts to this stage:

- Prior to Concept Development Workshop (CDW; Checklist #1): During this part, the sponsoring organization reviews historical documents and guidance to identify the location, resource requirements, and potential stakeholders. Sponsoring organization leverages networking to build the stakeholder registry and identifies potential agreements to support the event.
- CDW (Checklist #2): This workshop is the key Tool & Technique for this phase; it allows the sponsor to gather stakeholders together to gather input into developing the Exercise Charter, which includes the Purpose, Scope, Exercise Objectives, Evaluation Parameters, Scenario Description, Knowledge Management Plan, Media Requirements, and Resource Requirements.
- Post CDW/Prior to IPM (Checklist #3): This part finalizes the Exercise Charter/Directive, the Planning Team Structure, and the Planning Timeline. It also produces draft agreements for additional support.

The Tools and Techniques associated with this phase include:

- Networking
- Knowledge Management
- Data Analysis
- Concept Development Meeting
- Site Surveys

The key outputs of this phase include:

- Exercise Charter: a high-level document that ensures a common understanding by the stakeholders of the key deliverables, milestones, and the roles and responsibilities of everyone involved in the exercise. This document serves as the foundation for the event, as well as establishes a shared understanding of the expectations between the sponsor and the organizer. At a minimum, the document will include:
  - Purpose (based on sponsor's intent, provides the high-level reason for the exercise)
  - Scope (Type of Exercise, Desired Participants, Location, Duration)
  - Specific, Measurable, Achievable, Relevant, and Time-Bound (SMART) Exercise Objectives and related success criteria
  - Specified and Implied Boundaries
  - Key Stakeholders (including sponsor and exercise lead)
  - Key Deliverables
  - Plan of Action and Milestones (POAM): see Planning Timeline.
  - Available Resources (Funding, Personnel, and Time)
  - Change Request Requirements
- Stakeholder Registry: a document that contains contact information on all stakeholders, including their name, organization, job title, and role in the event (planner, participant, or both).



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- **Planning Committee Responsibilities and Structure:** A document that outlines the responsibilities of the planning committee, which includes a diagram that identifies the different roles in the Planning Committee. The Planning Committee should consist of a single senior-level individual who is responsible for the overall design, development, control, training and/or evaluation of the event, as well as representatives from each participating organization and/or critical infrastructure sector (depending on the size of the event, one planner may represent several organizations). Depending on the event, the planning team can determine whether responsibilities for members of the planning committee include (but are not limited to):
  - Proposing injects that support their organization's objectives
  - Modifying (to the extent necessary) the scenario and events list for their organization
  - Updating resource (i.e., staffing) documents for their organization
  - Handling logistics (i.e., transportation) and administrative details for their organization
  - Coordinating exercise participant training and briefings for their organization
  - Scheduling and conducting participant briefings for their organization
  - Reviewing the final plan for overall completeness and accuracy

Members of the committee may be assigned to work groups (if necessary) and will be responsible for identifying participants and controllers for their organization. These work groups have an identified leader and directly support all aspects of the event:

- **Lead and Resource Support:** Plan, resource, and coordinate a JACK VOLTAIC® event that meets all objectives.
  - **Scenario Design:** Design a realistic scenario with participant-focused injects.
  - **Cyber Range Development:** Provide a combination virtual/physical space for JACK VOLTAIC® event participants to conduct a cyber game scenario on realistic representations of municipality infrastructure.
  - **Legal and Policy Table-Top Exercise:** Baseline understanding and address underlying concerns about authorities, reporting, and assistance.
  - **Strategic Communications:** Effectively communicate the meaningful stories and messages of JACK VOLTAIC® to key audiences.
  - **Event Execution:** Design, resource, and coordinate an objective-focused event with a realistic and integrated scenario that meets all objectives.
  - **Distinguished Visitor Day:** Create an opportunity for Senior Leaders and Executives to experience JACK VOLTAIC®.
  - **Data Collection and Analysis:** Identify, understand, collect, assess, and synthesize impactful qualitative and quantitative data that supports the event's objectives.
- **Planning Timeline:** a document that places actual dates for the events listed in Table 1.
  - **Assumption Log:** a record of all assumptions and constraints for the event. The lead planner will maintain this log throughout the entire planning cycle, updating as appropriate.
  - **Draft Stakeholder Objectives:** for each member of the stakeholder registry, the initial exercise objectives, success criteria, key deliverables, high-level requirements, summary milestones, and other summary information desired by the stakeholder and their organization. These objectives help guide scenario development and participant outreach.
  - **Draft Agreements:** Used to define initial intentions for the exercise and specific areas for support; may take the form of contracts, memorandums of understanding (MOUs), service level agreements (SLA), letters of agreement, letters of intent, verbal agreements, email, or

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other written agreements. These agreements may take significant amounts of time for approval, so the responsible organization should identify and execute as early as possible.

## Design Checklists

### Checklist #1: 2-6 Months prior to Concept Development Workshop

- Review JACK VOLTAIC® (JV) Executive Reports: provides information about JV to help sponsor determine whether the expected outcomes of the exercise justify the required investment and establish boundaries for the exercise
  - Review Historical Documents: lessons learned and products from previous exercises may relate to the exercise purpose, scenario, and objectives.
  - Review Past Agreements: Identify any potential areas an agreement can help support the event
  - Seek expert judgment and gather data (brainstorming, focus groups, interviews, etc.)
  - Conduct Design Planning and/or Exercise Objective Development Workshops if required
  - Assign exercise manager or planner, responsibility, and authority level
  - Develop Stakeholder Register
  - Meet with key stakeholders to identify the exercise objectives, success criteria, key deliverables, high-level requirements, summary milestones, and other summary information
  - Develop high-level Assumption Log with constraints
  - Draft Exercise Charter
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Checklist #2: Conduct Concept Development Workshop

- Brief exercise purpose: sponsor’s intent; exercise objectives; key stakeholders; target training audience; event classification guidance and other pertinent information
- Review historical documents and lessons learned from previous exercises (as applicable)
- Update high-level Assumption Log with constraints
- Determine scope of exercise (type of exercise, key participants, location, duration, other)
- Draft scenario outline (bullet outline)
- Determine deliverables (Final Reports, Data Collection, Executive In/Out-Briefs, etc.)
- Determine execution method (On-Site or Virtual)
- Determine simulation requirements (Cyber Range)
- Determine legal and policy requirements (Law and Policy Table-Top Exercise)
- Develop draft planning timeline with key milestones
- Determine exercise feedback requirements
- Determine strategic communications requirements (public relations)
- Draft Initial Planning Meeting (IPM) Agenda
- Identify Concept Development Workshop (CDW) due outs, assign offices of primary responsibility (OPRs) and post workshop minutes on appropriate webpage
- Finalize and publish Exercise Charter
- Post exercise information and updates on appropriate webpage (if available)

Checklist #3: Actions Prior to Initial Planning Meeting/Conference (2-6 months prior)

- Validate/Update JV Exercise Manual and Planner Playbook (if applicable)
- Finalize and publish IPC Agenda; include Approved Exercise Charter, Planning Timeline, Stakeholder Register, Exercise Manual and Planner Playbook, and Assumption Log
- Develop Initial Media Plan if necessary
- Produce Draft Exercise Feedback Plan
- Pre-coordinate internal and external exercise support requirements or participation as needed; add to organization’s calendar
- Identify all meeting attendees; provide instructions on how to attend

## STAGE 2: PLANNING (4-14 months prior)

### Planning Discussion

This stage begins with the Initial Planning Meeting and concludes at the end of the Mid Planning Meeting. Decisive to this stage is the finalization of the stakeholder registry and the identification of participant objectives. There are three key events in this phase:

- Conduct Initial Planning Meeting (Checklist #4): The purpose of this meeting is to familiarize current stakeholders with the Approved Exercise Charter and begin drafting the exercise plan. Key to this meeting is identifying initial objectives from the current participants from the stakeholder registry and identify additional stakeholders/participants required to achieve the event and participant objectives.
- Actions Prior to Mid Planning Meeting (Checklist #5): The key objectives for this period are 1) building partnerships with additional stakeholders/participants identified at the IPM and 2) using site surveys to refine participant objectives and explore potential events for the scenario.
- Conduct Mid Planning Meeting (Checklist #6): The key outcomes from this meeting are the final stakeholder registry, which includes confirmed participants and planners, the draft MSEL, and the draft Data Collection Plan. While there may be additional participants added after this event, they must be included prior to the MSEL Development Workshop to allow for proper incorporation of their objectives.

The tools and techniques required for this stage include:

- Networking
- Knowledge Management
- Data Analysis
- Initial Planning Meeting
- Site Surveys

The key outputs for this phase include:

- Draft Exercise Plan: a document that provides planners, controllers, observers, evaluators, and players that provides the following:
  - Exercise Summary (Concept and Scope)
  - Sponsors, Stakeholders, and Participants
  - Exercise Control Plan (White Cell Structure, Responsibilities, and Members)
  - Location and Venue Orientation (including maps, room blocks if needed)
  - Schedule of Events
  - Concept of Execution
  - Media Plan
  - Coordinating Instructions
- Final Stakeholder Registry: A finalized version of the registry from the previous stage, any changes to the registry from this stage forward requires an approved Change Request.
- Draft Participant Objectives: These objectives are critical as they are the foundation for the injects. It is extremely important that these objectives represent the 80-90% solution as they will be used to develop and shape the MSEL.
- Scenario Concept & Timeline: The outline and details of the simulated sequence of events that will provide the environment for the participants and their actions during the exercise. The scenario must be realistic for the participants and tied to the exercise objectives. The

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concept for the scenario should be a written narrative, whereas the timeline provides a sequence of events leading up to the exercise as well as throughout it.

- Draft MSEL: The Master Scenario Events List is a chronological timeline of events and actions that will be used to encourage participant action during the exercise. The key component to the MSEL are injects, which are specific events tied to a participant and supports an exercise or participant objective. The inject builds the scenario environment and challenges participants to act. Each inject is comprised of the following:
  - Turn / Exercise Time introduced into the scenario
  - Targeted Participant (individual organization, multiple organizations, or everyone)
  - Inject
  - Description / Synopsis of event
  - From (where/who does the inject come from)
  - To (a specific entity within an organization)
  - Mechanism: how is the inject received within the exercise environment
  - Expected Response: what the planning team anticipates may happen
  - Supported Objective(s): which of the exercise and/or participant objectives does this inject support
- Draft Data Collection Plan: The data collection plan supports the Feedback stage by identifying critical data points tied to each exercise and participant objective. The draft guide should include the following:
  - Some general data points for all established objectives
  - A prescribed data classification syntax that facilitates analysis by allowing the collector to identify the topic tied to the observation.
  - Communication methods and communication flow during the exercise
- Draft Feedback POAM: This timeline provides information on the post-execution requirements, to include reports, out-briefs, or other events.

## Planning Checklists

### Checklist #4: Conduct Initial Planning Meeting/Conference (IPM/IPC)

- Conduct meeting per IPC agenda
- Brief approved Exercise Charter
- Brief approved exercise objectives and planning timeline with milestones
- Finalize and gain approval of agreements
- Provide exercise staffing document format; used to determine exercise team composition (e.g. exercise controllers, data collectors, analysts, and observers) as well as participant requirements
- Determine logistical / sustainment requirements
- Determine communication and information technology requirements
- Draft staffing documents for exercise team and sector participants
- Validate exercise milestones (part of Exercise Charter)
- Review draft scenario
- Outline Master Scenario Event List (MSEL) Workshop requirements
- Draft Law and Policy Table-Top Exercise (L&P TTX) requirements
- List possible L&P TTX topics of interest and participating organizations
- Finalize Exercise Feedback Plan and mutual support requirements
- Identify IPM due outs, assign responsibilities, and post meeting minutes as appropriate
- Update Assumption Log
- Develop agenda for Mid Planning Meeting (MPM)

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Checklist #5: Actions Prior to Mid Planning Meeting (2-5 months prior to executing meeting)

- Finalize site survey coordination (personnel, technical, and facility requirements)
- Refine staffing requirements and update staffing documents (exercise support team members and participating participants by organization)
- Refine communications and information technology requirements
- Design mini-exercise rehearsal
- Design communications exercise to test communications and information technology support plan
- Refine scenario
- Update Assumption Log
- Finalize and publish Mid Planning Meeting Agenda, include any approved changes or updates to Exercise Charter, Planning Timeline, Stakeholder Register, Exercise Manual & Playbooks, Exercise Requirements, Exercise Change Requests, Exercise Staffing Document (for staffing/input), and Assumption Log
- Identify all meeting attendees; provide instructions on how to attend

Checklist #6: Conduct Mid Planning Meeting

- Conduct meeting per MPM agenda; combine with MSEL Workshop and L&P TTX if needed
- Brief approved Exercise Charter
- Brief approved exercise objectives and planning timeline with milestones
- Brief draft scenario
- Brief results of Exercise Staffing Document
- Validate and finalize Exercise Staffing Document
- Brief MSEL (to select audience – trusted agents)
- Brief Exercise Feedback Plan (date/time/venue/source of observers)
- Brief logistics support plan
- Brief communications and information technology support plan
- Brief draft mini-exercise rehearsal plan
- Update milestones (as needed)
- Update Assumption Log
- Identify MPM due outs, assign responsibilities, and post meeting minutes as appropriate
- Develop agenda for Final Planning Meeting (FPM)



## STAGE 3: PREPARATION (1-4 months prior)

### Preparation Discussion

The preparation stage begins immediately after the Mid Planning Meeting and concludes prior to the start of the first rehearsal. Decisive to this stage is the approval of the MSEL and its integration into the exercise platform (DECIDE®, cyber range, etc.). There are seven parts to this stage.

- Actions Prior to MSEL Development Workshop (Checklist #7)
- MSEL Development Workshop (Checklist #8)
- Actions Prior to Law and Policy TTX (Checklist #9)
- Law and Policy TTX (Checklist #10)
- Actions Prior to Final Planning Meeting (Checklist #11)
- Conduct Final Planning Meeting (Checklist #12)
- Actions After Final Planning Meeting (Checklist #13)

The tools and techniques for this stage include:

- Mid Planning Meeting
- MSEL Development Workshop: The focus of this workshop is to develop and finalize the MSEL for the exercise. Attendees should consist of only the trusted agents from each of the participating organizations (preferably who will not play), as well as representatives from organizations who will support the exercise (e.g., cyber range, exercise platform, common operating picture, etc.). The key outcome of this workshop is the approved MSEL for the exercise.
- Law and Policy Tabletop Exercise
- Final Planning Meeting: This meeting is to ensure that all exercise documentation (exercise plan, participant rosters, MSEL, data collection plan, and feedback POAM) are finalized and prepared for execution. It will consist of a series of briefings by the document owners in addition to pre-execution checks on all applicable technology (both for on-site and virtual support).

The key outputs are:

- Final Exercise Plan: Including all the components discussed in the Draft Exercise Plan of Stage 2, the final exercise plan is complete upon briefing and approval by the planning committee at the Final Planning Meeting. The next four key outputs all become annexes to the Final Exercise Plan.
- Approved and integrated MSEL with supporting Participant Objectives: Finalized at the MSEL Development Workshop and approved at the Final Planning Meeting, this output details out the injects/events of the exercise will unfold. If using a cyber range with a tabletop/function exercise, the MSEL will show how the events are distributed and integrated across the different exercise mediums.
- Final Data Collection Plan: The final Data Collection Plan incorporates the final MSEL with the draft Data Collection Plan discussed in Stage 2. The final plan incorporates specifics about what information should be collected about each event in the MSEL.
- Exercise Feedback POAM: The final timeline for post-Exercise events, it is briefed and approved at the Final Planning Meeting
- Rehearsal Plan: Schedule, required attendees, resource requirements, scenario scene-setter, and any additional information (passwords, etc.) for event rehearsals.

## Preparation Checklists

### Checklist #7: Actions Prior to MSEL Development Workshop

- Complete scenario documents necessary for MSEL development
  - Identify and sequence significant events/timelines for scenario and MSEL
  - Identify trusted agents from training audience
  - Identify MSEL manager
  - Identify any participant objectives that do not have a corresponding inject on the MSEL; these objectives are a priority for discussion during the workshop.
  - Coordinate with other entities potentially influencing MSEL development (includes any automation, platforms, or cyber ranges that require the MSEL for the exercise)
  - Identify potential master scenario events (for MSEL consideration)
  - Identify all workshop attendees; provide instructions on how to attend
- 

### Checklist #8: MSEL Development Workshop

- Review participant objectives and determine tasks, conditions, and standards required to achieve objective within the scenario
  - Identify key threads in the scenario; determine events and critical tasks associated with threads.
  - For each inject, at a minimum, identify: the timeframe, the event originator, target audience, expected player actions
  - Develop contingency injects; provide recommended sequencing
  - Ensure exercise technology (e.g., cyber range) can support MSEL injects
  - Provide Exercise Director and Key Stakeholders briefing on MSEL for approval
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Checklist #9: Actions Prior to Law and Policy Table-Top Exercise

- Sanitize sample documents for cyber incident response and provide them as a read-ahead minimum 2 weeks prior to execution
- Determine legal jurisdiction and all mandated reporting responsibilities required by law or local policy for potential cyber incidents
- Finalize the list of topics for the L&P TTX and determine need for external subject matter expertise
- Determine any potential limitations for discussion (i.e. competing private industry partners, federal partner discussion requiring clearances, etc.)
- Decide whether to hold concurrent events/tracks to meet the needs of different audiences (i.e. military, private industry, local government, etc.)
- Invite guest speakers (preferably with at least 60 days notice) and provide them with the information necessary for travel and whether there is compensation available (travel, accommodations, etc.)
- Request government/organizational policy documents if participants would like them reviewed
- Create the data collection plan, identify the number of note-takers required and who determine who they are, and who is supplying them
- Schedule facilities and determine technical needs
- Finalize list of L&P TTX attendees and provide instructions on how to attend

Checklist #10: Law and Policy Table-Top Exercise

- Brief note-takers on the data collection plan, non-attribution environment
- Collect guest speakers presentations and ensure they are loaded and functional prior to the first talk of the day
- Brief all speakers on the agenda and expectations
- Have digital and physical copies of any documents needed on hand
- Present small speaker gifts (optional, but thoughtful if not paying speakers or providing travel)
- Have a time keeper holding speakers to their time and encouraging additional discussion during breaks
- Encourage seating by function/sector to allow for internal discussion before sharing with the group
- Identify any remaining legal questions that need to be resolved prior to the exercise event, determine stakeholders who need the answers, and identify the parties responsible for providing the answers
- Determine if any information from the L&P TTX should be used to adjust the MSEL

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Checklist #11: Actions Prior to Final Planning Meeting

- Publish updated scenario and MSEL to trusted agents
- Refine communications and information technology requirements
- Design mini-exercise rehearsal
- Design communications exercise to test communications and information technology support plan
- Finalize coordination of any external exercise support requirements or participation
- Update Assumption Log
- Identify all meeting attendees; provide instructions on how to attend
- Finalize and publish FPM Agenda; distribute Final Exercise Plan, Final Data Collection Plan, and Rehearsal Plan to attendees for review prior to the meeting.

Checklist #12: Conduct Final Planning Meeting

- Conduct meeting per FPM agenda
- Distribute all necessary document
- Brief Final Exercise Plan, to include:
  - participant on-boarding plan (administrative and training requirements, if required)
  - exercise support team on-boarding plan
  - rehearsal plan (including mini-exercise scenario)
  - exercise logistics (venue location, meals, parking, schedule, etc.)
- Brief Final Data Collection Plan
- Brief Final Scenario (not recommended to brief MSEL; completed at workshop)
- Brief Exercise Feedback Plan
- Brief status on external exercise support and/or participation
- Update Assumption Log
- Identify FPM due outs, assign responsibilities, and post meeting minutes as appropriate

Checklist #13: Actions After Final Planning Meeting

- Conduct administrative actions and training as required
- Conduct final equipment tests and ship equipment as required
- Refine external exercise support and/or participation as required
- Execute movement to site as required

## STAGE 4: EXECUTION

### Execution Discussion

The execution phase is the culmination of the previous three stages. Decisive to this phase is successful on-boarding of participants and communications/IT check of all equipment prior to the execution of the event. There are two checklists for this stage:

- Actions Prior to Start of Event (Checklist #14)
- Actions During the Event (Checklist #15)

With respect to this playbook, the Execution phase is included to show how the preceding stages support the event execution. Checklist #14 and #15 highlight key tasks that help finalize the outputs and feed into the final phase, Feedback. For details on how to execute, please reference one of the Execution Playbooks. Figure 4 shows the ITTOs for this phase. The key outputs of this phase are:

- Exercise Assessment Data: This output represents all the data collected during the event as directed by the Data Collection plan. Most data will be text in the form of emails, chats, or observations logged by the White Cell during the events.
- Issue Log: This document represents a list of concerns dealing with logistic support, execution, etc. It is meant to serve as a basis for improving the event's execution for future rotations.
- Observations: An observation is one made by the exercise control team, data collectors, distinguished visitor, or other as it pertains to the exercise or its execution.

### Execution Checklists

#### Checklist #14: Actions Prior to Start

- Conduct participant on-boarding (administrative and training requirements)
- Conduct briefings to Exercise Support Team and other participants as required
- Conduct communications and information technology exercise to validate equipment and comms plan as needed
- Conduct the mini-exercise rehearsal

#### Checklist #15: Actions During the Exercise

- Conduct interviews with exercise OPRs and stakeholders for feedback
- Conduct "hot-washes" to collect results for the Exercise Feedback
- Post exercise updates on appropriate website or social media platforms as needed

## STAGE 5: FEEDBACK (1-3 months after)

### Feedback Discussion

The primary purpose of this stage is to analyze all the data collected from the execution, then communicate findings and recommendations. There are several ways to communicate the results:

- Out-briefs: Presentations that include slides or other visuals. These presentations can be in person or virtual. Due to the diverse participants in a JV event, it is important that the briefing organization generate a robust slide deck that allows for a tailored briefing.
- Reports: A written report detailing the planning, execution, findings, and recommendations from the event. A sample of the chapters is listed below:
  - Introduction
  - Research Methodology (objectives, planning time line, partners, participants, scenario, data collection plan)
  - Execution (Event Design, Event, Post-Event)
  - Findings
  - Recommendations
  - Conclusion

### Feedback Checklist

#### Actions After the Exercise (1-3 months after)

<input type="checkbox"/> Capture and share key, overarching, and crosscutting observations and lessons no later than 45 days after the end of the exercise	
<input type="checkbox"/> Identify due outs, assign responsibilities, and post updates on appropriate website	
<input type="checkbox"/> Produce the Exercise Feedback Reports as required	<input type="checkbox"/>
<input type="checkbox"/> Conduct requirements and deliverable reporting	
<input type="checkbox"/> Update the organization's training plan	
<input type="checkbox"/> Collect surveys as needed	
<input type="checkbox"/> Execute Executive Out-Brief with Key Stakeholders	

## References

Joint Training Event Handbook 2019, Joint Staff J-7

[Homeland Security Exercise and Evaluation Program \(HSEEP\), January 2020](#)

[JACK VOLTAIC® 3.0 Research Report](#) (specifically Chapters 4 & 5 as examples of this process)

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