Designing a Simulation Exercise

NEDRIX Conference
February 16, 2005
Designing a Simulation Exercise

Agenda

- The Simulation Planning Committee
- Simulation Goals & Objectives
- The Simulation Scenario
- Pre-Simulation Activities
- Post-Simulation Activities
- Questions
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The Simulation Planning Committee
## Designing a Simulation Exercise

### The Simulation Planning Committee

<table>
<thead>
<tr>
<th>Internal Resources</th>
<th>External Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities/Security</td>
<td>Local Fire/Police</td>
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<tr>
<td>IT</td>
<td>LEPC</td>
</tr>
<tr>
<td>Operations</td>
<td>EPA</td>
</tr>
<tr>
<td>Human Resources</td>
<td>FEMA</td>
</tr>
<tr>
<td>Legal</td>
<td>State Emergency Agencies</td>
</tr>
<tr>
<td>Public Relations</td>
<td>Other DR/BC Professionals</td>
</tr>
</tbody>
</table>

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Goals & Objectives
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Goals & Objectives

- Know your audience
- Define the exercise objectives
- Establish the scope of the exercise
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Goals & Objectives

☐ Know your audience
  ✓ BR/BC Professionals
  ✓ Executives/Officers
  ✓ Business Unit Leaders
  ✓ General Office Staff
  ✓ Technical Staff
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Goals & Objectives

- Define the exercise objectives
  - Increase Recovery Plan Awareness
  - Validate Recovery Strategies & Procedures
  - Familiarize Recovery Teams with Emergency Procedures
  - Rehearse Crisis Management & Decision Making
  - Substantiate the BR/BC Program
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Goals & Objectives

☐ Establish the scope of the exercise
  ✓ Identify the recovery teams who will participate and business functions that will be exercised
  ✓ Specify if command centers, alternate sites, etc will be used during the exercise
  ✓ Decide how teams will be organized
  ✓ Determine the amount of time that will be spent on each aspect of the exercise
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The Simulation Scenario
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The Simulation Scenario

☐ Agree on a simulation committee team leader/project manager
  ✓ Keep the team focused
  ✓ Schedule meetings/conference calls
  ✓ Develop a task list
  ✓ Ensure the tasks are assigned to committee members
  ✓ Be sure deadlines are being met
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The Simulation Scenario

- Develop the scenario
  - Brainstorm to generate ideas for the scenario
  - Be sure the scenario is realistic
  - Identify areas of concentration and lessons learned
  - Be sure simulation materials such as BCP’s, BIA’s, call trees, etc are up-to-date
  - Specify the exercise timeframe and time units
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The Simulation Scenario

Expert Resources/Presenters

- Determine whether an expert is needed for the scenario
- Experts can be found within your own organization or from an external source
- Establish the expert’s role in the simulation
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The Simulation Scenario

☐ The Injects

✓ Set the timing for the injects (real time vs. simulation time)
✓ Ensure the injects are in the proper order
✓ Be certain that the information in the injects is consistent with facts provided by expert resources
✓ Develop questions/problems to facilitate discussion among the participants
<table>
<thead>
<tr>
<th>Inject#</th>
<th>Real Time</th>
<th>Sim Time</th>
<th>Inject</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wednesday Morning</td>
<td>Monday Morning</td>
<td>As the day begins at L.U.C.E. Company as managers filter into the</td>
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<tr>
<td></td>
<td>9:20 am</td>
<td>7:00 am</td>
<td>weekly manager’s meeting. One of the items on the agenda is an</td>
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<td>Operations audit. The managers are told that the audit is being</td>
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<td>done because there have been inquiries from customers, banks, and</td>
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<td>credit agencies. The auditors will investigate operations for</td>
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<td>discrepancies, user access rights, and to be sure that proper</td>
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<td></td>
<td>controls are in place. Depending on findings, a Data Center audit</td>
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<td></td>
<td>will be performed in two weeks.</td>
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<td>8:30 am</td>
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<td>The Operations manager returns to his department and calls a staff</td>
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<td></td>
<td>meeting. He asks the call center staff to cooperate with the audit</td>
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<td>team. The Information Services manager informs the Data Center staff</td>
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<td>of a possible audit. He explains that an audit may begin in two</td>
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<td>8:45 am</td>
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<td>Several employees seem agitated by the announcement. They have</td>
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<td></td>
<td>questions about how thorough the audit will be and what information</td>
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<td>the audit team will want. Should any action be taken at this point?</td>
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<td>If so, what action(s) is taken?</td>
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<tr>
<td>2</td>
<td>Friday</td>
<td>10:45 am</td>
<td>Overnight Carrier arrives at L.U.C.E. Company and makes the</td>
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<td></td>
<td>9:25 am</td>
<td>1:10 pm</td>
<td>usual morning delivery to the mailroom. The mailroom clerk sorts</td>
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<td>the mail which is delivered to the various departments. The customer</td>
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<td>service secretary, a temporary employee, returns from lunch talking</td>
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<td>and laughing with two other employees. They stop at the mail table</td>
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<td>and continue to talk. The secretary starts to open the mail. The</td>
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<td>Overnight Carrier package draws the employees’ attention because</td>
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<td>they notice that the return address is for the audit firm that is</td>
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<td>conducting the Operations audit.</td>
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<td>The secretary opens the package and goes to dump the letter out.</td>
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<td>Instead a white powder falls onto her hand, desk and the floor. She</td>
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<td></td>
<td>screams “Anthrax” when she sees the white powder.</td>
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</tbody>
</table>
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The Simulation Scenario

- Facilitators
  - Stimulate discussion among the participants
  - Keep participants on track
  - Ensure the participants are using the materials/information provided
  - Act as a liaison between the expert(s) and the participants
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The Simulation Scenario

- The Presenter
  - Leads the simulation participants
  - Acts as the timekeeper
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The Simulation Scenario

- Practice & Evaluate
  - Perform the simulation exercise for an unbiased audience
  - Assign a committee member to observe
  - Hold a committee meeting(s) to evaluate the “dry run”
  - Fine tune the scenario, injects, timing, if necessary
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Pre-Simulation
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**Pre-Simulation**

- Set the scene for the participants
- Discuss/explain materials & information being used during the simulation
- Experts may present information pertinent to the exercise
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Post-Simulation

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Post-Simulation

- Allow time for participants to organize notes and present information gained during the exercise
- Conclude by summarizing lessons learned and critiquing the exercise
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Questions????