Business Continuity Testing Protocols

Introduction

A Business Continuity Plan (BCP) must be tested and updated on a regular basis to ensure its effectiveness in the event of a disaster and its continuing relevance to the Business.

To be successful, BCP testing requires careful planning with consideration given to the following aspects:

- The objective(s) of the test – what is to be determined from it?
- The type of test to be undertaken – see below.
- Who the test participants will be (whole/part of crisis management team).
- The part(s) of the BCP to be tested.
- Who the facilitator(s) of the test will be.

The type of test undertaken should be commensurate with the BCP’s maturity, the needs of the business and be economically viable. It is essential however that the full BCP is tested at least once a year.

Types of Tests

There are various methods and modes of testing and exercise protocols that are practiced in the corporate and some government environments. Each testing approach has its pros and cons, and each is intended to test a different approach to the business continuity problem and restorative response. These include:

Plan Review

This is similar to a plan audit, where the team will work through all components of the plan to determine if any elements are missing or inconsistent. This is a useful practice and will be beneficial in training new members of the team, but does not go far enough to adequately test the plan.

Simple / Basic

A simple test would include testing the activation of the staff call tree, checking of suppliers/customers details and other contacts etc. This ensures all relevant details are kept up to date. While this is a practical test it is limited in its extent.

Desk Top

In this instance all members of the crisis management team/BCP committee, etc. are gathered in a room to work through the plan in a stress-free environment. A scenario will be posed to the team with specific time frames and parameters. From here the team will look to follow through the documented actions required by the plan. This type of test should enable the company to determine if team members know their duties or whether training is required. It will also enable the team to document any errors or inconsistencies.

Simulation

This is the closest to a full test and invocation of the plan. It will assist in determining if the procedures and resources work. A scenario will be provided and the team will use the resources which are established in the BCP (for example, separate disaster recovery site, alternative equipment, services from a third party/’buddy’ sites) and can involve sending teams to other locations to restart technology (e.g. full regeneration of IT data back-ups) or business functions (lab testing in an alternative location).

This method should enable identification of any staff concerns with regard to their role/nature of their role, missing or insufficient resources, errors or omissions.

Priorities

Testing should be prioritised by starting with the plan review then moving on to the simple/basic and desk top testing. The final more complex simulation testing should only be undertaken when the other tests have all been completed successfully.

It is important to keep the scenarios plausible and relevant. Parameters and time frames (for example, action which would be taken in the first 4 hours, 24 hours, week, etc.) should be set. Small scale issues will be just as useful when testing the plan as large scale disasters.

As the primary purpose of testing is to identify the effectiveness and possible limitations of the plan, the most important element of the plan test is the debrief; At this stage the group and the facilitator should discuss what worked well, what was missing and any participant concerns. The plan should be updated to reflect these findings.
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The following pages include details and checklists for designing testing protocols for each type of test.

Selecting the Exercise Type

You will need to decide the type of exercise that would best meet your objectives. The availability of resources is also a major bearing on how you plan your exercise. As with most things, the more complex an exercise is, the more it will cost to run and the longer it will take to plan and deliver.

You should consider:

- The amount of money you have to spend and the likely cost of the exercise
- The amount of your time you and others involved in the exercise can afford to commit to the planning
- The amount of time participants are able to spend on the exercise

If you are holding the exercise to test or develop an emergency plan, the table below may be useful.

<table>
<thead>
<tr>
<th>TYPE OF PLAN TO BE TESTED</th>
<th>TYPE OF EXERCISE CONSIDERED</th>
<th>COMPLEXITY OF SCENARIO</th>
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</thead>
<tbody>
<tr>
<td>Plan in preparation (unpublished)</td>
<td>Discussion / Seminar</td>
<td>No scenario / basic scenario</td>
</tr>
<tr>
<td>New plan (untested)</td>
<td>All above + tabletop</td>
<td>All above + detailed “problem issues”</td>
</tr>
<tr>
<td>Established plan (trained tried and tested a couple of times)</td>
<td>All above + small scale live elements</td>
<td>All above + much more detailed scenario + live element</td>
</tr>
<tr>
<td>Well established plan (trained, tried and tested many times)</td>
<td>All above + large scale live elements</td>
<td>All above + meticulously planned and scripted</td>
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The Test Facilitator

The test facilitator must be familiar with the BC plan being tested, ideally independent of both the BC plan developers and standing team members. The facilitator coordinates the test’s execution scenario and provides spontaneous input to the test. This helps plan execution throughout the test scope. The facilitator is in charge of all test elements, provides oversight to the process, and is the final arbiter.

The Test Debriefing

The purpose of the debriefing is:

- To review and evaluate the test
- To provide feedback
- To review lessons learned from the test
- Obtain feedback from all participants on what worked and what didn’t work
- Note issues of command, control, coordination, and communication
- Have each function chair report on their group
- Evaluators and simulation team members share their observations
- The best time for a debriefing is immediately after the test
- Ask two key questions: What worked? What didn’t work?
- Simulation team members and evaluators should also debrief to capture their observations and lessons learned for sharing with the test team.

Keys to a Successful Test

- Top level support and involvement
- Test design team and volunteers
- Realistic test plan
- Thorough preparation and attention to detail
- Clear introduction and instructions
- Participant feedback at debriefing

Evaluation Response Questions

- Do you feel the test goal was achieved?
- Do you feel that you had the opportunity during the test to participate in at least one of the objectives?
- If you answered YES, then which objective(s) did you participate in?
- What did you like best about participating in this test?
- When did you feel most uncomfortable and why?
- Please reflect on the test and provide an honest opinion about what you have learned today.
- If you have a written departmental or facility plan, do you feel your plan, as written today, will be adequate to recover your business functions?
- Additional comments
- What worked properly?
- What didn’t work properly?
1. **Plan Review**

The plan review is a discussion taking the participants through each part of the Plan during development, review or an update.

- Allows a step-by-step review and discussion of the content and layout of the Plan.
- Ensures key area managers awareness and understanding of the Plan.
- Provides an early opportunity to identify and correct oversights or discrepancies.
- Is easy to conduct and is not time consuming.
- Does not assess the effectiveness of response and recovery activities.

<table>
<thead>
<tr>
<th>PLAN REVIEW CHECKLIST QUESTIONS</th>
<th>YES</th>
<th>NO</th>
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</thead>
<tbody>
<tr>
<td>Do the Plan strategies address ‘All Hazards’ in a business disruption? (i.e.: Access to facilities?)</td>
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<tr>
<td>Are hard and electronic copies of the up to date Plan stored at appropriate, easily accessible and secure locations? If electronic copies only what provisions have been made for IT infrastructure failure or power failure?</td>
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<tr>
<td>Are activities and priorities clearly understood?</td>
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<tr>
<td>Are the actions the best responses?</td>
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<tr>
<td>Do actions identify who does what, when and where?</td>
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<tr>
<td>Do ‘manual work arounds’ have a logical flow?</td>
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<tr>
<td>Are actions practical? Are they sufficient?</td>
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<tr>
<td>Do actions have practical timeframes (RTO)?</td>
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<tr>
<td>Were actions successfully completed?</td>
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<tr>
<td>Do actions identify who does what, when and where?</td>
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<tr>
<td>Do ‘back to business as usual’ actions have logical flow?</td>
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<tr>
<td>Are recovery actions practical? Are they sufficient?</td>
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<tr>
<td>Were actions successfully completed?</td>
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<tr>
<td>Have all interdependencies been adequately addressed?</td>
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<tr>
<td>Does the Plan anticipate all the resources required to support Plan activation?</td>
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<tr>
<td>Are all vital records, data or resources required to implement continuity arrangements current, correct and included in the Plan?</td>
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<tr>
<td>Does the event log list all critical incidents or revisions that have occurred during the life of the Plan?</td>
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</table>
### PLAN REVIEW TEST OUTCOME QUESTIONS

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>Was the test suitable and appropriate?</td>
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<tr>
<td>Did participants understand the Plan?</td>
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<td>Are roles and responsibilities appropriate and current?</td>
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<td>Have backups been identified for all roles and responsibilities?</td>
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<td>Are delegations of tasks appropriate?</td>
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<td>Are any revisions or additions to the Plan required?</td>
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<td>Has responsibility for these actions been assigned?</td>
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<td>Has an appropriate timeframe been designated to complete the actions?</td>
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<td>Has a formal report on the test been completed?</td>
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<td>Has the Plan been updated with the results of the testing?</td>
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<tr>
<td>Has the date and the type of test been entered into the Plan’s Event Log?</td>
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<tr>
<td>Has the revised Plan been approved by the Plan Owner?</td>
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### SIMPLE / BASIC CHECKLIST QUESTIONS

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
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</thead>
<tbody>
<tr>
<td>Are all staff and key departmental or regional contacts included?</td>
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<tr>
<td>Are all contact details complete, current and accurate?</td>
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<tr>
<td>Does the Plan address contacting staff to notify them whether they need to come to work or report to an alternate location?</td>
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<tr>
<td>Does the Plan identify key messages and communication channels to each of the stakeholders in the event of IT systems being unavailable?</td>
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<tr>
<td>Does the Plan identify essential suppliers or customer contact details?</td>
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<tr>
<td>Is it clear who the Plan Coordinator should contact regarding required continuity resources?</td>
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### Desk Top

- Table top exercises are a more detailed and more involved than plan review and basic exercises. In particular, they are based on a simulated event with a realistic scenario and time line.
- Their emphasis is on validating the contents of a plan rather than developing the policy. As the name suggests, these exercises usually run with all the players sat around a table, although this can be varied, perhaps with players sat at their desks communicating over the phone, or by adding reality by contacting other people to see what resources might be available on that day. It is usually a theoretical exercise with no resources deployed.
• Provides an excellent test of the procedures contained within the emergency plan and is relatively easy to organize.

• This exercise provides an environment where participants can openly discuss issues and critically evaluate the emergency plan.

An example TTX (Table Top Exercise) can be developed utilizing the following suggestions:

• The scenario should be plausible and something that will resonate with the team.

• Keep it simple. You do not need a complicated or extreme scenario to check the usual weak spots in teams and plans. (i.e.: Incident triggers; raising the incident management team; communicating with all employees; coordinating with third parties; media and social media; business continuity plans being out of date, incomplete or unrealistic.)

• Look at recent news events for ideas. Every day there are major events happening that might support your exercise objectives and fit your business. It’s particularly powerful if you can work up scenarios that have either affected competitors or happened nearby.

• With a scenario chosen you need to bring it to life with a series of potential “problem issues” related to you. The issues supply the team with more information, problems and even questions as the exercise unfolds. Depending on the type of exercise you might only need three major issues to keep a team busy for a couple of hours.

• “Problem issues” can be supplied in many different ways, so be creative. Even using some PowerPoint, screenshots you can feed information through from a mocked up News page.

Here is an example TTX:

Objectives
Assure that the new incident management team becomes familiar with the incident management and business continuity plans. Assure that the team trains and practices working through a site-wide incident. To identify any weakness in plans or XYZ Inc.’s incident management capability and schedule appropriate training, planning and further exercises.

Introduction
According to FEMA, access roads to the XYZ Inc. site are prone to 1 in 100 year flooding. It’s been raining solidly for the last two weeks, the ground is saturated and rivers are bursting. XYZ Inc. business operations are currently normal and an important overseas customer is due to visit later this week to see the operation and discuss placing new orders.

Then “problem issues” might be something like this:

1. **Day One.** Local weather forecasters are predicting more heavy rain for the week ahead and potential city flooding if this continues.
   • Facilitator may prompt: Is this an incident? / Who decides? / What, if any, action will you take?

2. **Day Two.** Local News update. Rivers in the city are expected to flood sometime tomorrow night. The local government advises that tonight they will close several roads around the city (including to the XYZ Inc. site) due to rivers overflowing. They recommend that the public avoid all non-essential travel into the city. They have also recommended that some local schools close due to potential health and safety problems accessing the area to collect children.
   • Facilitator may prompt: What are your priorities? What’s the message to staff and customers, how will you get it out? What about parents with children in schools that are closed? Is it safe to keep operating?

3. **Day Three.** Last night roads were closed and your site isolated, a local electricity substation also flooded and you’re running the XYZ Inc. building on emergency power; that is just lights for security. An employee is off work and has been tweeting “XYZ Inc.’s site is flooded and nothing’s getting done for a while”.
   • Facilitator may prompt: Where is your team now working from? / What are the priorities? / Media Message / Twitter response? / Recovery plans / what about that customer who is due to visit?
4. **Day Four.** It’s stopped raining. Water is going down and the power has been restored on site, schools and roads should be open today.

- Facilitator may prompt: The priorities? / Can you get staff back to work today? / What if it rains some more?

4. **Simulation**

- A live exercise involves actually rehearsing the actions contained in a plan.
- Participants respond as though the scenario was real, deploying the resources that would normally be used. For example, if it says to send a vehicle to the scene of an emergency, you would actually send the vehicle to a fictional incident scene.
- A true test of logistics and physical capabilities.
- As close a simulation to real life as is possible.
- Provides site familiarization opportunities.

Note that live exercises are not necessarily the best test for emergency plans and that usually the outcomes do not justify the cost. However, combining elements of live exercises and incorporating them into desktop exercises. (i.e.: Physically making the telephone calls to trigger emergency plans and physically setting up emergency control rooms) are useful live elements that can be easily incorporated.