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# Operational Risk Management and Business Continuity

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SHCP



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# ORM & BCP – Why Necessary?

## ORM Govt Cases

- Anglo Leasing Affair in Kenya (2004)
- Orange County (1994)
- Hammersmith & Fulham Council (1989)



Mexico, Sep 1985



Chile, Feb 2010

## BCP Facts

- Over one third of businesses that suffer a significant, though not necessarily catastrophic, business interruption are no longer in business within two years of the event

**Costs can be high, reputation is at risk, but government's finances are critical, particularly in the case of a major incident such as a regional or national disaster**

# ORM & BCP – Why Not Addressed?

- **Mainly executive neglect:**

- “it won’t happen to me” is alive and well
- inadequate resource allocation
- low priority
- responsibility delegated
- project versus program
- relative lack of regulatory pressure

- **How well prepared is your Treasury?**

- do you have a full business continuity and disaster recovery plan?
- has the BCP been tested in the last 12 months?
- is your BCP managed by IT or risk management?
- is business continuity viewed within an ORM framework?

**Central Banks are normally better prepared than Ministry of Finance, have a recovery infrastructure and alternate site, and regularly test – maybe the central bank can assist the Ministry of Finance**

# Operational Risk Management

**The risk of loss resulting from inadequate or failed internal processes, people and systems or from external events**

- definition explicitly includes legal risk, but excludes strategic and reputation risk
- has been applied to government debt management in publication by World Bank

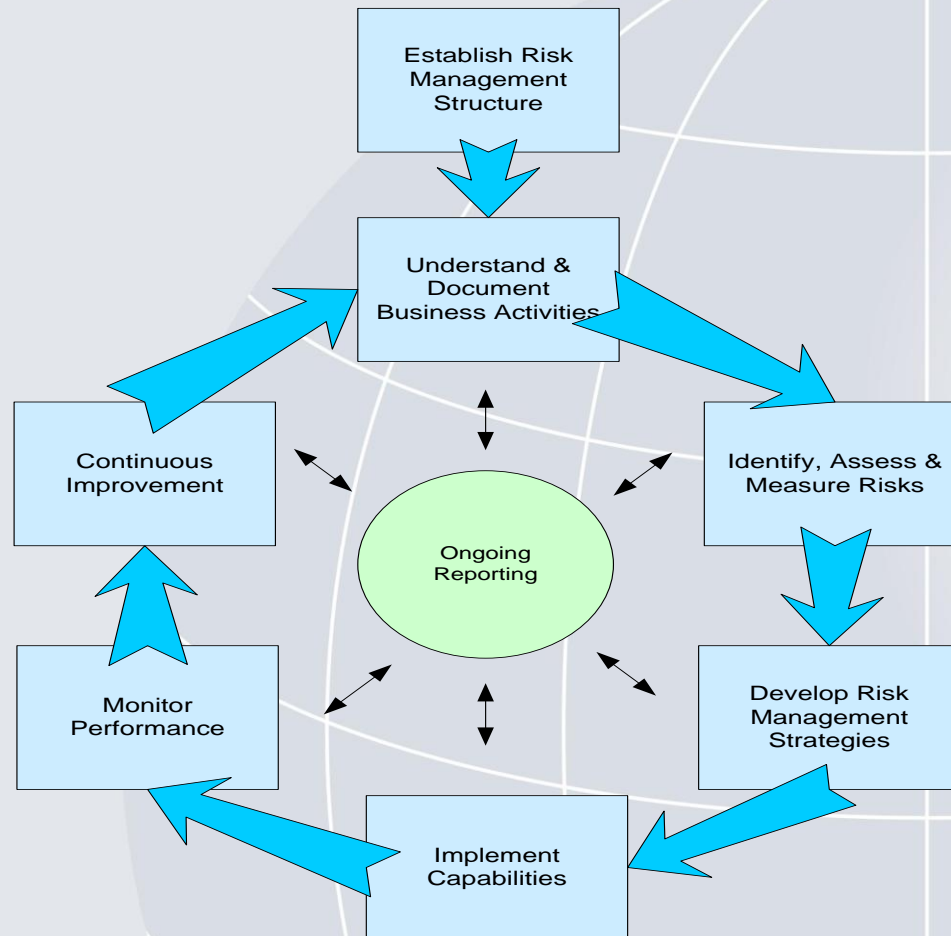
# Operational Risks for Treasury Management

<i>INFRASTRUCTURE AND TECHNOLOGY FAILURES</i>		
Power failure	Hardware failure	Sabotage
Data corruption including viruses	LAN/WAN/Intranet/ Internet failure	Internal flood (sprinklers, pipes)
Voice network failure	Theft of equipment	Theft of data/information
Poor maintenance	Accidental damage	
<i>INCIDENTS WHERE ACCESS TO PREMISES IS DENIED</i>		
Flooding or a fire concern	Health and safety violation	Hazardous chemicals accident
Gas or chemical leak	Industrial action or riot	Bomb or terrorist threat
Building fire or explosion	Internal/external flood	Sabotage or terrorism
<i>KEY SERVICE PROVIDERS OR RESOURCE FAILURES DEPENDENCIES</i>		
Failure of key service providers (telephone, internet, banking etc)	Third party providers (Central Bank and other outsourced operations)	Impact of incident on critical teams or groups (travel, food poisoning, group incident)

# Operational Risks for Treasury Management

<i>STAFF, MANAGEMENT AND RELATED HUMAN FAILURES</i>		
Human error (which may be due to poor training or inadequate supervision)	Poor training or inadequate supervision (which may lead to human error or execution of unauthorized transactions)	Failure to follow code of conduct or conflict of interest guidelines
Lack of policy guidance (which may lead to poor decisions or unauthorized activities)	Poor understanding of risk environment (which may lead to unnecessary or unknown risks)	Poorly specified delegations (which may lead to execution of unauthorized transactions)
Failure to follow or adhere to administrative practices (which may lead to processing errors)	Key person risk (which may lead to human error when key person is absent)	Fraudulent, corrupt or dishonest practices (which may lead to financial loss and political embarrassment)
<i>FAILURE TO MEET STATUTORY, LEGAL, HUMAN RESOURCES AND OTHER OBLIGATIONS</i>		
Legal/statutory obligations (e.g. compliance with loan agreements)	Management directives (e.g. internal policies and procedures)	Procedures manuals and delegated authorities
Reporting obligations (e.g. to higher authorities and international institutions)	Contractual obligations (e.g. debt service obligations)	Health and safety regulations (e.g. national workplace laws or regulations)
<i>MAJOR NATURAL AND REGIONAL DISASTERS</i>		
Earthquake	Severe flooding	Tsunami
Volcanic eruption	Severe fires	Civil disturbance or terrorism

# Six-Step ORM Framework



# Probability and Impact

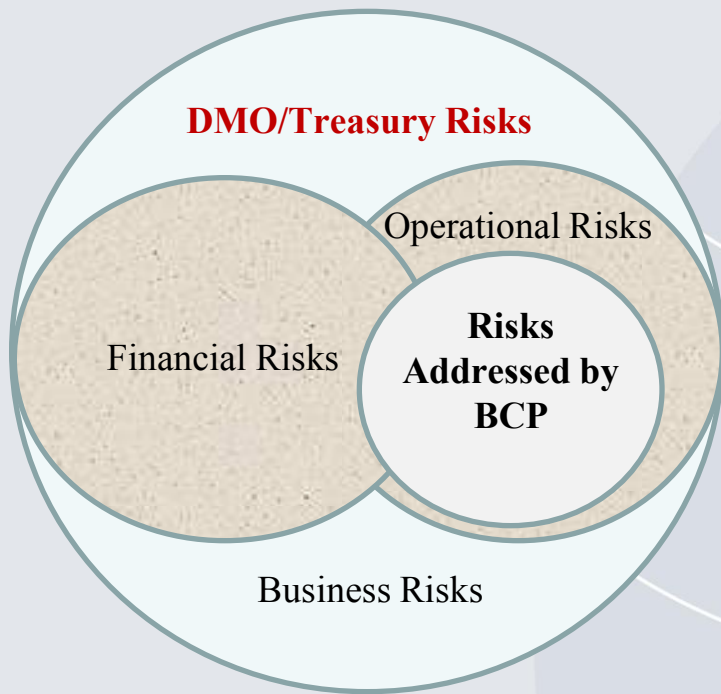
	Low Impact	Medium Impact	High Impact	Very-High Impact
Very-High Probability (almost certain)	VHpLi	VHpMi	VHpHi	VHpVHi
High Probability (probable)	HpLi	HpMi	HpHi	HpVHi
Medium Probability (possible)	MpLi	MpMi	MpHi	MpVHi
Low Probability (remote)	LpLi	LpMi	LpHi	LpVHi



# Impact Guidelines

Assessment of Impact	Reputational Impact	Financial Loss Impact	Impact on Outputs or Budget Variance
<b>Very-High</b>	Loss of stakeholder confidence Loss of market confidence Loss of trust, e.g. from primary dealers Extensive media coverage High-level ministerial enquiry [or resignation]	Reported in government's financial statements  Significant amount of time spent dealing with issue (i.e. greater than 30 person-days)	Significant delay in achieving outputs  Significant debt service budget variance (i.e. greater than 10%)
<b>High</b>	Strained stakeholder relationships Temporary loss of market confidence Moderate media coverage Ministerial enquiry	Reported to minister  Large amount of time spent dealing with issue (i.e. between 20 and 30 person-days)	Large delay in achieving outputs  Large debt service budget variance (i.e. between 5% and 10%)
<b>Medium</b>	Increased stakeholder attention Market confidence not affected Minor, if any, media attention Major attention within ministry/DMU	Reported to the entity responsible for monitoring the DMU  Moderate amount of time spent dealing with issue (i.e. between 10 and 20 person-days)	Moderate delay in achieving outputs  Moderate debt service budget variance (i.e. between 3% and 5%)
<b>Low</b>	Stakeholder and market relationships intact  No media coverage Internal ministry/DMU enquiry	Included in internal monthly reports  Minimal amount of time spent dealing with issue (i.e. less than 10 person-days)	Little or no delay in achieving outputs  Little or no debt service budget variance (i.e. less than 3%)

# Business Continuity Planning



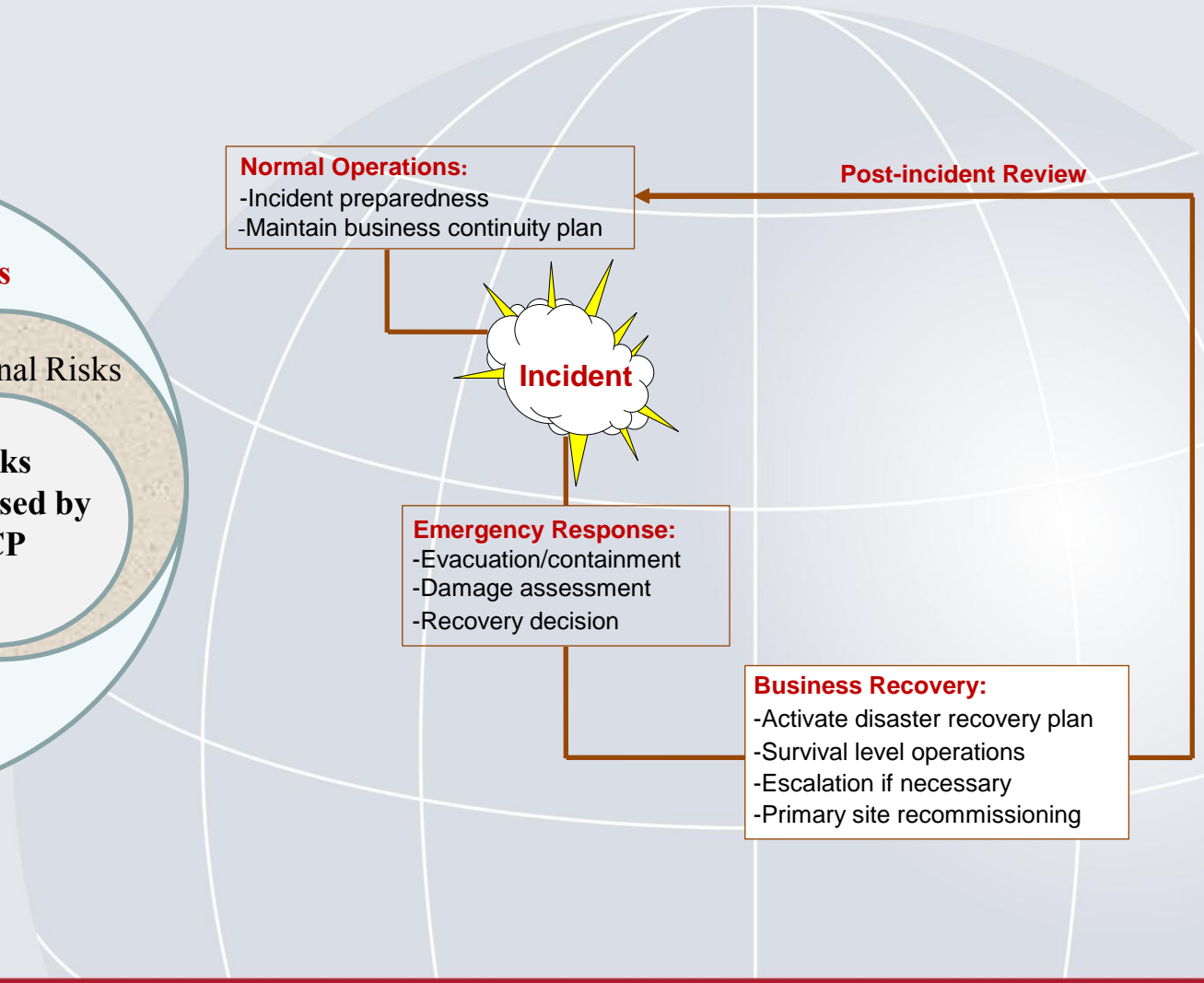
**Normal Operations:**  
-Incident preparedness  
-Maintain business continuity plan

**Post-incident Review**



**Emergency Response:**  
-Evacuation/containment  
-Damage assessment  
-Recovery decision

**Business Recovery:**  
-Activate disaster recovery plan  
-Survival level operations  
-Escalation if necessary  
-Primary site recommissioning



# Six-step BCP/DRP Framework

1. Document **business activities** and critical processes and systems
2. Undertake **business impact analysis** to assess probability and impact
3. Develop **BCP/DRP** (include 3<sup>rd</sup> parties)
4. **Implement** or **update** BCP/DRP
5. **Training** to imbed into the day-to-day operations of the treasury
6. Regular (annual) **testing** and **updating**

# ORM and BCP Strategy

- **Prevention or avoidance**, where the probability of an event occurring is reduced or eliminated
- **Transference**, where risks are passed to third parties such as insurance or outsourcing
- **Containment**, where the potential impact of an event occurring is limited in the early stages using controls or other techniques
- **Acceptance and recovery**, where an event or disruption might well occur but debt management operations can be resumed successfully using the disaster recovery plan

# ORM and BCP Implementation

- Appoint an **ORM/BCP champion** to oversee implementation of measures approved by senior management:
  - training program
  - raising awareness
  - introducing ORM/BCP into service level agreements
  - developing control tools and mitigation strategies
  - developing reporting requirements
  - maintaining ORM/BCP and annual testing

# References

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