

*It has been more than one year since the events of 11 September 2001 ("9/11"). 9/11 raises the issue of how well banks in Hong Kong could have coped with a similar large-scale disaster. In this connection, the HKMA has been taking a number of initiatives to help ensure the readiness of business continuity planning of the Hong Kong banking industry. In particular, the HKMA will issue in December 2002 a guidance note on business continuity planning and expects authorized institutions (AIs) to take the recommendations into account. This article gives a brief account of the key initiatives taken and being explored by the HKMA in the light of 9/11 and the main points in the guidance note.*

### Introduction

The HKMA has been reviewing the implications of 9/11 for business continuity planning. Accordingly, the HKMA has been taking some initiatives to help the AIs to develop or enhance their business continuity plans (BCPs) for coping with catastrophic disasters. In particular, following consultation with the banking industry, the HKMA will issue in December 2002 a guidance note ("the Guidance Note") on business continuity planning. The Guidance Note aims to set out the HKMA's supervisory approach to the matter and the sound practices that the HKMA expects AIs to take into consideration in this regard. A copy of the Guidance Note will be found at the HKMA website (<http://www.info.gov.hk/hkma/eng/bank/spma/attach/TM-G-2.pdf>).

### Implications of 9/11 and Initiatives Taken by the HKMA

Discussions on 9/11 have been held with banks, both individually and as a group, including those whose New York offices were directly affected by the events. There seems to be a general consensus that the main lessons to be drawn from 9/11 include the following:

- the increased level and intensity of the threats faced by financial institutions and the need to cater for disasters that might involve complete destruction of key buildings and

surrounding infrastructure, as well as loss of key staff;

- the risk of geographical concentration of key offices and back-up sites, complicated by the difficulty of getting physical access to back-up sites because of traffic disruption;
- the vulnerability of financial institutions to breakdown of the telecommunications and power infrastructure;
- the need to deal with multiple events affecting service providers, counterparties and customers at the same time;
- the vulnerabilities of certain "choke points" of the financial system such as stock or futures exchanges, clearing firms and inter-dealer brokers, etc; and
- the need to be able to cope with prolonged disruptions and the importance of planning for business survival.

The lessons learnt from 9/11 are certainly relevant to the Hong Kong banking sector as well as the financial services sector as a whole. There is geographical concentration of key offices of many important financial institutions, participants and facilities which make up the financial services sector in Hong Kong. If a wide-scale disaster were to happen to or near these offices and facilities, the

financial system in Hong Kong could be seriously affected.

Recognising the implications of 9/11, the HKMA's supervisory objective is to help ensure that AIs have workable and well thought-through BCPs to protect all the critical areas of their business and to cope with prolonged disruptions. To this end, a circular was issued to AIs in January 2002 offering some preliminary lessons learned from the incident. Since then, the HKMA has also stepped up its reviews of BCPs of strategically important banks and other selected AIs during its on-site examinations. Up to October 2002, the HKMA has performed on-site examinations of BCPs on 16 AIs. Separately, the HKMA has continued its research on the subject and as a result will issue the Guidance Note to set out more comprehensive and detailed guidance on BCP for AIs' reference.

## Key Points of the Guidance Note

### *Scope of business continuity planning*

9/11 highlights the fact that the traditional scope of planning for inaccessibility of a single building for a short period is clearly not adequate. The HKMA recognises that BCPs involve a cost, and that it may not be cost effective to have a fully developed and implemented plan for all worst case scenarios. However, it would seem sensible for AIs to plan on the basis that they may have to cope with the complete destruction of buildings and surrounding infrastructure in which their key offices, installations, counterparties or service providers are located, the loss of key personnel, and that they may need to use back-up facilities for an extended period of time.

AIs may find it useful to consider two-tier plans: one to deal with near-term problems, which

would be fully developed with the physical capacity to put it into immediate effect and the other, which might be in paper form, to deal with a longer-term scenario (e.g. how to lease additional premises and how to accommodate processes that might not be critical immediately but would become so over time).

### *Board and senior management oversight*

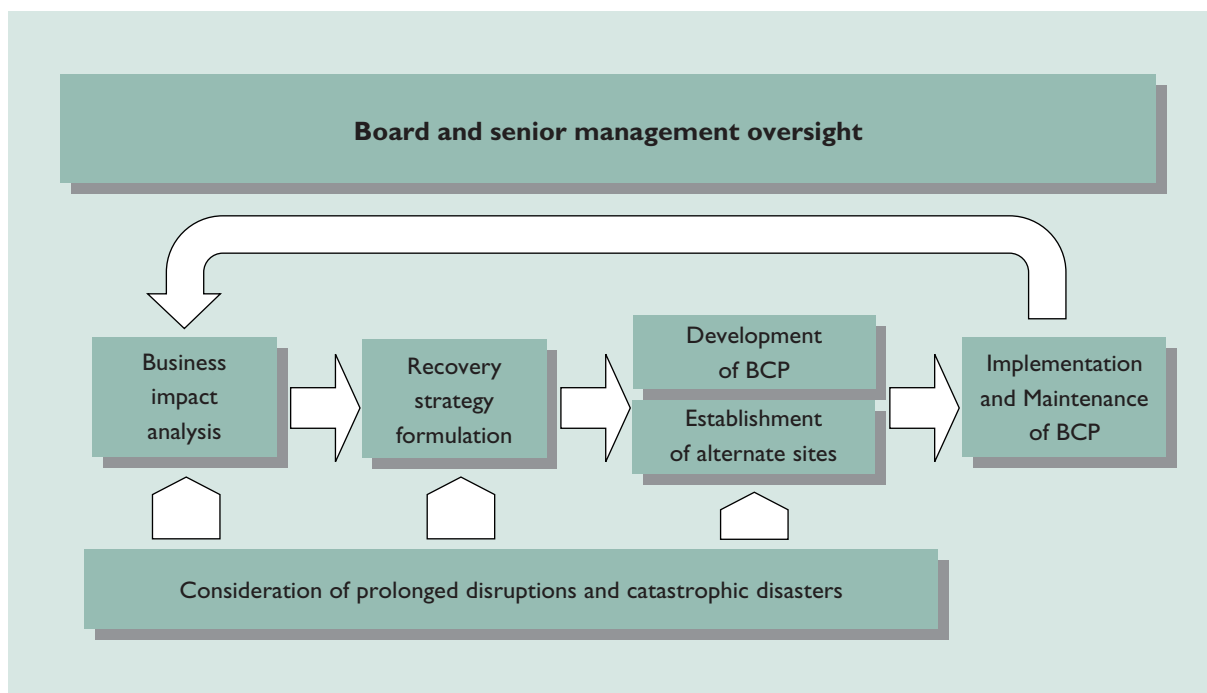
The key role of the Board of Directors<sup>1</sup> and the senior management in overseeing business continuity planning is emphasised in the Guidance Note, as they have the ultimate responsibility for the effectiveness of their BCPs. The senior management should establish policies, standards and processes for business continuity planning, which should be endorsed by the Board. The senior management should ensure that business continuity planning is taken seriously by all levels of staff and sufficient resources are devoted to implementing the plan.

The senior management should establish clearly which function has the responsibility for managing the entire process ("the BCP function"). Such function should submit regular reports to the Board and senior management on major changes to, and testing of, the BCP. Periodic audits of the BCP should also be conducted. In addition, the AI's Chief Executive should sign-off a formal annual statement submitted to the Board on whether the recovery strategies adopted are still valid and whether the BCP is properly tested and maintained. The annual statement will be reviewed as part of the HKMA's on-site examinations.

### *Key stages of business continuity planning*

The Guidance Note describes the different key stages of business continuity planning, as illustrated in the following diagram:

<sup>1</sup> For the purpose of the Guidance Note, the responsibility of Board oversight of business continuity planning for overseas-incorporated AIs in respect of Hong Kong operation should rest with the local senior management.



The HKMA recommends certain sound practices in respect of each stage:

- (a) *Business impact analysis* – AIs should identify critical functions and services that must be maintained and continued in the event of a disaster, and determine the priority and how quickly the AI needs to resume them.
- (b) *Recovery strategy formulation* – Individual critical functions should formulate their own recovery strategies on how to achieve the recovery timeframe and to deliver the minimum level of critical services derived from business impact analysis. Based on the recovery strategies formulated, they should establish the minimum BCP requirements (e.g. relating to alternate sites, human and facilities resources, technology requirements and vital records) for senior management approval.
- (c) *Development of BCP* – AIs should develop and document BCPs, which should include detailed guidance and procedures on how to respond to and manage the various stages of a crisis, to resume and continue critical business services and functions, and to ultimately return to business as usual. In general, the

plans should include details of:

- a crisis management process, a crisis management team (comprising senior management from business and support functions) and a command centre(s) for managing a crisis and containing the damage to avoid spillover effects to the business as a whole;
- business resumption processes (including recovery checklists) as well as business recovery teams (comprising recovery personnel with appropriate knowledge, contact information and sufficient back-up staff members) for recovery of relevant business and support functions;
- recovery of technology resources (e.g. applications, hardware equipment, network infrastructures and other critical equipment), and technology recovery teams with alternate personnel assigned for key team members;
- management of vital records (stored on electronic or non-electronic media e.g. paper records) that are vital for recovery of critical business and support functions;

- a strategy for communication with key external parties (e.g. the media, customers, counterparties, investors and other stakeholders) as well as arrangements for internal communication with staff, parent bank/head office, subsidiaries, etc.; and
- other risk mitigation measures (e.g. insurance coverage and any arrangement for obtaining additional liquidity).

- (d) *Establishment of alternate sites* – Als should examine the extent to which key business functions are concentrated in the same or adjacent locations and the proximity of the alternate sites to primary sites. Alternate sites should be sufficiently distanced to avoid being affected by the same disaster (e.g. they should be on separate or alternative telecommunication networks and power grids). Als should also consider arranging telecommunication links from their alternate sites to the alternate sites of critical counterparties and service providers whose primary sites are close to Als' primary business locations. In addition, Als should pay particular attention to the transportation logistics for relocation of operations to alternate sites.

Als should avoid placing excessive reliance on external vendors in providing alternate sites or other BCP support. Als should satisfy themselves that such vendors do actually have the capacity to provide the services when needed and the contractual responsibilities should be clearly specified.

- (e) *Implementation and maintenance* – Als should test their BCPs at least annually with the participation of senior management, recovery and alternate personnel. Testing should cover the major BCP components as well as co-ordination and interfaces among important parties. Formal testing documentation should be produced. In particular, a post mortem review report should be prepared at the completion of the testing for formal sign-off by Als' senior management.

BCPs should also be kept updated in respect of any relevant changes with proper approval and documentation. Major items (e.g. business impact analysis, recovery strategy, and relevant service level agreements) related to BCPs should be reviewed, say on an annual basis. Copies of the BCP document should be stored at multiple locations in addition to the primary sites.


#### *Business continuity models*

The Guidance Note also describes two business continuity models that could be adopted by Als to handle prolonged disruptions. The first one is the traditional “active/back-up” model, which is based on an “active” operating site with a corresponding alternate site (back-up site). This model may require significant investment if the “back-up site” needs to cater for prolonged disruptions of the “active site”.

Another emerging model is a split operations model, which operates with two or more widely separated active sites for the same critical operations, providing inherent back-up for each other (e.g. call centres for customer services). Each site has the capacity to take up some or all of the work of another site for an extended period of time. This strategy can provide nearly immediate resumption capacity but may incur higher operating costs, in terms of maintaining excess capacity at each site and added operational complexity.

In considering the strategy for coping with prolonged disruptions, Als should form their own judgement based on the risk assessment of their business environment and the characteristics of their own operations.

#### **Way Forward**

The HKMA will continue its research and monitor overseas developments in this area, taking into account guidance being developed by the international regulatory community. The Guidance Note will be updated from time to time to keep pace with the development of sound practices in this area. 

- Prepared by the Banking Development Department