BUSINESS CONTINUITY IN THE UNITED NATIONS SYSTEM

Prepared by

Istvan Posta M. Deborah Wynes

Joint Inspection Unit

Geneva 2011



JIU/REP/2011/6

Original: ENGLISH

BUSINESS CONTINUITY IN THE UNITED NATIONS SYSTEM

Prepared by

Istvan Posta M. Deborah Wynes

Joint Inspection Unit



United Nations, Geneva 2011

EXECUTIVE SUMMARY

Business continuity in the United Nations system JIU/REP/2011/6

Objective

The objective was to review: (a) the existence of business continuity strategies/policies and plans within the United Nations system organizations, identifying commonalities and differences; (b) experiences and best practices relating to their implementation; (c) the liaison and coordination mechanisms among the United Nations organizations in the field of emergency preparedness and business continuity; (d) the functioning and staffing of specialized preparedness and business continuity units for emergency management, including their financing frameworks and funding mechanisms for their operation.

Main findings and conclusions

The report contains nine recommendations, one of which is addressed to the legislative bodies of the United Nations system organizations, seven to their executive heads, and one to the Secretary-General of the United Nations in his capacity as the Chairman of the United Nations System Chief Executives Board for Coordination (CEB). Lessons learned from real life events experienced by the United Nations system organizations are offered in chapter IV.

The general level of business continuity preparedness in the United Nations system organizations is well below the recommendations of the relevant international standards. A handful of organizations have started business continuity implementation in a comprehensive way while most organizations are just recognizing it as an issue that needs to be addressed. Only a few organizations have an approved business continuity policy and plan. This results in a lack of knowledge throughout an organization about the purpose of business continuity management and intentions of senior management, which further leads to inadequate political and financial support of Member States.

Different elements of business continuity are handled in isolation rather than holistically. Often, criteria for prioritizing critical functions and staff performing them are missing, resulting in a large number of activities deemed to be critical. In virtually all organizations, recovery time objectives tend to be unrealistically short and when resumption of activities depends on information and communication technology, usually there is an expectation gap between the requirements stated in the business continuity plans and what the information and communications technology (ICT) offices can deliver.

In order to improve the low level of business continuity management in the United Nations system organizations, stronger senior leadership commitment and support of the Member States is required; dedicated human and financial resources need to be allocated; business continuity policies/strategies and plans should be developed and responsibility for implementation of the approved policies/strategies should be assigned. Business continuity plans should be based on risk assessments, identified critical functions and recovery time objectives (**Recommendations 1 and 3**).

Organizations which have dedicated units/persons for management of business continuity have more evolved business continuity management activities. The business continuity

function is housed in different parts of each organization, largely depending on where business continuity as a concept originated. Placing it within security or information technology often results in a piecemeal approach with a heavy focus on that aspect of business continuity. In order to achieve overall coherence in business continuity, business continuity managers should be placed in the office of the executive head or the executive office for management (**Recommendation 2**).

Most organizations lack the human and financial resources at their headquarters to provide adequate guidance and technical assistance in the implementation of business continuity to their field offices. The guidance provided is sometimes prescriptive and bureaucratic, adding more complications than assistance. Cooperation among United Nations entities in the field in terms of business continuity is not very close, although they mostly face the same risks, the impacts of which could be handled jointly and locally. Interaction and exchange of experiences and lessons learned among the United Nations organizations should be improved.

The scope of business continuity plans should be organization-wide and field offices should be provided with tailor-made guidance from their headquarters. There should be a mechanism of overview and control in place to ensure coherence and interoperability of the field offices' business continuity plans with their headquarters and with the United Nations country team. The resident coordinators should overview the knowledge sharing, cooperation and complementarity of business continuity preparedness of the United Nations organizations in their duty stations (**Recommendations 4 and 5**).

Insufficient assignment of responsibility and lack of accountability are damaging successful implementation. Unless a person(s) is held accountable for the ongoing exercise, maintenance, review and update of a business continuity plan, the process will not be kept alive. These tasks should be included in the job descriptions and performance evaluations of line managers and business continuity coordinators (**Recommendation 6**).

General awareness of United Nations staff of business continuity is low. Critical staff are generally able to perform their tasks, mostly through regular telecommuting. However, there are no business continuity career or training programmes offered, even for business continuity managers. Organizations should ensure that business continuity training is incorporated in staff development and induction courses for all staff and that periodic training is provided to critical staff as an integral part of business continuity management (**Recommendation 8**).

Inter-agency cooperation on business continuity issues is weak and of an ad hoc nature. There are economies of scale to be gained from mutual backups, a common approach to business continuity, interoperability of the organizations' business continuity plans, exchange of knowledge and expertise within the system etc. For this, more organized system-wide cooperation and harmonization of practices are required and can be discussed within the HLCM/CEB forum (**Recommendation 9**).

Recommendation for consideration by legislative organs

Legislative bodies of the United Nations organizations should, on the basis of the executive heads' budget proposals, provide the necessary financial and human resources for the implementation, continuous monitoring, maintaining and updating of the approved business continuity plans developed on the basis of the business continuity (BC) policy/strategy of the organization (Recommendation 7).

CONTENTS

			Page
	EXECUTIVE SUMMARY		iii
	ABBREVIATIONS		vi
	Chapter	Paragraphs	
I.	INTRODUCTION.	1-26	1
	A. Objective	5-8	1
	B. Scope	9-12	2
	C. Background	13-19	2
	D Business Continuity in the United Nations	20-26	4
II.	BUSINESS CONTINUITY MANAGEMENT		
	PROGRAMME	27-81	6
	A. Business Continuity Strategy and Policy	27-30	6
	B. Business Continuity Management	31-43	7
	C. Business Continuity Planning	44-65	11
	D. Exercise, Maintenance, Review and Updating	66-74	16
	E. Training	75-81	18
III.	SAFETY AND SECURITY AND ICT ELEMENTS		
	OF BCM	82-97	20
	0 2		
IV.	LESSONS LEARNED FROM REAL LIFE		
14.	INCIDENTS	98-110	23
V.	INTER-AGENCY COOPERATION	111-116	27
٧.	INTER-AGENCI COOLERATION	111-110	21
	EXES		
I.	Overview of the BCM in the United Nations system organizations		29
II.	Self-assessment of business continuity maturity by organizations		30
III.	Overview on action to be taken on recommendations		32

ABBREVIATIONS

ACABQ Advisory Committee on Administrative and Budgetary Questions

BC Business continuity

BCM Business Continuity Management

BCMU United Nations Secretariat: the Business Continuity Management Unit

BCP Business Continuity Plan

B-GAN Broadband Global Area Network

CEB United Nations System Chief Executives Board for Coordination (formerly

ACC)

DFS Department of Field Support (UNHQ)
DM Department of Management (UNHQ)
DPA Department of Political Affairs (UNHQ)

DPKO Department of Peacekeeping Operations (UNHQ)

DR Disaster Recovery

DRC Democratic Republic of the Congo

DRP Disaster Recovery Planning

ECLAC Economic Commission for Latin America and the Caribbean

ERM Enterprise Risk Management

FAO Food and Agriculture Organization of the United Nations

HLCM UN System High-level Committee on Management

IAEA International Atomic Energy Agency
ICAO International Civil Aviation Organization
ICT Information and communication technology

IFAD International Fund for Agricultural Development

ILO International Labour OrganizationIMO International Maritime Organization

IT Information technology

ITU International Telecommunication Union

JIU Joint Inspection Unit

MONUSCO United Nations Organization Stabilization Mission in the Democratic

Republic of the Congo

OCHA Office for the Coordination of Humanitarian Affairs
OHCHR Office of the High Commissioner for Human Rights

RTO Recovery time objective

SARS Severe acute respiratory syndrome SEPT Senior Emergency Policy Team

UNDP United Nations Development Programme

UNDSS United Nations Department of Safety and Security

UNEP United Nations Environment Programme

UNESCO United Nations Educational, Scientific and Cultural Organization

UNFPA United Nations Population Fund

UNHCR Office of the United Nations High Commissioner for Refugees

UNICC United Nations International Computing Centre

UNICEF United Nations Children's Fund

UNIDO United Nations Industrial Development Organization

UNLB United Nations Logistics Base

UNODC United Nations Office on Drugs and Crime
UNOPS United Nations Office for Project Services

UNRWA United Nations Relief and Works Agency for Palestine Refugees in the Near

East

UNWTO World Tourism Organization

UPU Universal Postal Union
WFP World Food Programme
WHO World Health Organization

WHO/Europe World Health Organization Regional Office for Europe

WIPO World Intellectual Property Organization
WMO World Meteorological Organization

I. INTRODUCTION

- 1. As part of its programme of work for 2011, the Joint Inspection Unit (JIU) conducted a review of business continuity in the United Nations system organizations. JIU has not reviewed the subject matter before. The proposal for the review was submitted by the United Nations Children's Fund (UNICEF) and supported by 12 United Nations system organizations. The real-life events such as the ones described below are the main reason for the high level of interest in this topic.
- 2. On Saturday, 27 February 2010, at around 3:00 a.m. local time, Chile was hit by an 8.8 magnitude earthquake. Although the centre of the earthquake lay south of the capital, the impact was felt considerably in Santiago as well. As a result, the Economic Commission for Latin America and the Caribbean (ECLAC) premises suffered some damage, especially the older part of the building where approximately 300, or 50%, of all ECLAC work stations were located. Consequently, ECLAC had to set up temporary work spaces for 300 staff.
- 3. In Cairo, during the Egyptian "Arab Spring", mobile telephone communication was cut off from 28 to 29 January and internet communication was blocked from 28 January to 2 February 2011. Text messaging was possible in certain places as soon as the mobile network was back on, while in other places, difficulties existed for another 2-3 weeks. Loss of communication traumatized people. Staff were unable to go to their offices due to the curfew and the security situation. The Resident Coordinator, as the Designated Official for Security, based on advice from United Nations Department of Safety and Security (UNDSS), decided that non-essential staff and family members should be evacuated.
- 4. In the past year, areas of Copenhagen have been affected by three floods: in August 2010, on 2 July 2011 and 14-15 August 2011. The flood of 14-15 August 2011 was far more serious than the previous two. The equivalent of more than one month's rainfall fell in two hours. This caused a serious leak on the roof of UN House, which resulted in the flooding of two floors. The severity of the flooding was such that the disaster management company assessed that return to the affected floors would not be possible for at least two months. The heavy rains also caused repeated sewage floods which greatly affected the WHO/Europe office situated in a different building.

A. Objective

- 5. United Nations system organizations provide essential services for people in different parts of the world. Business continuity and within it emergency preparedness and disaster recovery are issues of growing importance given the circumstances in which the United Nations organizations operate and their reliable, continuous, uninterrupted operation is an important element of the public image of the United Nations system.
- 6. Business continuity management essentially provides a framework on the basis of which an organization builds its resilience and facilitates the continuation of its operations in the event of disruption of business activities. To minimize the impact of disruptions, in recent years, several United Nations organizations have started developing business continuity plans for their headquarters and centres away from headquarters, including country offices. These plans are aimed at ensuring that United Nations funds, programmes, specialized agencies and IAEA are able to function and fulfil their respective mandates in all circumstances.
- 7. General Assembly resolution 63/268 stressed the need for a coordinated approach to business continuity management between the United Nations Secretariat, offices away from

Headquarters and the regional commissions, including systematic support, appropriate coordination structures and regular consultations between the business continuity management focal points in New York and in other duty stations. It further stressed the need for the Secretariat to draw upon the experiences of other United Nations entities and to coordinate with host country authorities in formulating the business continuity strategy. The General Assembly requested the Secretary-General to strive for economies of scale through coordination among organizations within the United Nations system on relevant issues.

8. The objective was to review: (a) the existence of business continuity strategies/policies and plans within the United Nations system organizations, identifying commonalities and differences; (b) the experiences and best practices of their implementation; (c) the liaison and coordination mechanisms among the United Nations organizations in the field of emergency preparedness and business continuity; (d) the functioning and staffing of specialized preparedness and business continuity units for emergency management, including their financing frameworks and funding mechanisms for their operation.

B. Scope

- 9. The review covered JIU participating organizations. In accordance with the internal standards and guidelines of JIU and its internal working procedures, the methodology followed in preparing this report included a preliminary review, questionnaires, interviews and in-depth analysis. Detailed questionnaires were sent to all participating organizations. The Inspectors regret that eight organizations did not provide a response to the JIU questionnaire despite repeated requests (UNODC, UNEP, UN-Habitat, UNHCR, ILO, WMO, IMO, UNWTO). On the basis of 17 responses received, the Inspectors conducted interviews in person or through videoconferences with officials of the participating organizations as well as the Secretariat of CEB. Comments from participating organizations on the draft report have been sought and taken into account in finalizing the report.
- 10. In accordance with article 11.2 of the JIU statute, this report has been finalized after consultation among the Inspectors so as to test its conclusions and recommendations against the collective wisdom of the Unit.
- 11. To facilitate the handling of the report and the implementation of its recommendations and the monitoring thereof, annex III contains a table indicating whether the report is submitted to the organizations concerned for action or for information. The table identifies those recommendations relevant for each organization, specifying whether they require a decision by the organization's legislative or governing body or can be acted upon by the organization's executive head.
- 12. The Inspectors wish to express their appreciation to all who assisted them in the preparation of this report, and particularly to those who participated in the interviews and so willingly shared their knowledge and expertise.

C. Background

13. Business Continuity Management is defined as "a holistic management process that identifies potential threats to an organization and the impacts to business operations that those threats, if realized, might cause, and which provides a framework for building organizational

resilience with the capability for an effective response that safeguards the interests of its key stakeholders, reputation, brand and value-creating activities. 1"

- 14. Business Continuity Management (BCM) is strongly related to crisis and incident management, and emergency planning. These approaches however are linked to a specific incident type or an event and do not suggest an organization-wide multi-hazard approach to dealing with threats that might cause them. For example, with H1N1 influenza, officials around the world, not just in the United Nations, adopted specific measures, (quarantining flustricken employees, providing contamination prevention information etc.); but their measures would not have ensured the organization's ability to continue with its operations if a significant percentage of its employees had become sick.
- 15. Business Continuity Management evolved from Disaster Recovery Planning (DRP) related to information and communication technology (ICT). The best known DRP exercise was the expectation of the millennium bug (Y2K). The effort to codify disaster management during the preparation for Y2K resulted in several standards, which focused exclusively on ICT management and systems recovery. Disaster Recovery Planning resulted in the formation of professional societies, institutes and professional accreditation programmes. Soon it became clear that entire organizations, not just their data, needed protection, because information technology (IT) continuity does not warrant business continuity; it is a subcomponent of BCM, but it does not guard against non-IT threats.
- 16. The continued occurrences of major disruptive events, such as natural disasters and terrorist attacks, widened the scope of disaster and contingency planning to continuity planning first in the private sector and later in the public sector. Several major standards on business continuity were developed. Today, business continuity is largely defined by the following internationally used standards, all of which offer a definition of business continuity management based on the definition from BS 25999:
 - (a) BS 25999, Business Continuity Management, Part One: Code of Practice (2006) and Part Two: Specification (2007)²
 - (b) ISO 22399, Societal security Guideline for incident preparedness and operational continuity management (2007)³
 - (c) ASIS SPC.1-2009, American National Standard, Organizational Resilience: Security, Preparedness, and Continuity Management Systems Requirements with Guidance for Use (2009)
 - (d) ASIS/BSI Business Continuity Management Standard, Requirements with Guidance for Use $(2010)^4$
- 17. Business Continuity Management exists within the larger context of Enterprise Risk Management (ERM); however, unlike ERM, which identifies, assesses, evaluates, prioritizes and controls risks across an organization, BCM deals with the consequences of business interruption. Usually, interruptions are caused by low likelihood, high impact risk of a

¹ BS25999-1, British Standards Institute, Code of practice for business continuity management.

² A Management Guide to Implementing Global Good Practice in Business Continuity Management, by the Business Continuity Institute is based on BS 25999.

³ ISO 22301, Societal security – Business Continuity Management Systems – Requirements is a new standard under development expected to be published in 2011.

⁴ Based on BS 25999 Part 1 and 2.

catastrophic nature (so-called black swans). Managers realized that scenario analysis, which leads to development of pre-designed response activities, can help in dealing with the aftermath of increasingly frequent natural disasters, pandemics, utility outages, unavailability of data, information and communication means etc.

- 18. The field of BCM is constantly evolving; some practitioners are already dealing with organizational resilience, which they view as a larger concept. For them, business continuity is a response planning mechanism that concentrates on recovery of business operations, so it is reactive, while organizational resilience incorporates procedures and processes to reduce the risk of disruptive events actually happening, so it is proactive.
- 19. For the purpose of this report, the Inspectors do not wish to advocate usage of one standard over the others or to focus on the difference between business continuity and organizational resilience. The Inspectors are pleased that some organizations are embracing the concept of organizational resilience; however, the fact is that most United Nations organizations are just recognizing the importance of business continuity planning and are at the very beginning of the process. In the Inspectors' opinion, those organizations should put the basics in place first: business continuity practices in an organization have to reach a certain level of maturity before an organization can plan for strengthening its resilience. In reaching this stage, any BCM related standard coupled with the experience of other United Nations organizations will offer a good stepping stone.

D. Business Continuity in the United Nations

- 20. The Chief Executive Board for Coordination, in its Conclusions of the fourth session of the High-level Committee on Management⁵ stated that planning for Y2K and the events of 11 September 2001 had brought to light a number of concerns relating to organizations' preparedness to meet emergencies and to put business back on track after catastrophic events. The report identified the United Nations Secretariat, UNICEF and UNDP as organizations which had advanced furthest in terms of emergency preparedness.
- 21. Attacks against the United Nations began to become more frequent in the new millennium. The tragic events in Baghdad and Algiers contributed to the introduction of robust security standards within the United Nations system. The threats of SARS and avian influenza clearly showed the need for pandemic preparedness. These tragedies and crises, together with a resurgence of natural disasters, exposed the organizations' vulnerabilities and resulted in first attempts to deal with business continuity in the United Nations. A brief system-wide survey carried out by CEB in October 2007 on the existence, content, structure and types of scenarios covered by the Business Continuity Plans for Financial Operations showed that emergency preparedness and business continuity plans for financial operations (United Nations Secretariat, ILO, UNESCO, WHO, UNDP), and by some to address different levels of emergency (UPU, IAEA and UNFPA). Only UNICEF appeared to be on the way to developing a full business continuity plan.
- 22. The General Assembly noted a piecemeal approach to business continuity in initial reports of the Secretary-General⁷ and requested a comprehensive review covering all business continuity activities, including those related to pandemics and other kinds of emergency

⁶ CEB/FB/2007/INF.1

_

⁵ CEB/2002/5

⁷ A/62/328,

planning and disaster recovery and business continuity in the area of ICT (A/62/7/Ad.2) and A/RES/62/238.

- 23. The more frequent occurrences of utility outages, natural disasters, bomb attacks on United Nations offices, H1N1, etc. showed that focus on pandemic preparedness, security or financial operations only was not sufficient and that business continuity management involved a holistic, multi-hazard approach. Today, generally speaking, United Nations organizations increasingly recognize the importance of business continuity planning, but it still remains a challenge for most of them to position it as a valuable part of organizational governance. Organizations have not yet moved from managing business continuity as a programme to embedding it into everyday managerial culture.
- 24. The degree to which BCM in the United Nations system organizations exists is very varied. Based on the responses received and interviews carried out by the Inspectors, it is evident that large organizations, or organizations with operational or verification type of activity (United Nations Secretariat, UNICEF, UNDP, WFP, UNOPS, IAEA) are at a more advanced stage of business continuity management than others. Small organizations and organizations with normative mandates are less developed in BC terms. A number of organizations are in the process of formulating their business continuity approach and basic structure of its management (FAO, UNFPA, WIPO, UNIDO, ICAO).
- 25. The fact that an organization does not have a formal business continuity management programme in place does not mean that important elements of business continuity do not exist. Security of personnel and premises and emergency notification systems in all organizations received attention through the United Nations security systems and standards. Medical emergency preparedness became important with pandemic threats. Information and communication technology has well established backup procedures and disaster recovery plans due to the nature of the services they are providing and generally accepted best practices in that field. However, all these initiatives exist in isolation, without overall coherence. The aim of business continuity management framework is to ensure that all individual initiatives complement and strengthen each other.
- 26. The Inspectors asked all participating organizations to perform a self-assessment of how mature their BCM programmes are. Based on the results in annex I it is evident that only a few of the organizations have a comprehensive framework for BCM in place and have started its implementation. The United Nations Secretariat assessed itself at the highest level of maturity, meaning that their BCM is managed. UNFPA, UNICEF, UNOPS and UNIDO evaluated their BCM as incomplete, while UNDP, WFP, FAO, UNESCO, ICAO, WHO, ITU, WIPO, UPU and IAEA are at an interim stage. The Inspectors believe that these assessments in some cases are overstated compared to the Inspectors' findings from interviews with the officials of these organizations. Furthermore, the Inspectors have reason to believe that the organizations which did not respond to the questionnaire have either limited or unmanaged BCM.

II. BUSINESS CONTINUITY MANAGEMENT PROGRAMME

A. BUSINESS CONTINUITY STRATEGY AND POLICY

Recommendations from international instruments⁸

27. The BCM policy is the key document that sets out the scope and governance of the BCM programme and reflects the reasons why BCM is being implemented. It provides the context in which the required capabilities will be implemented by BCM teams and identifies the principles to which the organization aspires and against which its performance can be audited. It is a short, clear and to-the-point statement signed by the most senior management, which drives the BCM programme. It provides a high-level overview of BCM objectives and expectations.

28. The BCM policy is owned by the most senior management of the organization; it is driven from the top, strategic level. To be effective, the policy has to be communicated to the entire organization and its stakeholders. To ensure that the policy is aligned with management's strategic vision and the organization's goals, it should be reviewed on an ongoing basis. Having a BCM policy is a foundation for successful BCM. It provides motivation for middle management and staff to complete the necessary activities.

Situation in the United Nations system organizations

29. Among the United Nations system organizations, there are just a handful which have an approved BC policy or strategy: United Nations Secretariat, UNDP, UNICEF, UNIDO, UNOPS, FAO, UPU and WHO. Some of the approved policy documents are not complete, do not contain all of the above-mentioned essential elements and communication to or involvement of the stakeholders is rare. There are organizations, such as WFP, IAEA, and WIPO, which are developing BCM, but do not have an approved policy document. The Inspectors found that not having a policy statement results in lack of information and knowledge throughout an organization about the intentions and purpose of BCM. This further results in inadequate political and financial support of Member States and insufficient attention on the part of middle management.

30. The implementation of the following recommendation is expected to enhance the effectiveness of business continuity management programmes across the United Nations system organizations.

Recommendation 1

The Executive Heads of the United Nations system organizations who have not done so yet should develop business continuity policy/strategy, including the assignment of business continuity management with responsibility for implementation, to be submitted for information to the legislative bodies.

⁸ The Good Practice Guidelines 2010, A Management Guide to Implementing Global Good Practice in Business Continuity Management, the Business Continuity Institute; http://www.thebci.org/gpg.htm

B. BUSINESS CONTINUITY MANAGEMENT

Recommendations from international instruments⁹

- 31. Clearly defined roles, responsibilities and authorities to manage the BCM programme and process throughout the organization are established in the BCM policy. A member of senior management should be given overall accountability for the organization's overall BCM capability. This will ensure that the BCM programme is given an appropriate level of importance within the organization.
- 32. Business Continuity Management is an iterative process, which needs to be actively managed. Initially, BCM can be managed using a programme management approach, but as BCM matures, it should be embedded in the organization's managerial culture. Implementing a BCM programme involves: raising awareness in the organization; collecting various data to determine the activities which need to be continued to support organizational objectives; developing plans to respond to and measures to mitigate the impact of incidents that might occur; and exercising contingency plans. Additionally, in the case of organizations with field offices, coordination and overview of BCM activities of those offices is necessary.
- 33. A critical success factor in the management of BCM programmes is dedication of human and financial resources. The senior management of an organization should appoint a competent person/team/unit to lead, oversee and manage the programme and they should ensure that adequate financial resources are provided to them. Equally critical is the placement in the organizational structure.
- 34. Whether the BCM function will be the responsibility of a whole unit, small team or a part-time/full-time individual depends on the size of an organization. The roles and responsibilities of these individuals should be included in their job description and their performance evaluated in the appraisal process. They should have appropriate training and in the case of large organizations, professional certification may be desirable.

Situation in the United Nations system organizations

35. There is a very mixed picture regarding the assignment of responsibility for management of BCM programmes in the United Nations system organizations. There are organizations which have a dedicated person or unit, some where a dedicated person performs BCM related activities in conjunction with other responsibilities, some that have a person appointed on a provisional basis, others that are in the process of making the appointment, and others that do not have anyone assigned for this purpose.

_

⁹ Ibid.

n/unit	United Nations Secretariat: the Business Continuity Management Unit (BCMU) situated in the office of the Assistant Secretary-General for Central Support Services, Department of Management, comprises a P5 Chief, P4 BC Specialist and G5 Administrative Assistant ¹⁰
Dedicated person/unit	UNICEF: a P4 Business Continuity Manager, situated in the office of the Director of Emergency Programmes, was until September 2011 supported by a P2 BC Analyst and GS-4 Administrator
Dec	UNDP: a P4 BCM Advisor is placed in the Security Office/Bureau of Management reporting to the Director of Security Office, Bureau of Management
	UNFPA: a P5 Senior Adviser, Enterprise Risk Change Management and Business Continuity, is responsible for the development of the BCM programme
	UNIDO: a P5 Senior Security Coordinator is responsible for BCM
>.	UNOPS: a P5 Chief of Security through a D1 Director of Corporate Support Group reports to the Executive/Deputy Executive Director
Part-time responsibility	UPU: a P5 Postal Security Manager is responsible for BCM
ime resp	WHO: One technical officer is in charge of BCM on a short-term, part-time basis
Part-ti	IAEA: Central Security Coordinator, P5, situated in the office of the Deputy Director General of Management, is tasked with the establishment of an overall IAEA disaster recovery/business continuity plan. Additionally, a cost-free P4 expert is soon to be hired
	WIPO: a D level Chief Information Officer is responsible for developing BCP with the involvement of a part-time consultant
	ITU: a P3 Executive Officer, in the Office of the Secretary-General, is in charge of reviewing the ERM & BCM processes
sional Itment	WFP: A senior BCM consultant was hired to work with a BCM Working Group, comprising the BC focal points from each of the WFP HQ Divisions, on the formulation of a BCM Programme. The Working Group is chaired by the Director of Emergencies.
Provisional appointment	FAO: Internal Audit is the initial catalyst for BC activities at FAO, which will, after putting in place a BC mechanism, transfer the responsibility for BCM to a new unit to be created or an already existing one.

¹⁰ Additionally, Departments for Peacekeeping Operations and Field Support (DPKO/DFS) within the Office of the Under-Secretary-General, have a P4 Organizational Resilience Officer, who is supported by one Administrative Assistant in conducting business continuity functions. They report to a P5 Focal Point for Security.

- 36. When the above table is compared with the self-assessments in annex ii (albeit overstated as already earlier noted) it is evident that organizations which have dedicated units/persons for management of BCM programmes have more evolved BCM activity than organizations which do not. When responsibilities and accountability are clearly defined, individuals have a strong sense of ownership of the activities they are required to perform.
- 37. The Inspectors noted that in most organizations, business continuity related issues are still dealt with in silos; for example, IT deals with business continuity in isolation from security, finance, emergency planning etc. This is mostly due to lack of a comprehensive vision and insufficient knowledge about an integrated approach to BCM.
- 38. The placement of a BCM manager in an organization is equally varied. It partly depends on how BCM came to be introduced: if the catalyst has a security/IT/risk management background, often that individual becomes the BCM manager and the responsibility is placed in the office that that individual already professionally belongs to. The Inspectors found that the BCM manager's role could be influenced by his/her background and experience as well as by his/her placement in the organizational structure; BCM managers might see security/IT/risk management as the key issue and neglect others. Furthermore, their direct responsibility in security/IT/risk management does not extend to the entire organization. This may be an issue for sustainability of the BCM programme.
- 39. The Inspectors found that when BCM managers are placed in the office of the Executive Head or the Deputy for Management and Administration, it is easier to achieve overall coherence and harmonization of different components of business continuity. Placing BCM in the office of the Executive Head also sends a message from the top about the importance the senior management gives to BCM.
- 40. All those interviewed by the Inspectors agree that the commitment of higher management is crucial for successful implementation of BCM in any organization. The importance of BCM in organizational governance increases when there are events that obviously show its benefits (see the case studies of Santiago de Chile, Cairo and Copenhagen in paragraphs 98-110), but the commitment is more challenged when operations run without unplanned interruptions for a longer period. In such circumstances outside impetus such as stronger formulation of member States expectation or system-wide managerial "messages" from the CEB machinery contribute to increasing commitment by high-level leadership to BCM. The history of the evolution of particular elements of the business continuity shows that when such impetus existed (e.g. security aspect of the BC, pandemic preparedness) it resulted in high responsiveness of the leadership of the individual organizations of the United Nations system. In the Inspectors' view, in order to improve the low-level BCM situation in United Nations system organizations, stronger senior leadership commitment and support of Member States is required; such outside impetus is needed to stimulate changes towards a holistic handling of BCM.
- 41. The commitment of management or lack thereof is at its most obvious in the budgetary proposals made to the governing bodies. Most organizations manage to finance BCM activities through ad hoc budgetary decisions and not through approved budgetary allocations. However, BCM constantly competes with other organizational priorities and if an organization does not have to deal with any incidents for a long time, it is easy for the management to forget about the value of BCM. BCM is one of the first items to experience budget cuts, especially during a period of reducing management-related expenditure reductions due to budgetary restraints. It is reflected in the fact that, besides the United Nations Secretariat, which has a dedicated BCM Unit and budget comprising mostly staff costs, only IAEA, ITU, UNOPS and WFP have proposed budget allocation for BCM in their

- 2012-2013 budget proposals. However, the Inspectors find it contradictory that most organizations they visited reported commitment by senior management to BCM.
- 42. The Inspectors find this alarming. They would like to point out that successful implementation of BCM does not require a significant investment (except for IT investment, which is not usually budgeted as a BC allocation). The investment is larger at the beginning of BCM implementation and more so in terms of staff time than monetary investment. However, small but sustainable financial resources are necessary to perform the required activities of testing, updating and monitoring. If the investment is not sustained, the BCM programme will suffer in quality, or completely end, which would mean that the human and financial resources already invested would be wasted (see recommendation 7).
- 43. The implementation of the following recommendation is expected to enhance control and compliance with business continuity policies/strategies of the United Nations system organizations.

Recommendation 2

Executive Heads should place business continuity management in the office of the executive head or the executive officer for management.

C. BUSINESS CONTINUITY PLANNING

Recommendations from international instruments¹¹

- 44. The BC Plan is a central pillar of BCM. It is a documented collection of procedures and information that have been developed, compiled and maintained in readiness for use in an incident, to enable an organization to continue to deliver its important and urgent activities at an acceptable predefined level. The term Business Continuity Plan implies having a single document, but in practice, it usually consists of multiple plans corresponding to five stages of the BC cycle: emergency response, incident management, continuity, recovery and resumption.
- 45. Traditionally, organizations used to have a Crisis Management Plan, Security Plan, IT Disaster Recovery Plan, Medical Response Plan, Pandemic Plan etc. The Business Continuity Plan comprises these individual plans, which need to be integrated and viewed holistically in order for an organization to be able to deal with the multitude of risks it faces.
- 46. Before the BC Plan can be developed, the senior management of the organization has to take a position, on the basis of the organizational strategy, on which services or products of the organization are to be delivered as a priority in the event of interruptions, so that the organization is capable of fulfilling its mandate. This is followed by identification of the business units and activities which support delivery of those services/products. This will determine the scope of BCM. Limitation of BCM scope is a strategic decision. If a particular service/product is chosen to be continued, then it is necessary to ensure that various activities supporting its delivery can be continued or recovered within required timescales. Dependencies on suppliers and partners should also be considered.
- 47. The purpose of the process, called Business Impact Analysis, is to document, for each critical activity, the impact over time that would result from its loss or disruption and the maximum amount of time that an organization can afford to exist without that activity, i.e. the time within which the activity has to be resumed, the so-called recovery time objective (RTO). 12 Furthermore, the critical staff necessary to perform critical activities are to be identified and adequately trained on the use of the BC Plan and any accompanying software and equipment.

Situation in the United Nations system organizations

- 48. Of the United Nations system organizations, only a few have developed, approved and signed BC Plan: the United Nations Secretariat, UNOPS, UNICEF, UPU, ¹³ IAEA and FAO. Several organizations have their plans drafted, but not yet approved or are working on the development of their BC Plans: OHCHR, UNDP, WFP, UNESCO, WIPO, UNIDO, WHO, UPU, ICAO and UNFPA.
- 49. The Inspectors became aware of efforts by some organizations which are in the early stages of BCM development to benefit from the experience and knowledge of organizations which are in the more advanced stages. For example, WFP, FAO and ICAO are consulting with the United Nations Secretariat in their BCM development process. These relationships

¹¹ *Ihid*.

¹² RTO is usually measured in hours, i.e. activities to be resumed in 0-4, 4-24 hours.

¹³ The UPU business continuity plan was approved by their governing body in 2010; however, the plan has not yet been signed or entered into force.

depend on personal and informal contacts; however, there are no formal channels of communication for exchange of practices; the existing relationships have weak institutional frameworks. The need for enhanced cooperation among the United Nations system organizations was highlighted to the Inspectors in each interview. (see more details in paragraphs 111-116)

- 50. The Inspectors reviewed multiple BC plans and noted that organizations often assess common risks when identifing critical functions and determining the RTOs. This implies that having a forum in which organizations could share and compare their assessments and templates would be beneficial.
- 51. Many organizations already have an established risk management function, and maintain a corporate risk register, so threat assessment may already be available. However, the Inspectors noted that risk assessments for BC purposes are often not handled within the already existing risk management frameworks of the United Nations organizations. In some organizations, the Inspectors were informed that services of consultants would be procured for this purpose, although these organizations already have an established risk management function. The Inspectors are not only concerned about the cost of such services, but the quality of products that some consultants deliver based on their limited understanding of the United Nations operating environment. The Inspectors stress that internal organizational expertise should be used first and that it should be complemented with the knowledge already existing in the United Nations system.
- 52. While there is no prescribed frequency for performing risk assessments for BC purposes, the Inspectors are concerned that many organizations rely on their initial assessment although the environment in which they operate has changed. If the risk assessment is not performed periodically, the recovery and resumption strategies put in place for critical activities based on the outdated risk assessment can become ineffective.
- 53. The Inspectors found in several organizations that criteria for prioritizing the critical functions and the staff performing them are missing, resulting in a large number of activities/staff deemed to be critical. Criticality is often taken out of context and misinterpreted: i.e. if one is deemed not to be critical, this might result in budgetary cuts. Because of this, recovery time objectives are frequently too short; for example, in several organizations, recovery of the management of duty travel (not medical, emergency or evacuation travel, but regular duty travel) or performance of oversight activities are stated as critical, to be achieved in 0-4 hours after an incident, whereas, clearly, the reputation of any of the United Nations organizations would not be at risk if these activities were not resumed in the first four hours.
- 54. Virtually all activities rely on software applications, which means that for performance of activities required to be resumed in 0-4 hours, the related applications need to be available immediately; usually this also means that remote access to those applications is required. The Inspectors observed two issues: (a) some processes can be executed using manual workarounds, however, workarounds are not considered by many organizations; (b) in almost all organizations that have their BC Plans drafted there is an expectations gap between what the users state as required and what their ICT offices can deliver. The Heads of ICT offices in virtually all organizations emphasized that reconciliation between expectations and ICT capabilities has to be performed, meaning that further integration of their IT business continuity and disaster recovery plan and BC Plan for the organizations is necessary.
- 55. In many organizations, the senior management has not decided which organizational services/products have to be delivered under all circumstances. As a result, middle and

operational management are making this decision on their own, making it more of a bottomup then top-down approach. Strong corporate-level priority setting is missing and causing excessive and contradictory selection of critical activities/staff/applications from different units in an organization. It is important to understand that, theoretically, all functions could be treated as critical, all activities could be resumed in the first four hours, and all applications could be made available immediately. This would, however, have prohibitive cost implications. This is precisely why activities, staff and applications performing and supporting them need to be prioritized.

56. The implementation of the following recommendation is expected to enhance the effectiveness of business continuity planning in the United Nations system organizations.

Recommendation 3

The Executive Heads of the United Nations system organizations who have not done so yet should develop and approve a documented business continuity plan based on a risk assessment, identified critical functions and recovery time objectives.

Geographical scope of a Business Continuity Plan

57. The United Nations Secretariat's Policy Statement on Business Continuity Management applies to all departments, offices and units of the United Nations Secretariat, offices away from Headquarters and regional commissions in Geneva, Vienna, Nairobi, Addis Ababa, Bangkok, Beirut and Santiago. BC Plans exist at departmental level and are overseen and monitored by the Business Continuity Management Unit. However, the BC Plans in the regional commissions and offices away from Headquarters are very uneven and inconsistent. The Inspectors noted that for effective BC activity in locations away from headquarters, cooperation with BCMU in New York, and also with other United Nations entities in the duty station is required. The major obstacle to this cooperation is different levels of BCM development in organizations at the same duty station, the inadequacy of allocated human resources and lack of professional contact among the organizations. In the Inspectors' view, dedicated human and financial resources need to be allocated; interaction and exchange of experience and lessons learned among the United Nations organizations should be improved.

58. The Departments of Peacekeeping Operations (DPKO) and Field Support (DFS) (United Nations Secretariat) have commenced a long-term programme of developing business continuity capabilities in peacekeeping and political missions. They have established a small, two-person team, which apart from covering their salaries, does not have a budget. The unit operates like a service provider: the team's activities are financed by DPKO and Department of Political Affairs (DPA) missions for which they provide training and support on BC issues. The Inspectors noted close cooperation between the DPKO/DFS team and BCMU/DM. Large missions take the DPKO/DFS team to their sites to assist and facilitate the missions in developing their BC plans and to deliver BC-related training to their personnel. The plan development and training always includes mission staff, police and military components. For smaller missions, group training is organized once a year at UNLB in Brindisi. Training is evaluative and each mission's BC focal point is required to draft the BC Plan for his/her mission upon completion of the course. Subsequently, missions' BC focal points receive support from the team in establishing, monitoring and updating their BC capacity in the field.

59. The Inspectors would like to see other parts of the United Nations Secretariat, which also have field presence, benefiting from this training, namely OCHA, OHCHR, UNHCR and UNRWA. Furthermore, when training in large missions is organized, other organizations

present in that location could be included, for instance when training is delivered at MONUSCO, all agencies present in the DRC should be invited to participate, at least as observers. Sharing knowledge and experience not only helps with the establishment of business continuity in different parts of the organization, but also promotes the use of similar approaches and practices.

- 60. UNICEF, UNDP, WFP, UNOPS and WHO are also organizations with BC Plans for field offices. In some cases, there is a weak link between the BC Plans of headquarters and field offices and also unclear division of responsibility between the headquarters and the field. Organizations which have a significant number of large field offices usually lack human and financial resources at the headquarters to provide adequate guidance or technical assistance to them. In the case of UNICEF and UNDP, there is one BCM manager who simply cannot be stretched far enough to assist and perform technical overview of BCM work at a large number of field offices. Organizations whose field offices are small usually do not provide any guidance from headquarters to them and leave them to work out their BC capability with United Nations country teams (i.e. UNESCO, UNHCR, UNIDO, FAO). The latter approach raises questions concerning the viability of a genuine BC Plan covering the organization as a whole.
- 61. The Inspectors also noted that sometimes the guidance provided to field offices is so prescriptive and bureaucratic that it makes the implementation of BCM for field offices more complicated. It becomes a burden, an exercise that has to be performed to satisfy the headquarters, rather than a practical tool that the office could use in case of an incident. The Inspectors are of the opinion that, while guidance and technical assistance are necessary, the size of the office and the local conditions in which it operates should be considered. The headquarters should allow some flexibility for field offices to be able to use BCM to their advantage.
- 62. During their interviews with country and regional offices of some organizations, the Inspectors noted that the cooperation among the United Nations entities in the field in terms of business continuity is not very close, yet they all face risks of largely the same incidents, the impacts of which could be handled jointly and locally. United Nations country teams cooperate well in the field of security and safety aspects of crisis management, but the Inspectors think that their cooperation should be enhanced and improved in other areas of business continuity. Resident Coordinators should play a catalytic role in creating a forum for cooperation of BC focal points of all organizations at the duty station.
- 63. In a few cases, the Inspectors noted that BC Plans cover the risks associated with major partners and suppliers. Business continuity literature suggests that this be done and the Inspectors agree that partners and suppliers should be considered, i.e. in terms of procurement or by organizations which rely heavily on outside partners. For example, WFP operates in emergency situations due to the nature of their primary business. In order to provide their services, they depend on and interact with a number of partners in the field. They realize that their business continuity plan cannot be solely internally focused, because their operational continuity is dependant on cooperation with others. Inspectors were pleased to note that WFP organized a meeting with all its partners in May 2011 to discuss field interdependency.
- 64. The implementation of the following recommendations is expected to enhance coordination and cooperation within and across the United Nations system organizations.

Recommendation 4

Executive Heads should ensure that the scope of business continuity plans of the United Nations system organizations includes their field offices. Overseeing and control mechanisms should be in place to ensure the coherence and interoperability of the business continuity plan with the headquarters and the United Nations country team, where appropriate.

Recommendation 5

The Secretary-General should ensure that the Resident Coordinators oversee business continuity preparedness of the United Nations organizations present in their duty station with a view to enhance knowledge sharing and identify possible areas of cooperation and complementarity.

Implementation of business continuity plan

- 65. There are not many United Nations system organizations which have reached the level of implementation of an approved and comprehensive business continuity plan. Inspectors found very little documentation on the experiences of the implementation of BC Plans and naturally it was subject to very few audits, mainly carried out at UNDP, the United Nations and UNESCO. Due to limited resources, the Inspectors were unable to gain in-depth insight into the implementation at the level of individual organizations or field offices, but the issues the organizations/field offices were facing are described below:
 - (a) Maintaining the interest and awareness of staff and middle management to continue working on BCM, especially in places where no incidents have occurred for a long period of time.
 - (b) Lacking human and financial resources to sustain operability of the previously developed and approved BC plan.
 - (c) Developing long, detailed and bureaucratic BC plan templates, which are not user friendly, especially for small offices in large organizations.
 - (d) Missing or insufficient control and accountability for BCM activity.
 - (e) Lacking clear oversight responsibilities for BCM activities in the field offices.
 - (f) Lacking continuous or periodic training of staff.
 - (g) Experiencing planning fatigue in offices away from headquarters and the field because BCM activities are not handled in a comprehensive way (emergency plan, security plan, IT BC/DR plan, pandemic plan etc.)
 - (h) Not deciding on alternate locations or devolution/transfer of business processes, in particular for major emergency situations.

D. EXERCISE, MAINTENANCE, REVIEW AND UPDATING

Recommendations from international instruments¹⁴

- 66. A series of exercises are recommended under all business continuity standards to ensure that the business continuity management programme and plan are operational. When deciding on the frequency or type of exercise to perform, consideration should be given to the complexity of the organization and its plan, and the complexity, risk and cost of performing an exercise. Without exercises however, an organization cannot say whether its BCM capability is reliable.
- 67. Regular maintenance will ensure that the organization remains ready to manage incidents despite constant changes in personnel and the circumstances and environment in which an organization operates. BCM maintenance should be a part of an organization's normal management process. The process should include identifying changes in critical activities and processes that support them, technology, people, and general operating environment.
- 68. It is a good practice to have a schedule of frequency for how often each part of the BC Plan needs to be updated: monthly, quarterly, annually etc. Maintenance is also required any time a major change occurs, after an exercise or after an audit recommendation. A review of a BCM programme can be performed through a self-assessment or an audit. Whichever type of review is conducted, it should start with the BCM Policy. Since exercise, maintenance, review and updating ensure that the BCM capability is reliable, adequate personnel should be assigned responsibility for it and should be held accountable for it.

Situation in the United Nations system organizations

- 69. Given that most organizations in the United Nations system are at the beginning of BCM, the activities described above are more plans for the future rather than something that has already been achieved. However, one can look at previously developed programmes such as those developed for avian flu and pandemics to see that generally maintenance, review and updating were not given adequate attention or resources. By letting these plans become outdated they were allowed to become obsolete and this basically resulted in a longer term waste of the originally invested resources.
- 70. The Inspectors noted similar problems in the case of BC Plans: they saw plans with outdated lists of staff and their contact information, which reflected the old rather than the current organizational structure. This is also evident from the findings in audit reports (UNDP, UNESCO) which recommend that management ensure ongoing exercise, monitoring, and oversight.
- 71. The United Nations Secretariat Headquarters, UNICEF and UNDP field offices the Inspectors visited put in considerable efforts to regularly test and update their BC Plans. A series of exercises, trials and simulations is being planned and performed at different levels. At the same time, it is to be noted that at some headquarters and a large number of field offices, previously approved BC Plans were not implemented or updated. The UNDP audit report prepared in 2010 stated that this is the case in more than 50% of the field offices in Africa. ¹⁵

¹⁴ The Good Practice Guidelines 2010

¹⁵ UNDP, OIA report 2010, issue 11, Corporate issues: weaknesses in business continuity management

- 72. The IAEA BC Plan includes a clearly defined schedule for the update process, detailing every critical update to be undertaken in a year, a time frame and standard procedures according to which updates should be performed. Although no regular updates had been performed since the approval of the plan, the Inspectors consider that this document could be a useful tool for other organizations when they embark on the development of their own procedures for reviewing and updating their BC Plans. As the BC Plans will be implemented in a growing number of organizations, the BCM managers and the internal audit should have a closer look into this area.
- 73. In addition to budgetary difficulties, inadequate assignment of responsibility is also a reason for lack of implementation. Experience has shown that unless a person(s) is held accountable for the ongoing exercise, maintenance, review and update of the BC Plan, it will not be performed regularly. These tasks should be included in the relevant job descriptions and personal appraisal system of line managers and the BC coordinators at different levels. The availability of human resources and their accountability is of key importance.
- 74. The implementation of the following recommendations is expected to enhance accountability and efficiency of business continuity management programmes across the United Nations system organizations.

Recommendation 6

Executive Heads should ensure that business continuity planning and implementation form part of accountability and performance evaluation of line managers.

Recommendation 7

Legislative bodies of the United Nations organizations should, on the basis of the executive heads' budget proposals, provide the necessary financial and human resources for the implementation, continuous monitoring, maintenance and updating of the approved business continuity plans developed on the basis of the organization's BC policy/strategy.

E. TRAINING

Recommendations from international instruments ¹⁶

75. Professional literature on business continuity highlights the importance of the human factor for successful BC in any organization. As one of the first considerations in developing a BCM culture, organizations need to assess the level of awareness of BCM and compare it to the desired level to identify the training needs for the staff at large. There should be a hierarchy for delivering training to different groups of staff. Staff with no particular responsibility for BCM do not need the same level of training as critical staff. The more understanding of BCM and its benefits senior management has, the more appetite they will have for it and the more likely it is that they will actively support its implementation.

76. BCM managers should benefit from continued professional development. As awareness about BCM in an organization increases, BCM managers will be facing increased. These demands have to be met with an appropriate response. Additionally, BCM is developing relatively fast. There are always new lessons to be learned from the industry and BCM managers should have access to them.

Situation in the United Nations system organizations

77. Across the United Nations, it appears that awareness is higher in offices that have been affected by man-made and/or natural disasters which have interrupted activities. Awareness also appears to be stronger in field locations than in headquarters offices. This is likely because headquarters offices are principally in locations considered less exposed to risk. As seen in different cases, however, these offices are not immune to interruptions, e.g., earthquake, storms and power outages in New York; power outage in Vienna; heavy rainfalls and floods in areas of Copenhagen, to name just a few.

78. Presently, the United Nations staff at large are mostly aware of security and safety issues, but there appears to be low awareness of business continuity. Further efforts are needed in this regard. The Inspectors think that it is possible to complement methods of raising security and safety awareness with a BC related component. Organizations which are just developing their BC Plans and those which are in the process of updating theirs should include methods and techniques for increasing BC awareness. This can be done through inclusion of a BCM component in induction training and periodic refresher courses. This is already done in some organizations, but the Inspectors noted that no organization measures the level of its staff's awareness. The Inspectors did not find any sign of BC related training in the activity of career or training programmes which are offered in major United Nations centres. Training and raising awareness does not need to be confined only to the traditional teaching methods. Sharing knowledge via internet and intranet sites, internal and external training, newsletters and e-learning, workshops and performance of BCM exercises are just some of the forms in which education on BCM can be delivered.

79. The Inspectors found that at the time of adoption of a BC Plan, the critical staff identified were generally prepared to perform their tasks in the post-crisis period. Most of their training and practice takes place through telecommuting. However, as the Inspectors noted previously, maintenance and updating of BC plans is an issue. With frequent staff changes, different persons from those noted in the actual plan perform the critical functions. Part of the review

_

¹⁶ Ibid.

and updating process should be not only to update the names of critical staff but to address their preparedness to perform their functions. There should be clear accountability for ensuring that happens.

80. The Inspectors noted that there is a lack of continued training for BC managers. Considering that an increasing number of the United Nations system organizations are developing and implementing BCM, having a common approach to training of BCM managers is of great importance. The United Nations Secretariat generously transfers its knowledge to BC managers in other organizations. It is working with the World Bank on developing e-modules for BCM (BCM for managers, BCM for staff, BCM for procurement etc). All of these materials are being developed with an agency-neutral approach so that they can be used by others. However, there is no awareness about these initiatives in the system. Against this background, the Inspectors think that a more formal inter-agency cooperation structure would provide a forum where such initiatives could be discussed for the benefit of the United Nations system organizations (see recommendation 9).

81. The implementation of the following recommendation is expected to enhance the efficiency of BCM programmes across the United Nations system organizations.

Recommendation 8

Executive Heads should ensure that business continuity training be incorporated in the career and staff development courses, including induction training, and that periodic training be provided to critical staff in the organizations as an integral component of business continuity management.

III. SAFETY AND SECURITY AND ICT ELEMENTS OF BCM

Safety and security and business continuity

- 82. Safety and security services play an important role in business continuity management, in particular in the first phase of incident management. Their role is absolutely essential in protecting human life and assets, emergency preparedness, evacuation, and operation of the emergency notification systems. The foundations of the United Nations security system are Minimum Operating Security Standards, Minimum Operating Residential Security Standards and the system of Designated Officials. There is an established Inter-Agency Security Management Network under which security issues, policies, procedures and practices are reviewed and monitored. Their activities, coupled with the safety and security circumstances under which United Nations organizations operate, has resulted in the allocation of significant financial and human resources and cooperation among the practitioners in different duty stations.
- 83. The Inspectors noted that the safety and security side of business continuity activities is well organized, documented and communicated to the staff even in the organizations in which BCM has not been developed. This might be the reason why in some organizations the office in charge of safety and security has been made responsible for BCM (UNDP, UNIDO, UNOPS, UPU, and IAEA). Notwithstanding the importance of safety and security in BCM, a business continuity management programme has a significantly wider scope. Therefore, it is difficult to handle the non-security related aspects of BCM if BCM is managed from the office in charge of safety and security. The same is true for ICT services, which is a host for BCM in some organizations.
- 84. The Inspectors are of the view that BCM should not be handled by security or ICT services; however, BCM should work closely with security and ICT services (see paras. 36-38 and recommendation 2).

Information and communication technology and business continuity

- 85. Continuity of services provided by information and communication technology is an important part of an organization's overall business continuity capability. Although it is necessary to have a separate IT business continuity/disaster recovery plan (IT BC/DR), this forms a part of the overall BC Plan of an organization. Organizations rely more and more on availability of IT applications, information, and data in order to perform their activities. An organization is more resilient if it does not lose its information or data or access to it during disruptive events, which is why more resources are invested in IT today than before.
- 86. As usage of information technology has developed in the United Nations system organizations so has the attention paid to IT BC/DR. Significant investments were made, although in some organizations, important planned measures were postponed or suspended due to budgetary constraints. The creation of ICT Network under the UN System High-level Committee on Management (HLCM) is also a sign that the significance of information technology has increased in the United Nations. The Inspectors think it would be important for this network to discuss and identify best IT BC/DR practices.
- 87. Once an organization's requirements have been identified, ICT can consider whether it can provide this service and at what cost. It is important to determine what infrastructure supports which applications and which applications support which business processes. When critical business processes are determined, the recovery time objectives can be determined.

Some of the most important practices in ICT which have a direct impact on business continuity are as follows:

Keeping backups and a secondary data centre

- 88. It is often wrongly thought that once an organization determines which information is needed in the first 24 hours after an interruption occurs and action is taken to have it backed up, that this information is available in less than 24 hours. Having a backup of vital information and having quick access to it are two different issues.
- 89. Standard backup procedures are in place in most United Nations organizations; there are application backups, incremental daily data backups, full weekly backups, and primary and secondary data centres. From an information security point of view the links can be encrypted at low cost, which was not possible before. Access to a viable secondary site is critical to ensure data replication and recovery. The best practice is to have the secondary data centre geographically distant from the primary. There are organizations which do not have a secondary data centre, because they consider that building one would be a significant investment. Instead, they use the United Nations International Computing Centre (UNICC).
- 90. The Inspectors raised the question of whether all United Nations organizations should use UNICC: the views of ICT professionals are divided. Some think that if everyone were to use UNICC the exposure of the entire system to the risk of being dependent on the same service provider would be high. Others feel strongly that UNICC should be used by all because it is a private United Nations cloud which provides for confidentiality and diplomatic immunity for data. The latter group argues that, in view of the cost of the service that UNICC provides and of the cost of that service being organized internally by each United Nations entity, no single entity would be able to achieve the same level of service in accordance with the rules of best practice at the same cost as UNICC. Regardless of which solution an organization favours, maintaining data and personnel in the same location increases the security risk.

Inexpensive and reliable connectivity (communication system)

- 91. During the Egyptian "Arab Spring", mobile telephone communication was cut off for one day and the internet was blocked for almost a week. For a while, landlines were the only form of communication. VHF radios were relied on for some time, but this radio system, because it is linked to the police and military, was cut off too. Critical staff in some organizations were provided with USB modems, but since these modems use the GSM network, like mobile phones, there was no connectivity. Some organizations used V-Sat equipment, others relied on the Broadband Global Area Network (BGAN). Those who had it realized how important this investment was.
- 92. All organizations affected by the above events realized that, technologically speaking, there are solutions for establishing communication capabilities independent of the host government; the question is how much they cost. In the Inspectors' view, all organizations need to consider the risk of total communication shutdown and determine how they would deal with it. Egypt-based United Nations system organizations, through their local ICT network, are developing a proposal for their senior management team for an inter-agency communication solution. They believe that a common solution would offer economies of scale and that by combining their resources and assets they can improve the situation for everyone. The Inspectors encourage such initiatives in other duty stations.

Remote connectivity

- 93. Working and access to information and data independent of location is key to continuity of operations. Most United Nations system organizations are using telecommuting for everyday work. In some organizations, this capability was developed because of work-life balance policies or because of the need to deal with influenza threats, in others simply because organizations outgrew their working space, but all of them use it for business continuity purposes. In the Inspectors' view, this is one area where the most impressive development had taken place.
- 94. In virtually all organizations, employees are able to access their e-mail accounts via webmail if they have connectivity to the internet. Most organizations provide Citrix licenses or similar solutions to their critical staff to access their desktops and applications. The Inspectors were told that once an organization changes the method of charging for the cost of Citrix licenses the demand for them reduces, i.e. when the cost is included in the budget of ICT offices, the demand for them seems to be higher than when the cost is charged directly to the offices which are using them. The Inspectors recognize that the budgetary modalities should promote the efficient use of operational resources but point out that a situation should be avoided whereby operational or budgetary considerations are implemented without examination of the impact of these measures on the BC capability of the organization.
- 95. Organizations need to ensure that their critical staff know how to connect remotely to their systems in the occurrence of an event that would warrant this. The solution is to use them frequently. Telecommuting is a good way to achieve this. Additionally, an exercise during which all critical staff would be telecommuting at the same time should be performed to stress-test the systems. Some organizations simply test remote connectivity to their e-mail system. This is not enough. The exercise should require that critical staff access all applications and perform all of the tasks they would be asked to perform in a real-life situation in order to identify and resolve any issues. It is imperative that all levels of staff participate in this exercise. The Inspectors were told that the highest levels of management most often do not have the time for exercises, which is unfortunate, given the level of involvement that would be required from them in a real-life situation.
- 96. Generally speaking, people telecommute whenever they are travelling on business. The benefits of telecommuting are indisputable. The United Nations organizations located in New York frequently experience so-called "snow days" when staff are advised to stay at home. This is just one example of when telecommuting is used in New York and reportedly it is working well for all New York-based organizations. Rome-based organizations have had similar experiences during events causing considerable traffic problems., In the past year, Copenhagen has had three floods due to heavy rainfalls and each organization affected relied on telecommuting until alternative solutions could be found. In Cairo, once connectivity was regained, staff were advised to work from home due to security concerns. In Santiago de Chile, remote working capability was used by ECLAC in the first days after the earthquake.
- 97. Telecommuting assumes that a telecommuter has the necessary equipment. Some organizations are moving towards using laptops with docking stations instead of desktops, others allow for the staff to use their personal equipment from home. There are pros and cons to each approach and each organization has to determine for itself which is the most suitable for its purposes. It is the Inspector's view that when an organization is deciding on its IT development projects, including remote connectivity and procurement of hardware, BC related aspects of these decisions should be considered.

IV. LESSONS LEARNED FROM REAL LIFE INCIDENTS

98. In addition to simulations, exercises and tests that should be performed on a regular basis in order to improve the BC Plan, real-life events offer the best possible potential for lessons learned. Documented lessons learned are a valuable source of information for organizations which are less advanced in BCM and for organizations which face similar risks. The Inspectors interviewed representatives of the organizations affected by the following events.

Earthquake in Santiago de Chile

99. ECLAC invested in pandemic preparedness, which was later expanded with the assistance of BCMU into comprehensive BC preparedness. Just a couple of weeks before the earthquake, BCMU visited ECLAC to assess the level of BC preparedness. They assisted ECLAC in conducting a crisis response and a telecommute test with critical staff. After-earthquake response was considered good from the business continuity point of view. The fact that the BC Plan existed and included a pre-designed scenario on action to be taken, and that the training of critical staff was conducted, contributed significantly to the adequate response of management and critical staff and to the quick resumption of ECLAC activities. The Crisis Management Team and the Security Management Team had their first meetings within 10 hours and the necessary decisions on the safety and security of the premise and assets were taken. Critical staff (i.e. IT, procurement, transportation and financial services) started working remotely and from the provisional alternative working spaces. After 48 hours ECLAC was able to start humanitarian relief, including providing some support to the host country. The following are some of the lessons learned from experience:

- (a) The Crisis Management Team needs to quickly agree during the first hours of a crisis on who should be allowed on the premises that are otherwise closed for normal business and the decision needs to be clearly communicated to everyone involved, to avoid for example sending away important external personnel.
- (b) Having an internal and external communication strategy and ensuring that staff are familiar with the communication protocol is essential.
- (c) Cell phones and/or landline service will likely be unavailable or inconsistent; alternative strategies are required and various means of communication (social media, private e-mail, MSN Messenger, Skype, etc.) should be used.
- (d) Staff should be proactive in reporting back to their organization to enable all staff to be quickly accounted for.
- (e) Roles and responsibilities of staff holding key administrative and support functions should be clearly defined in the business continuity plan and/or crisis management manual to avoid duplication of efforts and confusion.
- (f) Mainstreaming of telecommuting practices throughout the organization, including usage of laptops with docking stations instead of desktops, implementation of paperless processes, and storing of critical documents on shared drives greatly facilitates business continuity.

The Egyptian Arab Spring

100. The BC preparedness of the offices of United Nations organizations in Cairo varies. UNDP, WFP and UNICEF offices in Cairo had BCP plans but not all of them had been tested

by the time of the events. The WHO Regional Office has not finalized its BC Plan yet although certain elements of it were in place. The duty station level of coordination basically covered the safety and security aspects based on crisis management by DSS while the other critical functions and processes were handled individually by each organization. After the evacuation, which was organized and executed without major problems, the critical staff continued to work reduced hours (due to the curfew) in their offices in Cairo and after the reestablishment of the IT connectivity from their homes. The necessary managerial decisions to minimize the impact of the events were taken but in some organizations ad hoc decisions were required since there were no planned scenarios in all offices. The interviewees did not report major difficulties to the Inspectors in performing the limited scope of critical functions; even some of the evacuated staff could work remotely. Staff mentioned that the main issue was the interruption of communication between the United Nations offices and limited predesignated backup among them for continuation of certain functions.

101. The following are lessons learned communicated to the Inspectors in interviews with Cairo-based agencies:

- (a) Not having cash on hand was the biggest challenge. The banks closed for a while and when they opened again, they limited the amount of cash each person/organization could take out at one time. Cairo-based organizations are now looking at a solution that will satisfy frequent audit recommendations that not too much cash is kept idle, but also to have enough on hand should a similar situation occur.
- (b) Connectivity was an issue for most organizations because they relied on local suppliers. Backup communication systems should exist, but this does not mean that each agency has to have independent capability. United Nations country teams should have a United Nations-wide solution, so that all agencies can benefit from each other's capabilities and assets.
- (c) When all other communication fails, face-to-face communication through the established system of wardens is the only way to account for staff and to keep in touch.
- (d) Devolution plans may well be in place, but the most important thing is that the people who are assuming the functions of the affected office need to know what to do and do not need to be told that they need to assume them. This is because the affected office could be in a complete blackout, unable to communicate, and the people assuming their functions will have only the broadcast news to act upon.
- (e) Having access to critical documents is vital. All critical documents need to be available in electronic format and stored on shared drives at an off-site location.

Floods in Copenhagen

102. The floods affected each organization differently. The UN House in Copenhagen hosts 5 different organizations with 427 staff: UNDP (175), UNFPA (56), UNOPS (187), WFP (6) and IOM (3). WHO and UNICEF have their offices in another location.

103. UNDP had to relocate while the other organizations were less affected or not affected at all. UNDP in Copenhagen provides, inter alia, human resources services to 5,000 staff around the world; therefore, constant ability to communicate with the rest of the world is of critical

importance. Relocation meant physically moving 75 landlines. Because there was no other solution, while these lines were being relocated, all 75 were diverted to one telephone in one meeting room, which meant that only one call at a time could be handled. Private numbers of individuals working from home could not be given out due to privacy rules. Skype was used as an alternative way of communicating.

104. At UNDP, services were seriously slowed down and delayed, but due to the remote working capability of the staff there was no major interruption of services and work could be continued from home and from the provisional alternate location. The alternate location was not pre-designated; it was provided through an ad hoc decision by the insurance company liable for the UN House. Post-crisis experience shows that more attention needs to be paid to handling the psychological impact on staff.

105. The WHO Copenhagen office (WHO/Europe) is located in the vicinity of a sewage pumping station, which was built four-five years ago. In the last year, when there were heavy rains, WHO/Euro experienced three sewer floods. The floods were of major proportions: offices in the basement and ground floor were flooded, cars in the parking lot were completely covered in water and destroyed. Sewer floods are not only unpleasant and a health hazard, but since sewage waters contain heavy chemicals, they cause rapid corrosion of electrical installations and any metal infrastructure.

106. At the time of the first flood on 14 August 2010, the WHO office had no BC plan and needed to rely on improvised action. The lack of pre-designed scenarios and procedures in spite of the high morale and professionalism of the staff greatly impacted WHO/Europe operations. Major difficulties arose from the lack of updated chain of command, collapse of communication system, lack of updated emergency contact details (staff, HQ and host country), weak IT capability in emergency situations, lack of accessible documentation on electrical and other infrastructure of premises and lack of allocated financial resources.

107. After the first flood it was decided that development of a BC Plan for WHO/Europe was necessary. The established working group developed a comprehensive plan which contains immediate actions and tasks to be performed in the framework of the future implementation of the BCP, including scenarios for different types of interruption. This work was still ongoing when the WHO/Europe Office was flooded for the second and third times. During the interviews, the Inspectors were informed that the preparedness and the response of the management and the staff were significantly better compared to the earlier situation although the magnitude of the disaster was greater. The existence of a pre-designed scenario, the improved emergency response capability (i.e. updated notification change, improved IT connectivity, and clear prioritization of the critical processes), increased awareness and, obviously, the previously gained practical experience ensured a better response to the disruption of activity although the BC Plan was not yet finalized and its comprehensive implementation could not be started. The Inspectors noted the determination of management to continue strengthening their BCM, including the allocation of financial and human resources.

108. The following are lessons learned communicated to the Inspectors in interviews with Copenhagen-based agencies:

(a) Having a BC Plan is imperative. Training the staff on BC is essential. Having simple one page checklists that can be used in a crisis is practical and helpful.

- (b) An updated chain of command has to exist. When an event occurs quick decisions need to be made and the person making the decisions has to be empowered and not second guessed.
- (c) The importance of ICT is significantly greater than imagined when just planning and preparing for an event.
- (d) Investing in a "Single Number Reach" telephone system would allow staff to redirect their incoming calls to multiple phone numbers, which would be invisible to the caller, i.e. staff could divert their work calls to their home or mobile numbers making it easier for customers to contact them without publicizing their private numbers.
- (e) Most of the United Nations organizations are to move into a new centre in 2013 which is now already under construction. It is therefore timely to initiate inter-agency consultation of the organizations concerned on BC related issues for the new premises.
- 109. The Inspectors found that after Santiago and Copenhagen events, experience, reaction and lessons learned were analysed and partly incorporated into the business processes and/or BC plans. At the same time, no specific funding is planned for maintenance and updating of BC plans in Santiago. In Cairo, there were no reports on lessons learned four months after the events. Professionals from different networks (IT, finance, security) discussed the experiences among themselves, but no decisions on the required changes to BC plans were made.
- 110. The Inspectors are disappointed that in some cases lessons learned are not documented, because they will fade with the passage of time. When a BC plan has to be activated, the experience, reaction and lessons learned have to be reviewed and analysed by the Executive Heads and Resident Coordinators with a view to improving the BC plan and future BC capability at headquarters and at country level.

V. INTER-AGENCY COOPERATION

- 111. Inter-agency cooperation is an absolute necessity if the United Nations system organizations want to optimize the cost and achieve a reasonable level of business continuity. Certain elements of business continuity plans may differ from one organization to another given their specific mandates and the types of activities they perform. However, close programmatic cooperation of the United Nations organizations and their interdependence call for a common approach. Working together may result in economies of scale. Furthermore, if different organizations approach business continuity in a similar way they will be able to serve as a backup for each other for business continuity purposes.
- 112. The Inspectors found that only very initial attempts were made to deal with business continuity on a system-wide basis. With the exception of the work of security and ICT networks and the CEB survey on business continuity plans for financial operations, there were no other initiatives towards institutionalizing inter-agency cooperation.
- 113. Cooperation among BCM units at headquarters level varies from duty station to duty station. There is a Senior Emergency Policy Team (SEPT) in New York comprised of Executive Heads of New York-based funds and programmes. Their interaction in essence is inter-agency coordination and cooperation. The contacts at the level of BCM managers, however, are loose. This is possibly caused by the different levels of maturity of BCM in these organizations. UNICEF and the United Nations Secretariat regularly cooperate, but the involvement of UNDP and UNFPA is weak. UNFPA recently drafted its BC Plan based on the templates developed by the United Nations Secretariat, but it is too early to judge whether this interaction will last. The major obstacle for close cooperation of UNDP with others is the uncertainty and hesitancy on how to handle BCM in UNDP HQ. In other duty stations, such as Geneva and Vienna, inter-agency cooperation is limited mainly to security aspects. Although informal contacts regarding business continuity exist, long-lasting cooperation needs a driving force.
- 114. In recent years, BCMU/United Nations Secretariat has provided technical assistance with business continuity planning upon ad hoc request to FAO, WFP, WHO, and ICAO. This was achieved through sharing their knowledge and templates. This helped with developing a similar BCM approach in some cases and it was a generally inexpensive way of providing initial training to BCM managers in those organizations. UNICEF and the United Nations Secretariat are developing good practice guidelines for the United Nations system organizations. The Inspectors commend these efforts, but recognize that they are personality driven without strong institutional backup; therefore they do not cover all United Nations system organizations.
- 115. The Inspectors think that it is in the interest of the United Nations organizations to establish a forum to discuss and strengthen common approaches to BCM. Possible frameworks for such cooperation can be developed under harmonization by HLCM of business practices. Some of the benefits would be:
 - (a) Raising awareness of higher leadership and stakeholders about BCM;
 - (b) Improving and sharing the knowledge of the early implementers of BCM with beginners;
 - (c) Developing a common BCM approach which will enable organizations to help each other in crisis situations, especially in the field, and developing

common best practice guides, templates, maturity models, training modules etc.

(d) Providing a platform for common thinking on the future orientation of BCM in the United Nations system, i.e. building a resilient organization

116. The implementation of the following recommendations is expected to enhance the coordination and cooperation of BCM programmes across the United Nations system organizations.

Recommendation 9

The Secretary-General, in his capacity as the Chairman of CEB, should direct that business continuity issues be put on the agenda in the harmonization of business processes of the framework of HLCM/CEB with the aim to develop and approve maturity models for business continuity preparedness, business continuity plan templates, and good practice guidelines designed for the United Nations organizations.

Annex I

Overview of the BCM in the United Nations system organizations based on the responses to the questionnaire

		В	C Plan	Scope of the Plan	Processes f	for maintenance	and update	of BCM are in place
Organization	BC Policy approved	Approved	Under development	includes locations away from HQ	Exercise	Maintenance/ Update	Training of critical staff	Training of all staff
United Nations Secretariat	√	√		√	√	√	√	√
UNDP	√		√	√	√	√	√	√
UNOPS	√	√		√	√	√	X	V
UNFPA	X		√					
UNICEF	√	√		√	√	√	√	X
WFP	X		√	√	√	√	X	X
FAO	X	√		X	√	√	√	X
UNESCO	X		√	X				
ICAO	X		√		X	X	X	X
WHO	√		√	√				
UPU	√	√		X	X	X	X	X
ITU	X							
WIPO	X		√		·			
UNIDO	<u>√</u>							
IAEA	X	√		√	√	√	X	√

 $\sqrt{:}$ Yes, X: No

Annex II Self-assessment of business continuity maturity by organizations

Level of	Description																
Maturity			_			[±.				0							
		United Nations	UNRWA	DP	UNFPA	UNICEF	Ь	UNOPS	0	UNESCO	0	9	D	_	WIPO	UNIDO	Y.
		Uni Nat		UNDP			WFP	Ň	FAO		ICA0	МНО	UPU	ITU	WI		IAEA
	Processes and procedures standardized, fully compliant, undertakes training				Ĺ		ŕ								ŕ		
Managed	and testing, fully funded. Key threats and risks identified. Fully supported by	V														i '	
	management and all information up to date.															<u> </u>	
	Business Continuity Management (BCM) and Disaster Recovery (DR) fully															i '	
	integrated into business, fully funded, regular Business Impact Analysis (BIA)				,	,		,								l , '	
Incomplete	& Risk Assessment (RA) is undertaken, DR processes included in IT projects,				1	1		7								۱ ۷	
	training and testing undertaken, small silos of information. Awareness																
	increasing.															<u> </u>	
	General recognition of need for BC&DR, initial planning being undertaken.			١,			,		,	,	١,	١,	,	,	,		,
Interim	Awareness beginning to increase, limited funding. Starting to identify threats,			1			1		1	1	1	1	1	1	1		1
	Risk Analyses, some support from Chief Information Officer.																
	Low recognition of BC and DR plans. Minimal action. Limited support by		,														
Limited	management, no funding. Only general backup plans, little training or																
	information, silos of information. Vulnerable.																
	Lack of processes, minimal level of awareness, no centralized approach, no																
Unmanaged	funding, no training, no risk management, BC not recognized and /or															1	
	supported by Management, limited compliance.																

$\label{lem:resolvent} \textbf{Remarks of the organizations on their self-assessment}$

- > UNDP: Overall BCM is between Incomplete and Interim. ITDR is more advanced in terms of standardized processes and procedures.
- > UNOPS: Given its recent development, still require the "training and exercise" component.
- > UNICEF: As an organization, UNICEF is increasingly operating in an environment that is experiencing a series of global crises such as have not been experienced in living memory. The organization is now coming to terms with new global threats including food uncertainty, energy

security, mass migration and climate change. The challenge for BCM within UNICEF will be to try and maintain the correct level of capacity and resources to take forward the Business Continuity Management programme in order to enable the organization to become more resilient. This is not an easy task as, in common with many other organizations, funding is still tight due to the consequences of the worldwide financial crisis. The priority for UNICEF's organizational resources will, of course, remain to ensure that our core commitments to the children of the world are fulfilled. In spite of these constraints UNICEF has still been able to make some limited progress and move forward with BCM.

- > WFP: WFP has made significant advances in operational and contingency planning. It is now moving towards a more coherent business continuity strategy and the notion of organizational resilience.
- FAO: FAO is in the final stages of implementing a BC management process. Once the Framework Plan and new responsibilities are formally approved, we expect to progress quickly to the next levels.
- ➤ WHO: General recognition of need for BC&DR, initial planning being undertaken. Awareness beginning to increase, Funding not yet identified, therefore not allocated. Starting to identify threats, Risk Analyses, Clear support of DAF and IT.
- > UPU: Need to bring documents and training to UPU staff. Funding for training will need to be identified.
- ➤ IAEA: IAEA has expended considerable effort and resources in the area of Business Continuity and Disaster Recovery. An overall IAEA plan and Department-specific sub-plans exist that would guide IAEA in the event of a disaster. In particular, the IT components of DRI have been actively updated and strengthened in recent years. In the coming year, IAEA is undertaking a renewal of its overall business continuity planning; this renewal effort will be informed by lessons learned in previous planning efforts, including the following lessons learned:
 - The governance model for business continuity will include the update and refresh mechanism for the plan itself, thus avoiding the "create/stabilize/get out-of-date/recreate" cycle of previous Business Continuity planning.
 - Assignment of long-term "ownership" for the BCP to an organizational entity (a position, not a person) should be part of the overall governance improvement, to ensure that updates of the BCP continue even after the departure of any specific individual.
 - IAEA needs to ensure that appropriate funding for BCP is secured to complete the renewal project and, in particular, to maintain the BCP, including periodic tests and updates.

ANNEX III

Overview of action to be taken by participating organizations on JIU recommendations
JIU/REP/2011/6

		Uı	United Nations, its funds and programmes												Specialized agencies and IAEA											
	Intended impact	CEB	United Nations*	ONODC	UNEP	UN-Habitat	UNHCR	UNRWA	UNDP	UNFPA	UNICEF	WFP	UNOPS	ОП	FAO	ONESCO	ICAO	ОНМ	UPU	UTI	OWM	IMO	WIPO	UNIDO	UNWTO	IAEA
For action			\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes		\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes		\boxtimes		\boxtimes	\boxtimes	\boxtimes	\boxtimes		\boxtimes
For information																										
Recommendation 1	e		E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Recommendation 2	d		E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Recommendation 3	e		Е	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	Е	E
Recommendation 4	с		Е	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	Е	E
Recommendation 5	с		Е																							
Recommendation 6	a		Е	E	Е	E	E	Е	E	E	E	E	E	E	E	E	E	E	E	E	E	Е	E	E	Е	E
Recommendation 7	g		L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Recommendation 8	g		Е	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	Е	E	E
Recommendation 9	с	E																								

Legend:	L:	Recommendation for decision by legislative organ
	E:	Recommendation for action by executive head
		Recommendation does not require action by this organization

Intended impact: a: enhanced accountability b: dissemination of best practices c: enhanced coordination and cooperation d: enhanced controls and compliance e: enhanced effectiveness f: significant financial savings g: enhanced efficiency o: other

^{*} Covers all entities listed in ST/SGB/2002/11 other than UNODC, UNEP, UN-Habitat, UNHCR, UNRWA.