

WHO

Guidance for business continuity planning

World Health Organization



FOREWORD

The goal of the WHO health emergencies programme is to ensure all countries and partners are prepared for, and can prevent, detect and respond to, health emergencies in order to reduce the mortality and morbidity of affected populations.

This includes WHO's own capacity to manage risks and respond to emergencies in a timely, predictable and effective manner. Headquarters, regional and country offices all need to plan, well ahead of a crisis, for the appropriate resources, systems, policies, procedures and capacities to undertake effective risk mitigation and response operations in support of and in collaboration with ministries of health and other partners.

While the effects of hazards and events on WHO operations cannot be fully predicted, understanding the risks which each office may be subjected to, and preparing business continuity plans that take account of these risks, will help to:

- mitigate the impact of emergencies on WHO staff, premises, assets and programmes, and
- increase WHO resilience and capacity to:
 - maintain and restore critical operations to a predetermined acceptable level, and
 - initiate new critical and life-saving operations in response to the impact of the event on the health of the populations served.

In this business continuity guidance, a set of actions to prepare for all types of emergencies and minimize disruption to WHO operations is proposed. These actions include developing, implementing, simulating, monitoring and regularly updating business continuity plans.

The guidance is based on a common organizational approach and procedures for risks management and emergency response across all hazards and at each level of the Organization. Consideration is given to WHO adoption of the United Nations Organizational Resilience Management System (ORMS, 2015¹) and the WHO corporate risk management process and framework.² It also encompasses WHO responsibilities under the International Health Regulations³ (2005) and other international treaties, as the United Nations lead agency for health and the Health Cluster, and as a member of the United Nations or humanitarian country teams.

¹ The ORMS is a comprehensive emergency management system linking actors and activities across preparedness, prevention, response and recovery, to enhance resilience in order to improve the capacity of UN organizations to effectively manage the effects of disruptive events.

² EB 133/10 Corporate risk register: Organization-wide strategic risk management in WHO (May 2013).

³ http://apps.who.int/iris/bitstream/10665/43883/1/9789241580410_eng.pdf

Table of Contents

| | |
|--|----|
| 1. Introduction..... | 4 |
| Purpose and objectives..... | 4 |
| Accountability..... | 4 |
| Scope..... | 5 |
| Guiding principles..... | 5 |
| 2. Guidance | 6 |
| Planning under the WHO corporate risk management framework and the UN Organizational Resilience Management System | 6 |
| Preparing for business continuity planning..... | 7 |
| Safety and security of staff, premises, assets and operations | 9 |
| Identifying critical operations and functions that need to be continued | 10 |
| Memorandum of understanding (MoU)..... | 11 |
| Responding to an emergency | 11 |
| Activating and deactivating the business continuity plan..... | 13 |
| Exercising and maintaining the business continuity plan | 14 |
| 3. Template business continuity plan..... | 15 |
| Current situation..... | 15 |
| Risk management measures for ensuring the safety of staff, premises and assets | 16 |
| Critical operations | 16 |
| Response to the emergency..... | 16 |
| Activation and deactivation of the business continuity plan | 17 |
| Exercising and maintenance of the business continuity plan..... | 17 |
| Action plan..... | 17 |
| 3. References and good practices..... | 18 |

This document was elaborated in partnership with all WHO regional offices and some country offices who provided precious and valuable inputs based on their experience and expertise. The current guidance and template builds on previous guidance and templates from WHO offices in headquarters, the regions and countries, and is an attempt to align with the new policies and standard operating procedures promoted by the WHO Health Emergencies Programme and WHA Resolution A69/30 of May 2016. We are deeply grateful to and would like to thank all those who contributed to the elaboration of this document.

1. Introduction

Purpose and objectives

Business continuity planning will increase WHO resilience in the face of potential disruptions to the Organization's ability to operate during emergencies. Business continuity plans cover all WHO offices and staff.

The main objectives of WHO's business continuity plans for emergencies are to:

- guarantee the safety of WHO staff, premises and assets
- maintain critical WHO programmes and operations
- ensure WHO is able to deliver a swift and effective emergency response.



WHO office in GOMA after the eruption of Nyiragongo in 2002

WHO ability to respond swiftly to emergencies and restore critical operations as soon as possible is key to maintaining credibility in the eyes of partners and stakeholders. Business continuity plans bring together all procedures and information necessary for each WHO office to achieve the above objectives.

Accountability⁴

The head of each WHO office is accountable for developing, maintaining, testing and implementing the business continuity plan by:

- ensuring that each staff member is familiar with the plan and can quickly assume his/her role if the plan is activated;
- maintaining the plan, and ensuring it is regularly reviewed, tested and updated at least once a year;
- approving and signing off on the plan and all subsequent revisions;
- formally handing over the business continuity plan to his/her replacement.

The heads of WHO offices should only sign plans that have been tested and in which conflicting issues have been identified and addressed.

⁴ Accountability is defined in WHO's Accountability Framework as the obligation of every member of the Organization to be answerable for his/her actions and decisions, and to accept responsibility for them.
http://intranet-pdrive.who.int/public-drives/PubDept/DGO-CRE%20-%20Compliance%2C%20Risk%20Management%20and%20Ethics%20Office/CMP/reference/accountability_framework.pdf

Scope

Business continuity plans must address the threats most likely to affect the functioning of a WHO office. Threats of highest impact are typically identified in the corporate risk register⁵ completed by all WHO offices. All scenarios that could affect any aspect of WHO operations (e.g. programmes, human resources, infrastructure, Information technology, telecommunications) should be considered, including both internal and external incidents (e.g. fires, floods, earthquakes, conflicts, mass protests).

Planning should cover all identified threats and ensure readiness measures are put in place by the office to:

- guarantee the safety of WHO staff, premises and assets
- maintain critical WHO programmes and operations
- ensure WHO is able to deliver a swift and effective initial emergency response.

Examples of hazards impacts on the functionality of WHO offices

The WHO office might be destroyed or access might be blocked temporarily, mobility might be limited, new rules and restrictions might apply, normal utilities and services such as telephone, internet and waste disposal services might be disrupted, not all staff might be available or able to work. Additional staff may be required to assist. Additional office space, equipment, housing, transportation, communication, petty cash and other means to deliver programmes and services might be required.

Guiding principles

Business continuity plans should:

- be practical, realistic and feasible
- be simple and easy to perform
- promote needs based and efficient use of resources
- be based on strong procedures so that they are easy to operationalize and implement
- be regularly tested and validated
- be monitored and regularly updated according to evolving risks and needs.

⁵ <http://intranet.who.int/homes/cre/riskgmt/riskregister/>

2. Guidance

Planning under the WHO corporate risk management framework and the UN Organizational Resilience Management System

WHO has a well-defined corporate risk management framework⁶ which takes a comprehensive approach to risks, including technical/public health, financial, systemic and structural, and political/governmental, as well as risks to the Organization's reputation. A phased mechanism is proposed which enables the identification and assessment of risks, the formulation of responses to these risks, escalation to senior management level, and monitoring at all levels of the Organization. The framework requires "the risks identified as potentially causing a significant to severe disruption to WHO operations or to the functionality of a WHO office to be addressed by business continuity plans".

Business continuity and planning is one of seven core elements⁷ of the United Nations Organizational Resilience Management System (ORMS 2015), under which policy,⁸ implementation across the UN System and in the field is mandatory. ORMS recommendations are that disruptions to UN functionality and operations be met with flexibility and coordination, reflect prevailing circumstances, and focus on core priorities by:

- ensuring the health, safety, security and well-being of staff
- protecting assets
- maintaining the continuity of critical processes/capacity to implement mandates and programmes.



WHO office in GOMA after the eruption of Nyiragongo in 2002



WHO office in Port au Prince after the earthquake in 2010

⁶ Resolution EB 133/10. Corporate risk register: Organization-wide strategic risk management in WHO. May 2013.

⁷ Other core elements are: crisis management decision making and operations coordination framework; security support and response; crisis communications; mass casualty incident response; IT disaster recovery; business continuity; and support to staff, survivors and their families.

⁸ http://www.unsceb.org/CEBPublicFiles/High-Level%20Committee%20on%20Management/Document/Email%20dated%2020May%202015_ORMS%20Policy%20-%20signed.pdf

Preparing for business continuity planning

To initiate planning, the head of each WHO office assembles a team that includes representatives from operations, logistics, security, human resources, administration, information and communication technologies (ICT), and programmes. The team need not be limited to a specific WHO office and can include people from other WHO offices or UN agencies.

The process of business continuity planning begins by identifying the high impact threats to the WHO office, and assessing their potential consequences on functions and operations. This step forms part of the WHO accountability framework and is the responsibility of all budget centres; it allows risk management measures to be established or improved. Risks are identified in relation to organizational objectives, as defined through strategic planning processes, programme planning, office plan development, and ad hoc objective setting exercises (i.e. emergency response situations).

The strategic tool for assessing risks⁹ (STAR) provides also a comprehensive approach to risks assessment. The risks to be assessed in business continuity planning are not those threatening the health of the population served but those threatening the functionality of the office. In the UN system, professional security advisors manage threats to the security of staff, assets and premises; in the absence of a field security officer in WHO, advice may be requested from the United Nations Department of Safety and Security (UNDSS) which has security advisers on the ground.

A simple risk assessment matrix is presented below. This matrix allows the priority risks to a WHO office to be identified, as well as their consequences on staff, premises, assets and operations. The risk levels or scores obtained are defined by the characteristics of impact and probability (or likelihood), also referred to as “criticality” of the risk.¹⁰ A risk may have a major impact when it occurs although the probability that it may happen can be very remote. Conversely, a risk with a minor impact may turn into a major risk for the Organization if it occurs repeatedly or is not managed. Therefore, when discussing the criticality of a risk, there should be clarity about the impact and probability of each risk on the relevant objective(s). The scores obtained from the matrix are worked into a risk scoring table which determines the risk criticality levels, enabling identification of which risks need to be addressed first in business continuity planning.

Once the priority hazards to be addressed by business continuity planning and their consequences have been identified, it is important to assess which risk management measures need to be initiated, and which are already in place; in the latter case, assess whether the

⁹ An approach to integrated and strategic risks assessment of public health threats.

¹⁰ The risk scoring table pertains to the WHO corporate risk management policy and thus enables actions additional to business continuity planning to be taken, as required by the WHO corporate risk policy.

measures in place are sufficient to ensure business continuity or whether they need to be improved or strengthened.

Figure 1: Risk Matrix¹¹

| Hazard | Probability (likelihood) (0–5) | Impact (0–5) | | | | | Consequences | Necessary risk management measures |
|--------|--------------------------------|--------------|--------------|------------|----------------|------------|----------------|------------------------------------|
| | | Staff (S) | Premises (P) | Assets (A) | Operations (O) | | | |
| Floods | 3 | 1 | 3 | 3 | 2 | Staff | Drowning | |
| | | | | | | Premises | Flooding | Sandbags |
| | | | | | | Assets | Destruction | Alternative warehouse |
| | | | | | | Operations | Reduced access | Pre-position boats |
| | | | | | | Staff | | |
| | | | | | | Premises | | |
| | | | | | | Assets | | |
| | | | | | | Operations | | |
| | | | | | | Staff | | |
| | | | | | | Premises | | |
| | | | | | | Assets | | |
| | | | | | | Operations | | |

Figure 2: Risk scores

| | | Impact | | | | | |
|-------------|-----------|-------------|-----|-----------------|--------------------|---------------|----|
| | | Very low | Low | Medium | High | Very high | |
| | | 1 | 2 | 3 | 4 | 5 | |
| Probability | Very low | 1 | 1 | 2 | 3 | 4 | 5 |
| | Low | 2 | 2 | 4 | 6 | 8 | 10 |
| | Medium | 3 | 3 | 6 | 9 | 12 | 15 |
| | High | 4 | 4 | 8 | 12 | 16 | 20 |
| | Very high | 5 | 5 | 10 | 15 | 20 | 25 |
| | | | 1 | 2 | 3 | 4 | |
| | | Low | | Moderate | Significant | Severe | |
| | | Criticality | | | | | |

¹¹ For each hazard, give a score for the probability (or likelihood) from 1 to 5. Do the same for impact on staff, premises, assets and programmes, giving each a score from 1 to 5, and calculate the average (by adding the scores for each element and dividing by 4) (scores of S + score of P + score of A + score of O / 4 = score of impact) between 1 to 5. Plug the results for probability and impact into the risk score matrix to determine the criticality of the risks to the functionality of the office. Preparedness and/or remedial measures should logically start for the most severe risks first (see figure 2, from the WHO corporate risks management policy).

Safety and security of staff, premises, assets and operations

Business continuity planning should comprehensively address the safety of WHO staff, premises, assets and operations. Identifying the priority risks and evaluating the risk management measures already in place allows for planning of actions that need to be taken. Country offices not directly benefitting from a WHO field security officer can seek the advice and assistance of WHO Staff Security Services¹² (SEC).

Readiness measures include having the following information available and always up to date:

| | |
|----------|--|
| Staff | <ul style="list-style-type: none"> • Standard operating procedures (SOPs) for staff tracking, including list of staff with information on type of contract, dependents and contact details¹³ • SOPs for emergency communications including a communication tree (similar to the warden system) • List of security focal points and wardens (and alternates) with contact information • List of assembly points, evacuation routes and relevant procedures • List of approved health facilities to be used by staff, with addresses, and names of medical doctors • Specific memorandums of understanding (MoUs) with health facilities to avoid admission delays in emergencies • SOPs for medical evacuation including required documents • Proper security and safety training and certification of staff |
| Security | <ul style="list-style-type: none"> • Country and WHO offices specific security plans |
| Premises | <ul style="list-style-type: none"> • List of addresses and GIS coordinates of premises including warehouses and potential relocation sites • SOPs for relocation |
| Assets | <ul style="list-style-type: none"> • List of critical and high value assets including information technology (IT) resources, warehouse inventories, list of all cars and number plates • List of critical records or documents (e.g. staff contracts, documents for banking, agreements with government) that, if destroyed, lost or damaged, would cause considerable inconvenience to the Organization; these records could be located elsewhere • List of confidential documents that need to be destroyed or taken away in the case of evacuation • SOPs for asset protection and recovery |

Many elements for this part of the plan are available from the UN Minimum Operating Security Standards (MOSS),¹⁴ and from reports on residential security measures and se-

¹² <https://intranet.who.int/homes/sec/>

¹³ Staff are encouraged keep an electronic copy of all important document such as identification cards, passports, birth certificates, driving licences

¹⁴ UN security policy manual <https://dss.un.org/dssweb/policy/securitypolicymanual.aspx>

For remotely performed programmes similar arrangements need to be in place.

The plan should also identify partners from the public and private sectors and other UN agencies who can provide assistance if and when the business continuity plan is activated. All have specific strengths, assets or resources that could be pooled or used by the WHO office. For example, the International Committee of the Red Cross (ICRC) may have tents, medical equipment and storage space; the World Food Programme (WFP) and UNICEF could provide vehicles or office space; the university hospital may have a pool of medical students who could function as translators for the incident management team.

A sample table is shown below:

| Critical partner | Location/ contact details | Type of support/services | Type of agreement |
|---------------------|------------------------------|--|-----------------------------------|
| WFP | | Up to 3 vehicles without drivers, 3000m ³ warehouse space | Memorandum of understanding (MoU) |
| University hospital | | Emergency care for staff | MoU |
| BP, Shell | | Stocked fuel and oil for x days, x litres | Existing contract needs addendum |

Responding to an emergency

The third part of the business continuity plan (BCP) should address all the measures needed to perform initial emergency operations in line with the Emergency Response Framework 2017.¹⁶

The business continuity plan should include, at least, SOPs¹⁷ on:

- performing rapid risks and needs assessments to inform grading
- activating the WHO incident management system (IMS)
- repurposing staff as per the six functions of the IMS
- reprogramming funding
- accessing new emergency funding, surge staff, prepositioned supplies, etc.
- communicating about the event and WHO actions to governments, donors, partners and the media.

¹⁶ Currently being revised and updated

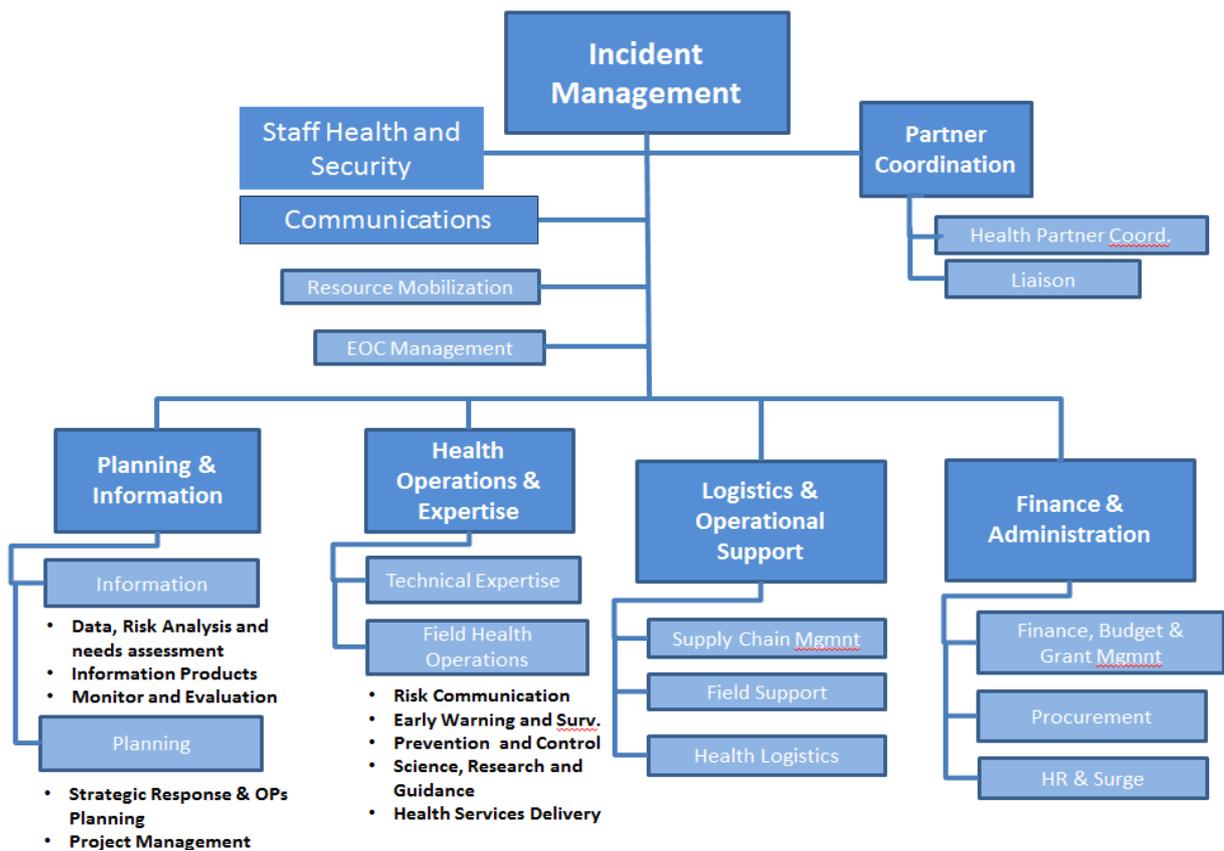
¹⁷ See <https://manual.who.int/p17/Pages/default.aspx> (this site and related SOPs are under revision to accord with the reformed WHO emergency programme)

The BCP should also include:

- the addresses of back-up locations and description of available facilities (workstations, IT, communications equipment, etc.);
- the identification and set up of a potential emergency operation centre (EOC);
- a list of assets that need to be transferred to the relocation facility; and
- pre-arrangements and memorandums of understanding (MOUs) to facilitate rapid access to e.g. office space in hotels, additional transport and accommodation, internet connectivity solutions.

The IMS will guide the repurposing of staff once the risks and needs assessment has been performed and the emergency has been graded (see figure below). WHO staff need to be identified and trained for the functions they will perform during an emergency, at least until the arrival of surge staff; this includes appropriate security training and certification if needed.

WHO's IMS Organizational Structure Critical and Sub Functions



Activating and deactivating the business continuity plan

The head of the WHO office will activate and deactivate the business continuity plan based on clear criteria and procedures. Depending on the situation s/he will decide whether all or only part of the plan is activated.

Triggers for activation and deactivation should be based on the risk assessment and possible scenarios.

Phase I – activation

The head of the WHO office or his/her designate:

- activates the BCP and/or gets approval if needed
- notifies the whole staff of the activation of the business continuity plan
- address security of staff, premises and assets appropriately
- announces relocation if needed
- announces repurposing of staff to cover both the emergency response and all operations identified as critical.

The assigned incident manager, in collaboration with the WHO head of office, initiates both the setting up of the incident management system from the pre-identified EOC, and the response activities.

Phase II – operations

The head of the WHO office:

- supervises the re-initiation of critical operations
- provides guidance on critical processes and functions, and maintains contact with other WHO offices
- activates the communications SOP to notify partners and government about WHO actions in response to the incident.

The appointed incident manager leads the response operation in close cooperation with the head of the WHO office¹⁸.

In a Grade 2 or 3 emergency, surge staff may be called in to assist in the response; the office prepares to receive these additional staff.

¹⁸ See the Emergency Response Framework and the Standard Operating Procedures on delegation of authority for roles and responsibilities.

Phase III – return to normal operations

- The head of the WHO office officially deactivates the business continuity plan.
- Staff return to their respective functions and restart suspended activities.
- The IMS is terminated and the remaining emergency operations are absorbed into the office work plan.

Phase IV – after action review

As soon as possible after resuming normal operations, the WHO office conducts a full review of implementation of the business continuity plan to identify gaps, areas for improvement, and needs for adjustment.

A full report of the after action review is submitted to the regional emergency director (RED) or executive director of the WHO health emergency programme, as appropriate, within 21 days of deactivation of the BCP.

Exercising and maintaining the business continuity plan

As per the United Nations Organizational Resilience Policy,¹⁹ regular review is a crucial element in assessing an office's resilience. In order to be effective and reliable, the business continuity plan needs to be subject to constant improvement, and tested to ensure emergency management procedures are consistent with business priorities and policy.

Exercising is therefore an integral part of planning. Selection, planning and costing of exercises are well explained in section 3 of the WHO exercise manual and the related exercise planning tool.²⁰ The head of the WHO office ensures testing of the business continuity plan before approval; business continuity capability is then maintained and enhanced through yearly updates, reviews and exercise.

Exercising enables:

- validation of the adequacy of emergency plans, systems and procedures
- familiarization of all staff with the plan, its procedures and systems
- enhancement of the functioning of the office during an emergency
- identification and remedy of deficiencies in the above
- maintenance and updating of the BCP.

¹⁹ See <http://www.unsceb.org/CEBPublicFiles/High-Level%20Committee%20on%20Management/Document/ORMS%20-%20Maintenance%2C%20Exercise%20and%20Review%20%28ME%26R%29%20Regime.pdf>

²⁰ The WHO exercise manual, July 2016, and the exercise planning tool, November 2016, will soon be available online.

3. Template business continuity plan

Title: WHO Office [name of country/region]

Business Continuity Plan

Date of approval

Signed by [name]

Current situation

Short description of WHO office specificities

Please provide:

- a description of programmes
- an organigram including number of staff
- a list of key assets
- a list of offices and their localization.

Results of risk assessment

From the risk assessment and criticality scoring performed, extract the most critical risks identified as per their impact on office functioning and operations and their likelihood of occurrence. Describe in more detail the hazards that may contribute to these risks as well as their consequences on staff, premises, assets and operations.

Evaluate for each risk whether the necessary risk management measures are in place and are sufficient, or need to be improved or installed.

| Priority hazard | Consequences | Necessary risk management measures | - Sufficient - To be improved - To be installed |
|-----------------|--------------|------------------------------------|---|
| | Staff | | |
| | Premises | | |
| | Assets | | |
| | Operations | | |
| | Staff | | |
| | Premises | | |
| | Assets | | |
| | Operations | | |
| | Staff | | |
| | Premises | | |
| | Assets | | |
| | Operations | | |

Risk management measures for ensuring the safety of staff, premises and assets

Use the evaluation of risk management measures currently in place to plan the actions needed to strengthen or install the necessary risk management measures (see action plan below).

Critical operations

Make a list of all WHO office operations, sorted into three groups:

- are critical and need to be maintained in the country
- can be relocated or performed remotely
- can be temporarily suspended.

For each programme that needs to be maintained, whether remotely or not, provide the following information:

- a list of staff required and their qualifications
- a list of identified office staff who can be repurposed, and their training needs in order to perform the assigned tasks
- a list of resources required to perform the operations
- a list for each programme of where the operations will be carried out, including possible relocation places.

Make sure that relevant SOPs are attached to the BCP.

| Programme | Critical, remote or suspended | Inputs needed | | | |
|-----------|-------------------------------|---------------|--------|----------|--------|
| | | Staff | Assets | Location | Budget |
| | | | | | |
| | | | | | |
| | | | | | |

Response to the emergency

- Make a list of existing staff who will be assigned and repurposed to:
 - perform the risks and needs assessments
 - populate the IMS.
- Annex job action sheets and terms of reference (TOR) for IMS functions and train staff accordingly.

- Identify gaps in staffing, and make a list of surge staff needed, with generic job descriptions.
- Prepare for the EOC and its alternates (premises, assets, communications, IT).²¹
- Make a list of expected logistics needs with reference to the list of pre-positioned assets.
- List the budget lines that can be reprogrammed for the response.
- Make a list of donors who could fund emergency operations, with their contact details and templates for proposals.
- Make a list of contacts who need to be notified.
- Make sure that the relevant SOPs are available in the annex to the BCP.

Activation and deactivation of the business continuity plan

- List the triggers that will activate/deactivate the BCP.
- Annex procedures/SOPs for activation/deactivation.

Exercising and maintenance of the business continuity plan

Exercise calendar

| Date | Objective of test | Type of exercise | Responsible |
|------|-------------------|------------------|-------------|
| | | | |
| | | | |

Record of changes

| Date | Change description | Change entered by (name) | Approved (WHO representative) |
|----------------|--------------------|---------------------------|-------------------------------|
| January 2015 | First plan | XX, Security Officer | XX, WHO representative |
| September 2015 | Update (new staff) | XX, Emergency Coordinator | XX, WHO representative |
| Etc. | | | |

Action plan

List the actions needed to address insufficient capacities to execute the business continuity plan, in a structured fashion.

²¹ WHO Framework for a public health emergency operations centre (Nov 2015)

| Objective | Action needed | Responsible | Budget required | Deadline |
|---|--|-------------|-----------------|-----------|
| Safety – security (staff, premises and assets) | | | | |
| | Update communication tree | Name | | Oct 2016 |
| | Purchase of Thuraya | Name | | Sept 2016 |
| | | | | |
| Continuation of critical/remote programmes | | | | |
| | Identify critical programmes | | | |
| | Identify remote office location | | | |
| | Train staff for re-purposed function | | | |
| | Test relocation SOP | | | |
| Response to emergency | | | | |
| | Find alternate location for EOC | | | |
| | Make MoU to insure access to future EOC location | | | |
| | Test use of EOC | | | |

3. References and good practices

- Non Stop Service: Continuity management guidelines for public sector agencies. Emergency Management Australia.
- WHO HQ business continuity management governance framework, 2009.
- UN framework for crisis and continuity management, 2009.
- Business continuity planning white paper: description and framework.
- WHO HQ Geneva Business Recovery Green Pack 2014
- WHO corporate risk management framework, 2015.
- WHO accountability framework, 2015.
- UN Organizational Resilience Management System and Policy, 2016
- UN Organizational Resilience Management System: Crisis Management Playbook, Oct 2015
- <http://www.phac-aspc.gc.ca/influenza/bcp-eng.php>.
- WHO. An approach for the integrated and strategic risk assessment of public health threats.

- United Nations System, Programme Criticality Framework.
- WHO BCP samples of good practices:
 - 00088_73_WCO RWANDA BCP Final Feb2016
 - 00064_51_Updated 2015 PNG BCP
 - 00042_26_PAHO Business Continuity Plan 10th revision MAY 2016 HWJ ECB.

DRAFT