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Office of Internal Oversight Services

INTERNAL AUDIT DIVISION

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Audit of business continuity management in the United Nations Stabilization Mission in Haiti

The business continuity plan for the peacekeeping operation in Haiti needed to be improved to enhance its effectiveness

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Audit of business continuity management in the United Nations Stabilization Mission in Haiti

EXECUTIVE SUMMARY

The Office of Internal Oversight Services (OIOS) conducted an audit of business continuity management in the United Nations Stabilization Mission in Haiti (MINUSTAH). The objective of the audit was to assess the effectiveness of the management of the business continuity programme to respond to risks and maintain continuity of critical business process following disruptive events. With the closure of MINUSTAH on 15 October 2017, it is anticipated that the follow-on mission, the United Nations Mission for Justice Support in Haiti (MINUJUSTH), will use the results of this audit in developing its business continuity plan. The audit covered the period from 1 July 2016 to 30 June 2017 and included a review of: (a) governance and strategy; (b) development and implementation of the business continuity plan; and (c) the maintenance, exercise and review programme.

MINUSTAH developed and implemented a business continuity plan including establishing a governance structure for the overall business continuity management system, conducted training and awareness campaigns across the Mission and adequately harmonized all its emergency plans. However, for a more effective business continuity management programme, the new Mission, MINUJUSTH could consider the following in developing the business continuity plan:

- Ensure all critical business services are identified and establish the maximum tolerable period of disruption to determine the nature and scale of mitigation strategies to be included in the business continuity plan;

- Determine critical business processes through risk assessment and business impact analysis;

- Ensure the Organizational Resilience Focal Point is adequately trained to enable him/her to guide Mission components in developing all aspects of the business continuity plan;

- Ensure that the assigned ORFP adequately guides the business continuity focal point for ICT systems in determining the recovery point objective

- Ensure a list of critical staff for the Mission is compiled and train them on implementing assigned business continuity strategies; and

- Ensure adequate communication and coordination between the business continuity focal point and various sections on the requirements of risk mitigating actions.

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Audit of business continuity management in the United Nations Stabilization Mission in Haiti

I. BACKGROUND

1. The Office of Internal Oversight Services (OIOS) conducted an audit of business continuity management in the United Nations Stabilization Mission in Haiti (MINUSTAH). With the closure of MINUSTAH on 15 October 2017, it is anticipated that the follow-on mission, the United Nations Mission for Justice Support in Haiti (MINUJUSTH), will use the results of this audit in developing its business continuity plan.

2. Business continuity is one of the core elements of the Organizational Resilience Management System (ORMS), the emergency management framework of the United Nations approved by the General Assembly in June 2013 (A/RES/67/254). Other core elements include security, information technologies and disaster recovery, medical response, crisis communications and support to staff, survivors and families. The ORMS Policy was promulgated in field missions in August 2015, with full implementation expected by June 2016.

3. The MINUSTAH Chief of Staff was responsible to ensure the implementation of all components of ORMS in the Mission, while the Chief of Joint Operations Centre served as the Organizational Resilience Focal Point (ORFP) and facilitated coordination of all components of ORMS. He was assisted by the Deputy Chief of Joint Operations Centre and designated focal points.

4. MINUSTAH had developed a business continuity plan to enable the Mission to carry out its critical functions and achieve timely and orderly recovery and resumption of normal operations following a crisis event. The ORFP in MINUSTAH was also the Business Continuity Management Focal Point and coordinated all activities with the Crisis Management Team (CMT)/Principals' groups comprising senior management, crisis management working groups, Security Management Team and various other support and substantive sections of the Mission.

5. Comments provided by MINUSTAH are incorporated in italics.

II. AUDIT OBJECTIVE, SCOPE AND METHODOLOGY

6. The objective of the audit was to assess the effectiveness of the management of the business continuity programme to respond to risks and maintain continuity of critical business processes following disruptive events.

7. This audit was included in the 2017 risk-based work plan of OIOS due to operational and reputational risks related to inability to continue operations at defined levels and periods following a disruptive event in MINUSTAH. During recent years, United Nations operations have become targets of increasing violence and malicious acts and have also suffered from natural disasters. Such events can cause serious disruptions in operations and impede the United Nations' ability to deliver time-critical services.

8. OIOS conducted this audit from March to July 2017. The audit covered the period from 1 July 2016 to 30 June 2017. Based on an activity-level risk assessment, the audit covered higher and medium risks areas in MINUSTAH business continuity management, which included: (a) governance and strategy; (b) development and implementation of the business continuity plan; and (d) the maintenance, exercise and review (ME&R) programme, including training and awareness of staff.

9. The audit methodology included: (a) interviews of key personnel, (b) reviews and analyses of business continuity plans, the maintenance exercise and review programme, and related reports and documentation; and (c) where possible, observation of tests/exercises of the business continuity programme.

III. OVERALL CONCLUSION

10. MINUSTAH developed and implemented a business continuity plan including a governance structure for the overall business continuity management system, conducted training and awareness campaigns across the Mission, harmonized all its emergency plans and put in place a functional ME&R regime. However, OIOS identified the need to strengthen risk management and controls to improve business continuity management in Haiti.

11. OIOS therefore suggests that MINUJUSTH when developing its business continuity plan should: (i) ensure all critical business services are identified, including the maximum tolerable period of disruption; (ii) determine its critical business processes through risk assessment and business impact analysis; (iii) ensure a list of critical staff for the Mission is compiled and train them on implementing assigned business continuity strategies; and (iv) ensure adequate communication and coordination between the business continuity focal point and various sections on the requirements of risk mitigating actions.

IV. AUDIT RESULTS

A. Governance and strategy

<u>MINUSTAH established a governance structure for the overall emergency management system</u>

12. ORMS required MINUSTAH to establish a governance mechanism including a coordination structure for crisis management, to ensure effective implementation of the Mission’s emergency management system.

13. The Chief, Joint Operations Centre, as the ORFP, coordinated all activities related to ORMS including crisis and business continuity management. The ORFP reported to the Chief of Staff who was responsible to ensure the overall implementation of ORMS in the Mission. MINUSTAH also designated focal points in each of its sections including Communication and Information Technology, Medical, Security, and Public Information to assist the ORFP in discharging his coordination role.

14. Additionally, MINUSTAH, at the leadership level, established a CMT of 14 members headed by the Special Representative of the Secretary-General (SRSG) for streamlined decision-making on the activation and deactivation of a crisis response following a critical event, and operational coordination of the response. The CMT, at the operational level, was assisted by the Crisis Management Working Group (CMWG) comprising 15 members headed by a designated Crisis Coordinator to support routine operations at the onset of a crisis. The coordination structure for crisis management included all the relevant United Nations entities in Haiti. Interviews of 7 out of 14 members of the CMT indicated that they had a clear understanding of the business continuity process and their roles and responsibilities in the event of a disruption in the delivery of the Mission’s critical business services.

15. The CMT met nine times during the audit period to take strategic decisions towards resolving three crises namely: Hurricane Matthew in October 2016; coordination of the November 2016 presidential election; and the January 2017 arrest of a Senator-elect. The CMT met five times during Hurricane Matthew

and twice during the election period and the arrest of a Senator-elect, respectively. The lessons learned reports and minutes of meetings during the crisis periods indicated that the CMT was involved in establishing strategic objectives and taking critical decisions on business continuity.

16. **Based on the above, OIOS concluded that MINUSTAH had established an adequate governance mechanism for implementing ORMS. Therefore, OIOS suggests that if possible, within available resources, a similar governance structure be implemented in MINUJUSTH.**

MINUSTAH needed to identify its critical business services

17. The Business Continuity Management Unit's guidelines required MINUSTAH's senior management: (i) to identify critical business services based on the Mission's mandate and strategic priorities; and (ii) to establish the maximum tolerable period of disruption for time critical services.

18. MINUSTAH senior management did not identify the critical business services based on the Mission's mandate and strategic priorities. Based on the guidelines, these were services that the senior management consider so important that they have to be maintained or quickly recovered after a disruptive event. As a result, the Mission did not establish the maximum tolerable period of disruption for time critical services to indicate the time period senior management considered acceptable to continue operations without these critical services. The maximum tolerable period of disruption also directs the nature and scale of mitigation strategies to be included in the business continuity plan to ensure that the durations of disruptions remain within the periods specified.

19. These omissions occurred because the ORFP did not adequately guide senior management in identifying the critical business services and establishing the maximum tolerable period of disruption for time critical services. Consequently, key information necessary to develop the business continuity plan was missing. *MINUSTAH indicated that there was a need for additional training on some topics including the identification of critical business services.*

20. **MINUJUSTH needs to ensure that the assigned ORFP is adequately trained to enable the Mission to identify its critical business services and establish the maximum tolerable period of disruption for time critical services. MINUJUSTH also needs to use these parameters to determine the nature and scale of mitigation strategies to be included in the business continuity plan.**

B. Development of the business continuity plan

Business continuity plan was prepared

21. The Business Continuity Management policy describes the business continuity plan as a living document that follows an all hazards approach and outlines critical business processes, critical staff required to maintain critical functions, risk mitigation strategies as well as recovery procedures for each department/office/organizational unit. The Secretary-General's report on ORMS (A/67/266) requires missions to: (i) develop a business continuity plan and appoint a business continuity focal point; and (ii) submit their plan to the Department of Peacekeeping Operations/Department of Field Support Organizational Resilience Programme Officer for review.

MINUSTAH developed a business continuity plan that was approved by the SRSG in August 2016. It identified the Chief of Joint Operations Centre as business continuity focal point. The plan was prepared in accordance with the template provided by the Organizational Resilience Programme Officer and it included important elements of business continuity.

22. Although there was no documentary evidence indicating that the business continuity plan had been reviewed by the Organizational Resilience Programme Officer, the ORMS annual report, ORMS and Crisis Management Standard Operating Procedures, and Crisis Management Quick Reference Guide had all been prepared by the ORFP in coordination with the Organizational Resilience Programme Officer. However, absence of a formal review of the plan by the Officer may have contributed to some of the deficiencies included in the present report.

The identification of critical business processes was not supported by risk assessment and business impact analysis

23. The Business Continuity Management policy required MINUSTAH to conduct a risk assessment and business impact analysis to support the identification of critical business processes and determine the effect of interruption of critical services provided by the Organization.

24. The different sections of MINUSTAH identified 118 critical business processes. However, the identification of these processes was not supported by a risk assessment for an objective evaluation of how disruption of these processes could threaten services that the Mission needed to deliver under all circumstances. Additionally, interviews with 10 out of 29 MINUSTAH programme managers indicated that prior to the identification of critical business processes, the programme managers did not conduct business impact analyses to determine the dependencies of such critical processes on essential service delivery and the impact of the interruption to such processes following a disruptive event. Consequently, a large number of activities were classified as critical. For example, all the activities of the Procurement Section including solicitation, processing requisitions and monitoring contracts were determined to be critical processes. Likewise, the Finance Section and the Conduct and Discipline Unit identified budget approval processes and training of staff, respectively as critical processes. While these were important tasks, they were evidently not time-critical business processes that put the Mission at operational or reputational risk immediately following a disruptive incident. Further, some critical business processes like safeguarding of strategic fuel reserves or rations reserves were not duly considered. The list of critical business processes appended to the MINUSTAH business continuity plan did not incorporate key operational activities and functions of some important sections including Security and Communication and Information Technology.

25. The above occurred because the ORFP had not been: (i) appropriately trained to identify critical business processes through risk assessment and business impact analysis; and (ii) able to adequately guide MINUSTAH sections in determining the critical business processes and ensuring that such determination was supported by risk assessment and business impact analysis. This deterred the Mission from proper identification of critical business processes and prioritization of resources accordingly, that may impede the Mission's capability to recover timely after a disrupting event. *MINUSTAH mentioned that although training had been provided, additional training (e.g. on risk assessment and business impact analysis) was needed from New York Headquarters.*

26. **MINUJUSTH, in developing its business continuity plan, needs to identify its critical business processes through risk assessment and business impact analysis. To assist in this, MINUJUSTH needs to ensure that the assigned ORFP is appropriately trained to guide Mission components in developing all aspects of the business continuity plan.**

The recovery point objective was not determined

27. The Business Continuity Management policy required MINUSTAH to determine: (a) recovery time objective (RTO) to define the time needed to recover a required function or application; and (b) recovery

point objective (RPO) to define the acceptable period of non-availability of information and communication technology (ICT) systems.

28. MINUSTAH determined the RTO for different activities and established the mitigation strategy for the RTOs identified for each activity. The Mission also established a recovery window of 0-4 hours for 50 activities and 4-24 hours for 64 activities. Although MINUSTAH depended on various ICT systems including Umoja to run the various activities of its sections, the Mission did not determine the RPO to define the acceptable period of non-availability of ICT systems.

29. The above occurred because the ORFP did not coordinate with the business continuity focal point for ICT systems to determine the RPO. As a result, the Mission was not able to determine the appropriate time window for acceptable period of non-availability of ICT systems due to the absence of RPO.

30. **MINUJUSTH needs to ensure that the assigned ORFP adequately guides the business continuity focal point for ICT systems in determining the recovery point objective.**

C. Implementation of the business continuity plan

Need to improve the preparedness and capability of the Mission to resume critical business processes

31. The business continuity plan requires MINUSTAH to identify alternate or recovery site to carry out critical functions in case a threat or interruption event results in Mission Headquarters primary working spaces becoming unusable. The Plan also requires MINUSTAH to: (i) assign critical staff the responsibility to maintain pre-identified critical processes in accordance with mitigation strategies; and (ii) provide critical staff with specific equipment and training to allow them to implement their business continuity functions.

32. MINUSTAH identified alternate sites to continue critical functions at the onset of a catastrophic event. However, the Mission did not identify and compile a list of critical staff on a permanent basis to maintain critical functions, risk mitigation strategies and recovery procedures for its sections and units. Rather, critical staff were identified and a list was compiled on an ad-hoc basis at the commencement of a crisis. A review of the critical business processes and corresponding mitigation strategies of the Medical Section, Engineering Section and Police Operations Centre of the Mission as well as interviews with the concerned officials indicated that the respective sections did not assign critical staff the responsibility to maintain pre-identified critical processes. Furthermore, the staff members did not receive training on implementing assigned continuity strategies and they were not aware of the mitigation actions to be implemented against each critical business processes to address the business impact severity.

33. The above occurred due to the frequent movement of staff in the downsizing Mission, which did not allow for the selection of critical staff on a permanent basis, and inadequate and ineffective coordination between the business continuity focal point and various sections/units heads regarding the implementation of risk mitigating actions. Also, the Mission did not implement a mechanism to ensure that the list of critical staff is updated anytime there is staff movement.

34. The absence of a critical staff list may impede the Mission’s ability to effectively respond to risks and maintain continuity of critical business processes following disruptive events. *MINUSTAH stated that it published and broadcasted on a weekly basis a list of personnel and respective contacts that can be reached to ensure critical functions in case of a crisis.* While OIOS noted the action taken by the Mission, there was a risk however, that these officers may not have the necessary training to support implementation, maintenance and, if necessary, recovery of critical processes.

35. **MINUJUSTH needs to ensure that it compiles a list of critical staff for the Mission and train them on implementing assigned business continuity strategies. MINUJUSTH could also ensure adequate coordination between the business continuity focal point and various sections/units heads to facilitate the implementation of the risk mitigating actions and enhance the capability of the Mission to resume critical business services following disruptive events.**

D. Maintenance exercise and review programme

Need for a functional ME&R regime

36. The United Nations Policy on Business Continuity Management required MINUSTAH to test the business continuity plan to validate policies, procedures, and systems against established standards and update the plan to reflect lessons learnt. The testing should include: (i) annual simulation exercises; (ii) quarterly test of emergency notification system; (iii) bi-annual telecommuting exercise and staff meeting using peer-to-peer technology; and (iv) annual fail-over tests.

37. Interviews with the ORMS focal point, Communication and Information Technology Section (CITS) personnel and business continuity focal points and a review of related documents indicated that MINUSTAH:

- Tested the emergency notification system using text messages. The last test was carried out in February 2017. Also, the Security Section broadcasted regular security alerts and notifications and launched a dedicated security awareness campaigns during the hurricane season;

- Conducted a telecommuting exercise and staff meeting using peer-to-peer technology during the 2016 Hurricane Matthew. The Mission allowed critical staff to work from home using handheld radios and other information technology support provided by CITS. Also during the demonstrations that arose from the 2017 arrest of the Senator-elect, staff members in Les Cayes remained at home and they were able to monitor the situation using their handheld radios; and

- Carried out the annual fail-over tests of the server unit as part of the disaster recovery exercise conducted every year. The last test was carried out in April 2017 and the positive results were documented in the disaster recovery review report.

38. However, although the Mission organized after action meetings of CMWG members and the Joint Operations Centre to discuss lessons learned from Hurricane Matthew, 2016 presidential elections and the crisis arising from the arrest of a Senator-elect, it did not update the business continuity plan to address the need for: (i) better information sharing; (ii) reinforcement of security measures; and (iii) streamlined aviation tasking procedures during crisis as noted in the lessons learned reports and after action reviews.

39. The above occurred as MINUSTAH did not take appropriate actions to ensure that the ORFP coordinated with the office of the Chief Mission Support, the Chief Security Adviser and the business continuity focal points of all sections to implement corrective measures resulting from the lessons learned exercises and after action reviews and update the business continuity plan accordingly.

40. As a result, MINUSTAH was unable to address the deficiencies identified and update the business continuity plan as appropriate based on the lessons learned. This increased the risk that MINUSTAH would not be ready and able to respond effectively and promptly in case of disruptive events.

41. **MINUJUSTH needs to ensure that the ORFP coordinates with relevant Mission components to implement corrective measures resulting from lessons learned exercises and after action reviews and updates the business continuity plan accordingly.**

Training and awareness campaigns were conducted across the Mission

42. The ORMS policy requires MINUSTAH to: (i) train all staff with business continuity responsibilities, particularly those responsible for time-critical functions; and (ii) ensure that staff have general awareness of business continuity arrangements and general emergency procedures.

43. During the audit period, the Mission conducted awareness campaigns related to business continuity arrangements and general emergency procedures. Additionally, the Mission, through the Joint Operation Centre organized various trainings for the civilian, military and police personnel of the Mission.

44. MINUSTAH also conducted dedicated sessions for the CMT and the Security Management Team Members respectively on 12 and 14 June 2017 with the aim of achieving integrated coordination and interaction among all the crisis management's members and to provide an up-to-date status of the Mission's preparedness in a context of Mission drawdown and transition.

45. OIOS concluded that MINUSTAH trained and made staff aware of business continuity arrangements and general emergency procedures. However, as noted earlier in the report, additional training was needed on some aspects of ORMS.

Controls over the harmonization of emergency plans were adequate

46. The ORMS policy requires close coordination between various preparedness processes (i.e. crisis management, business continuity, contingency planning, staff councilor and information technology disaster recovery) to ensure a comprehensive response to and recovery from a critical event. The various plans should be interlinked and informed by one another.

47. In addition to the business continuity plan, the Mission had an approved and updated security plan, information technology disaster recovery plan and crisis communication plan. The standard operating procedures for crisis management was approved as of 30 June 2017.

48. All existing emergency plans and related documents were consistent with respect to common information and processes. Additionally, the ORMS focal point of the Mission coordinated with various support and substantive sections including Security, Civil Affairs, CITS and Public Information Office before compiling and updating the emergency plans.

49. OIOS concluded that MINUSTAH had implemented adequate controls to ensure consistency and harmonization of common information and processes of various emergency plans.

V. ACKNOWLEDGEMENT

50. OIOS wishes to express its appreciation to the management and staff of MINUSTAH for the assistance and cooperation extended to the auditors during this assignment.

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