

INTERNAL AUDIT DIVISION

REPORT 2018/007

Audit of post-construction and occupancy of the new office facility for the Mechanism for International Criminal Tribunals at Arusha

While the construction of the new office facility was declared substantially completed, attention was required to some aspects of the facility for it to be fully usable

19 February 2018 Assignment No. AA2017/261/07

Audit of post-construction and occupancy of the new office facility for the Mechanism for International Criminal Tribunals at Arusha

EXECUTIVE SUMMARY

The Office of Internal Oversight Services (OIOS) conducted an audit of post-construction and occupancy of the new office facility for the Mechanism for International Criminal Tribunals (MICT) at Arusha. The objective of the audit was to assess the adequacy and effectiveness of governance, risk management and control processes over the effective management of the post-construction period and occupancy of the new office facility. The audit covered the period from 1 December 2016 to 31 October 2017 and included a review of: (i) follow-up and management of the punch-list; (ii) heating, ventilation and air conditioning (HVAC) system in the Archive Building; (iii) identification and management of potential design flaws; (iv) training and orientation of MICT staff; and (v) the occupancy plan.

MICT had substantially occupied the facilities on 5 December 2016, except for the archives which remained at rented premises. However, attention was required to some aspects of the facility for it to be fully usable.

OIOS made eight recommendations. To address issues identified in the audit, MICT needed to:

- Develop and execute a plan with specific deadlines and clearly documented follow-up procedures to ensure that all identified defects are fully rectified before the project is closed;
- Finalize the improvements to the fire-fighting equipment and review the installation of fire detection and fire-fighting equipment to ensure that all rooms are adequately covered and linked to the central control system.
- Take stock of all outstanding activities, define milestones and expected dates for completion for each activity, and closely monitor implementation to ensure the timely completion of the Court Building.
- Investigate the impact of sandstorms on the Office Building and take appropriate remedial action to address it
- ensure that ablution facilities, including consideration of portable facilities, are provided for use by security personnel guarding the primary entry point.
- Re-route the water pipes and move the water-based cooling system outside the data centre; install a humidity and temperature detection system to protect the equipment from water damage; and connect each single-phase rack to at least two power sources in compliance with data centre's power circuit requirements.
- Develop and implement space allocation guidelines based on clearly defined criteria for all organs of MICT to ensure equitable allocation of space in the new office facility.

MICT accepted the recommendations and has initiated action to implement some of them.

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Audit of post-construction and occupancy of the new office facility for the Mechanism for International Criminal Tribunals at Arusha

I. BACKGROUND

1. The Office of Internal Oversight Services (OIOS) conducted an audit of post-construction and occupancy of the new office facility for the Mechanism for International Criminal Tribunals (MICT) at Arusha.

2. MICT was established by Security Council resolution 1966 (2010) to continue the functions of: (a) the International Criminal Tribunal for the Prosecution of Persons Responsible for Serious Violations of International Humanitarian Law Committed in the Territory of the Former Yugoslavia since 1991; and (b) the International Criminal Tribunal for the Prosecution of Persons Responsible for Genocide and Other Serious Violations of International Humanitarian Law Committed in the Territory of Rwanda and Rwandan Citizens Responsible for Genocide and Other Such Violations Committed in the Territory of Neighboring States, between 1 January and 31 December 1994.

3. Pursuant to Security Council resolution 1966 (2010), MICT was established with two branches at Arusha and The Hague, which started operating on 1 July 2012 and 1 July 2013, respectively. According to the statute of MICT, the branch for the International Criminal Tribunal for the former Yugoslavia (ICTY) has its seat in The Hague, Netherlands and the branch for the International Criminal Tribunal for Rwanda (ICTR) has its seat in Arusha, Tanzania. Furthermore, in accordance with the statute, MICT is responsible for the management, including preservation and access, of the archives of both the Tribunals which are co-located with the respective branches of MICT in Arusha and The Hague.

4. General Assembly resolution 67/244/B authorized the construction of the new office facility for MICT at Arusha and approved the establishment of a multi-year special account to record the project's income and expenditure. The Assembly approved the financing of the project at a cost of \$8.8 million, including contingency. The Government of Tanzania allocated land to the United Nations at Lakilaki, about 12 km from the city of Arusha, where construction started in 2015. In the most recent report of the Secretary-General (A/71/753), it was noted that \$455,814 of the contingency remained unused.

5. The project was declared substantially completed on 1 December 2016 and the new office facility was occupied by MICT staff members from 5 December 2016. At the time of the audit, the project was in the post-occupancy phase which included a 12-month defect liability period starting from 1 December 2016, during which outstanding and defective works relating to the construction process, as well as other defects that MICT identified during occupancy, were included in the "punch-list"¹ for rectification. Among many stakeholders, the Office of Central Support Services (OCSS) – including its Overseas Properties Management Unit (OPMU) and the Procurement Division (PD) – and the Office of Legal Affairs (OLA) provided the required support to the project from its inception to the declaration of substantial completion. Additionally, they were also involved in the post-construction phase.

6. Construction works were carried out by a local contractor. Architectural services were provided by an architectural and engineering consulting firm (hereafter referred to as "the architect") which partnered with a sub-consultant ("the architect's sub-contractor").

7. Comments provided by MICT are incorporated in italics.

¹ Punch-list is a list of outstanding and defective work identified at the time of substantial completion of the construction process. Approximately 880 defects were identified which were classified as architectural, mechanical and electrical in nature.

II. AUDIT OBJECTIVE, SCOPE AND METHODOLOGY

8. The objective of the audit was to assess the adequacy and effectiveness of governance, risk management and control processes over the effective management of the post-construction period and occupancy of the new office facility at MICT, Arusha.

9. This audit was included in the 2017 risk-based work plan of OIOS because the General Assembly, by resolution 67/244B, requested the Secretary-General to entrust OIOS with ensuring effective oversight over the implementation of the construction of the new office facility at MICT, Arusha. Additionally, OIOS identified significant risks relating to the post-construction and occupancy period which needed to be managed effectively to fully realize the benefits of the project.

10. OIOS conducted this audit from August to October 2017. The audit covered the period from 1 December 2016 to 31 October 2017. Based on an activity-level risk assessment, the audit covered risk areas in the post-construction phase of the project, which included: (i) follow-up and management of the punch-list; (ii) heating, ventilation and air conditioning (HVAC) system in the Archive Building; (iii) identification and management of potential design flaws; (iv) training and orientation of MICT staff; and (v) the occupancy plan.

11. The audit methodology included: (a) interviews with key personnel; (b) review of relevant documentation; (c) analytical review of data; and (d) physical observation at the site.

12. The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.

III. AUDIT RESULTS

A. Follow-up and management of the punch-list

Photo 1: View of the new office facility at Lakilaki, Arusha



Substantial completion was achieved within the project budget

13. The construction of the new office facility at MICT Arusha was declared substantially completed on 1 December 2016, within budget. This was attributed, among others, to effective project management, cooperation of multiple stakeholders, the governance framework (with input from OCSS, PD, OLA and other offices at the United Nations Headquarters), maximization of local resources and materials, substantial application of lessons learned from other United Nations projects, and the creation of new best practices. MICT substantially relocated from rented offices to the new office facility on 5 December 2016 except for the archives which remain at the rented premises. Photo 1 above shows the completed office facility.

A clear plan with specific deadlines is required to address outstanding defects on the punch-list

14. Section 11 of the contract between MICT and the contractor required the latter to rectify all defects (listed on the punch-list) within 12 months from the date of substantial completion. Likewise, the contract between MICT and the architect required the latter to monitor the process of defect rectification and completion of outstanding and additional works, including arranging meetings with the contractor and MICT during the defects liability period. In addition, the lessons learned from a similar project at the United Nations Office at Nairobi were the need to retain key project management staff throughout all phases of the project and ensure that the architect and the contractor do not abrogate their responsibilities to rectify defects and complete any outstanding works.

15. When substantial completion was achieved, the manager who oversaw the project up to that point departed from MICT to take up other responsibilities within the United Nations. However, the Officer-in-Charge of MICT Registry in Arusha, who was a member of the project team during the earlier phases of the project, remained while project management activities were transferred to the General Support Services whose core responsibility was facilities management. Approximately 880 defects had been identified at the time of substantial completion and documented in the punch-list, all of which needed a dedicated manager to follow up closely to ensure that they were resolved within the defects liability period of 1 December 2016 to 30 November 2017. These defects were architectural, mechanical and electrical in nature.

16. Potential design issues and latent workmanship defects identified for being addressed in the context of the defects liability period were the following:

- Perimeter lights not properly functioning due to water inside the cable areas;
- Stagnant water in the parking areas, generator areas, public gallery entrance and leakage in the courtroom hallway during the rainy season. A comprehensive review of all slopes/gradients of the compound is needed, notably in areas surrounding the Archive Building;
- Soil erosion on the perimeter; and
- Constant leakage of water in office numbers 004 and 029 on the ground floor of the Office Building during rains. This posed a significant safety risk as water fell on trunking which housed live cables.

17. There was significant delay in rectification of identified defects. At the time of the audit, only 20 per cent (169 out of 880) of the defects had been fully rectified and there were no clear deadlines for completing the remaining 80 per cent. Given that the defects liability period expired on 30 November

2017, there was no assurance that the outstanding defects were rectified in time. There was a lack of urgency among key parties, especially the architect and its sub-contractor. Specifically, there was no evidence that the architect or its sub-contractor monitored the defect rectification processes and progress, especially between December 2016 and June 2017. Under the contract, the architect was expected to arrange frequent meetings and inspections with the contractor, with MICT in attendance, but there was no evidence of any such meetings in the aforementioned months.

18. In the absence of a dedicated project manager, MICT did not enforce its rights under the contract with the architect in the first half of 2017. While the General Support Services tried its best under the circumstances to have as many defects as possible addressed within the defects liability period, the challenges in managing an entirely new facility seemed beyond its capacity.

19. In mid-2017, MICT hired a project manager on loan from the Economic Commission for Africa, whose arrival quickened the pace of many activities that had stalled, including management of the punchlist. The architect, contractor and the architect's sub-contractor were brought on site in August 2017 to perform tests and agree on tangible solutions for resolving outstanding issues. The project manager also kept MICT management updated on a weekly basis and constantly engaged with all the key players.

20. On 20 November 2017, MICT provided an update to OIOS stating that, in close coordination with the architect, it was reviewing and monitoring the punch-list. This was being done through weekly meetings, regular video conferences and written correspondence. On 17 November 2017, MICT had a meeting with the contractor whom it requested to take corrective action on all outstanding activities before expiration of the defects liability period.



(1) MICT should: (i) develop and execute a plan with specific deadlines and clearly documented follow-up procedures to ensure that all identified defects are fully rectified before the project is declared completed and closed

MICT accepted recommendation 1 and stated that the contractor had already deployed manpower to the site to address the punch-list. MICT had instructed the contractor to provide a consolidated schedule by 20 February 2018. The defects are scheduled to be rectified and inspected by 30 April 2018.

Recommendation 1 remains open pending receipt of evidence of: (i) completion of all items listed in the punch-list

Fire-fighting equipment needed to be rectified to function as required

22. The Organization's Minimum Operating Security Standards (MOSS) require each office to have basic fire-fighting equipment that is in good condition and fit for the purpose. At the time of the audit,

the fire-fighting equipment at MICT was malfunctioning and a substantial number of leaks and pipe bursts had been reported during the occupancy of the new facility.

23. MICT depended on Arusha City's fire-fighting department located 12 kilometres away since it had not developed its own capacity. Considering the distance, it was essential for the new office facility to have its own basic fire-fighting equipment fully operational and ready for use at all times. Accordingly, MICT had invested in training six security staff and had a dedicated fire officer to ensure basic fire-fighting capacity. In addition, MICT had procured small, portable fire-fighting equipment but these would not suffice in the event of a major fire outbreak. However, the investment in training would be of no value if the equipment to be used by MICT staff was faulty.

24. MICT explained that the fire-fighting equipment was functioning at the time of substantial completion of the office facility. The architect attributed the system malfunction to faulty pump sensors that needed to be replaced. However, OIOS notes that there was no evidence that a thorough investigation had been undertaken to arrive at this conclusion. Considering that 11 months had elapsed with the problem persisting and known to all parties, a concerted effort is required to investigate and correct the flaw in a more effective manner. This needed to be urgently undertaken within the defects liability period that was scheduled to expire on 30 November 2017.

25. In addition, the Office Building was re-organized without adequate consideration of fire safety regulations. Initially, the building was designed to have open space. However, it became necessary to introduce partitions because the work of some staff members required confidentiality. The partitioning was done without re-designing the fire detection and emergency apparatus to fit the new concept. As a result, the fire alarms in the offices of the partitioned space were not linked to the central control system. This may impede the security team in quickly responding to fire outbreaks in the partitioned offices.

26. On 20 November 2017, MICT provided OIOS with an update as follows: (i) the system pressure sensors of the fire-fighting apparatus had since been rectified. Tests carried out during the week of 13 to 17 November 2017 showed effective performance of the apparatus. MICT was working with the architect to further improve the design by installing pressure relief valves to ensure pipe bursts do not recur; (ii) in early 2017, MICT procured portable smoke detectors and fire alarms which were installed in all rooms that were not covered by the installed fire detection system, pending detailed review and a bill of quantities to link all rooms to the smoke detector and fire alarm central control system. Notwithstanding the actions reported by MICT, arrangements for fire-fighting were yet to be fully completed.

(2) MICT should: (i) finalize the improvements to the fire-fighting equipment to prevent pipe bursts; and (ii) review the installation of fire detection and fire-fighting equipment in the new office facility to ensure that all rooms are adequately covered and linked to the central control system.

MICT accepted recommendation 2 and stated that pressure switches for the fire pumps had been adjusted to operate as desired. To meet the requirements for individual fire detectors for each enclosed office and their integration to the control centre, MICT will initiate the acquisition process depending on the availability of funds. Recommendation 2 remains open pending receipt of evidence that essential improvements to fire-fighting equipment and detection systems have been carried out.

Need to coordinate efforts to have the Court Building fully operational

27. At the time of the audit in October 2017, the Court Building was not yet ready for use. Some contractually required installations such as cross-talk attenuators and fire/sound sealants to openings were not installed. These had accordingly been included in the punch-list and were expected to be remedied

before the end of the defects liability period. Also, the equipment providing cold air to the courtroom was installed adjacent to the courtroom; the noise produced by this could negatively affect court proceedings. Sound levels measured by experts at the exhaust were in the range of 96 decibels whereas acceptable levels for office buildings range from 48 to 58 decibels. Furthermore, the cold air supply did not meet the user's requirements. It is the architect's obligation to review sound levels for the HVAC system in the Court Building.

28. In August 2017, MICT requested the architect to rectify or ensure that the contractor, among other things: (i) installed cross-talk attenuators to all buildings as reflected in the contractual drawings; (ii) sealed all openings above the ceiling with appropriate fire/smoke retardant material; and (iii) reviewed and identified appropriate ways to minimize sound generated when the HVAC system is activated.

29. Upon completion of the above interventions, and concurrent with the work in progress, MICT's General Services Section and the Information Technology Support Section also planned to carry out various outstanding activities such as ordering courtroom accessories and installing computers, wall-mounted cameras and screens in the court. All parties worked towards a deadline of 30 November 2017, although it was unlikely that the outstanding work would be completed by that date. In addition, a pipe burst that occurred in early October 2017 resulted in further damage to electrical installations, setting back the works considerably.



32. As reported in a previous OIOS audit (Report 2017/143) on MICT's readiness for management of trial and appeal proceedings, the first hearing of a case was planned for mid-November 2017 in Arusha but was then postponed to February 2018 due to judicial reasons unrelated to the project. This situation provided MICT with additional time to address the impediments concerning the courtroom's readiness. It was therefore necessary for MICT to define milestones and expected dates of completion for each

outstanding activity and monitor them effectively to ensure the availability of the courtroom in time for the proceedings scheduled for February 2018.

(3) MICT should take stock of all outstanding activities, define milestones and expected dates for completion for each activity, and closely monitor implementation to ensure the timely completion of the Court Building.

MICT accepted recommendation 3 and stated that all pending work had been completed. Water proofing works are also done and awaiting final tests and inspection. Recommendation 3 remains open pending receipt of the results of the final tests and inspection.

B. Heating, ventilation and air conditioning system in the Archive Building

Action plan was required to have the repositories working as intended

(a) <u>Design issues</u>

33. According to the contract between MICT and the architect, the latter was to ensure that both in the main repository and in the cold vault, optimal environmental conditions are maintained for the long-term storage of the archives by controlling temperature, relative humidity and air quality. The cold vault was expected to be kept at a constant temperature of 8 degrees Celsius (°C) and 25 per cent relative humidity. This was according to the specifications described in the Secretary-General's report A/66/754 of 28 March 2012 on "Construction of the new facility for the International Residual Mechanism for Criminal Tribunals, Arusha Branch".

34. These parameters, as determined by the MICT Archive and Records Section (MARS), were required because storing paper records in conditions that exceed 20°C or 40 per cent relative humidity, or which fluctuate by more than $\pm/2^{\circ}$ C or 5 per cent relative humidity may result in their deterioration. Storing magnetic tape or other electronic media in conditions that exceed 8°C or 25 per cent relative humidity or which fluctuate by more than $\pm/2^{\circ}$ C or 5 per cent relative humidity may lead to deterioration. Storing any records in an environment which is not free of dust, contaminants or pollutants may also result in deterioration. Archival standards also suggest that the internal environment should be managed by a climate control system which includes mechanisms for making informed adjustments to internal conditions based on the archivists' active intervention.

35. Eleven months after the building of the new facility was declared substantially completed and ready for occupancy, the archive repository was still not in use as it was deemed not fit for the purpose.



(b) <u>Payment issues</u>



(c) Attempts to address the situation





C. Identification and management of potential design flaws

Office air quality considerations require urgent remedial action

43. According to the United Nations Headquarters Building Manual, staff members should work in an environment with good air quality. The design of the Office Building in Arusha did not appear to have fully taken into account the impact of sandstorms in the area (see Photo 2 below) which significantly affected the air quality, thereby compromising the safety and occupational health of staff members.

44. The current Office Building in Arusha has a ventilated roof and louvre windows designed to enable free circulation of natural air. However, during sandstorms, dust fills the rooms and some staff members have to wear dust masks to cope. At the time of audit, at least two staff members were reportedly taken ill as a direct consequence of sandstorms. Also, sandstorms have left the roof vulnerable

as the ceiling shakes when the sandstorms occur (see Photo 3 below) to the extent that a ceiling block fell directly on the seat of a staff member in a documented incident earlier in 2017. Fortunately, the staff member was not at the desk at the time.



Photo 2: View of an approaching sandstorm behind the Court and Archive Buildings



Photo 3: Shaky ceiling due to the impact of a sandstorm



(5) MICT should: (i) in consultation with the Office of Central Support Services, investigate the impact of sandstorms on the Office Building and take appropriate remedial action to address it

MICT accepted recommendation 5 and stated that it is currently working on options to address the sand infiltration through the attic louvers. Once the design and specification for remediation works are completed, the works will be executed subject to the availability of funds.

Recommendation 5 remains open pending receipt of evidence that the impact of sandstorms has been investigated and appropriate remedial action has been taken.

Need to revisit and address issues relating to security of the new facility in Arusha

46. The MOSS for Tanzania require the following to be in place, among others:





It was unclear why ablution

facilities were not considered during the design phase, and why portable facilities have not been provided for use by security personnel.



53. MICT stated that it had taken the following actions:

(6) MICT should:

and (ii) ensure that ablution facilities, including consideration of portable facilities, are provided for use by security personnel guarding the primary entry point.

MICT accepted recommendation 6 and stated that it will prioritize the correction of any defective work, particularly those related to adherence to life-safety standards in the new facility.

Action was required to protect equipment in the data centre

54. The data centre at the new office facility in Arusha housed critical information and communication technology (ICT) equipment worth close to \$4.5 million comprising the digital archive (a MARS system known as DIVA), the converged information technology infrastructure (V Block) and networking and switching equipment which links the Arusha branch with The Hague. OIOS noted that pressurized water pipes were routed to the Court Building through the data centre, directly above the ICT equipment. Furthermore, the cooling system in the data centre was also water-based. In the event of a pipe burst or leak from the cooling system, water would fall directly on the equipment, potentially flood the data centre and cause significant damage because no safety valve was in place to immediately cut off the water supply and isolate the data centre. Also, there was no humidity detection system in the data centre to detect any humidity fluctuation that could adversely affect the equipment.

55. Additionally, the single-phase power source that fed the networking, internet and five switching racks, and the DIVA system (also five racks) was provided from a single power circuit which is not in compliance with the standards. There was one uninterrupted power supply (UPS) unit in place, but this could only provide alternative power for a limited period because there was no redundancy. Furthermore, this UPS was inherited from ICTR and was very old. The new UPS that was bought for the data centre was yet to be installed because of technical issues.

56. There was risk of severe damage to equipment worth \$4.5 million in the data centre: (i) in case of a pipe burst or leak if the water pipes are not re-routed to ensure that the water-based cooling system was moved outside the data centre; and (ii) by corrosion and condensation caused by humidity in the absence of a humidity detection system. Further, there could be considerable interruption in services if the single-phase power outlet were to cease supplying power. These risks have the potential to bring all activities of the branch to a standstill for long periods of time pending replacement of the damaged equipment.

57. On 20 November 2017, MICT stated that it had taken the following actions:

(i) Planning had commenced to re-route chilled water pipes installed inside the data centre to outside. For expeditious resolution, a work order was being initiated under an existing bulk purchase order with the contractor to design and develop a statement of works and bill of quantities. It was projected that these arrangements would be in place by 31 December 2017. Relocation of the water pipes will be concurrent with addressing ventilation inadequacy recently identified in the adjacent Security Control Centre.

(ii) Planning had commenced for procurement of an FM 200 fire suppression system, a back-up chiller and a UPS unit to be installed in the data centre.

(7) MICT should: (i) re-route the water pipes and move the water-based cooling system outside the data centre; (ii) install a humidity and temperature detection system to protect the equipment from water damage; and (iii) connect each single-phase rack to at least two power sources in compliance with data centre's power circuit requirements.

MICT accepted recommendation 7 and stated that it awaits quotations from the contractor in order to execute the re-routing of the water pipes. MICT expects the required works to be completed by 30 April 2018. Once the pipes are re-routed there will be no need to install the humidity and temperature detection system. Work relating to the data centre had been completed. Recommendation 7 remains open pending receipt of evidence that water pipes have been re-routed, the water cooling system has been moved outside the data centre, and that each single-phase rack has been connected to at least two power sources.

D. Training and orientation of MICT staff

The contractor had provided training to MICT staff

58. According to the Operation and Maintenance Manual Part 5 - The Building User Guide, before final completion, the contractor is expected to explain and demonstrate to designated maintenance staff the purpose, function and operation of the installations including items and procedures listed in the Operation and Maintenance Manual. Users of the buildings in general were also expected to be trained. Specifically, the training was supposed to include HVAC, plumbing, electrical system, security system, fire detection and alarm system and fire-fighting system, among others. By October 2017, training had been carried out. OIOS concluded that procedures for providing the required training were complied with but the benefits may not be realized unless the defects explained in the present report are fully addressed.

E. Occupancy plan

Guidelines were needed for space allocation in the new office facility

59. The Secretary-General's report A/66/754 of 28 March 2012 estimated that the space required in the new office facility in Arusha was for approximately 90 staff members taking into consideration the projected continuing positions required by MICT to exercise its residual functions. This was the basis on which designs were formulated. However, as the immediate needs of MICT evolved, there were over 130 staff members requiring office space; more space may be required in the event of a trial. As designed, the current office space did not match the actual staffing needs. To mitigate the shortage, three pre-fabricated containers were erected in the premises during the post-construction phase of the project, hosting 32 staff members (the clinic, security staff plus their gym, and ICT staff).

60. In the Office Building, the concept adopted at the design stage was "open space' (i.e., no walled offices). However, considering the fact that some staff members, units and sub-units (especially in the President's and Prosecutor's Offices) handled more sensitive information than others, it became necessary to partition the office space. It was not clear whether all aspects of space allocation were considered during the partitioning process to ensure that staff members who do not necessarily handle sensitive information were not granted private space. There was no evidence that factors such as the following were considered:

- Do all staff members, units or sub-units really require private enclosed space?
- Who is the ultimate authority for deciding space allocation?

- What space allocation guidelines shall be followed, if any?
- What shall be done during a staff surge in the event of a trial?
- What is the occupancy plan?

61. At the time of the audit, no comprehensive occupancy plan was in place, and the mechanism for determining space allocation was unclear. This was exacerbated by the fact that there were no guidelines for space allocation to be followed in the new office facility. Benchmarking against the guidelines for the United Nations Headquarters Building was being considered, but those guidelines needed to be fine-tuned and adapted to the local situation and promulgated by MICT's senior management for them to be binding on everyone.

62. While agreeing with the observations, MICT noted that space allocation guidelines will be guided by the need for confidentiality and separation of functions as imposed by the MICT mandate. OIOS is of the view that these should be clarified and documented.

(8) MICT should develop, promulgate and implement space allocation guidelines based on clearly defined criteria for all organs of MICT to ensure equitable allocation of space in the new office facility.

MICT accepted recommendation 8 and stated that space allocation per staff member continues to be a work in progress. MICT is considering the issue bearing in mind the unique functions of the organs and in some instances, among team members. This requires taking into consideration maintaining high confidentiality and the independence of some offices. Space allocation per staff at MICT cannot be applied using the prescribed standard Secretariat ratios and therefore would have to be considered in MICT's work context and the current configuration of the building. Recommendation 8 remains open pending receipt of evidence that space allocation guidelines have been promulgated and implemented.

IV. ACKNOWLEDGEMENT

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

(*Signed*) Eleanor T. Burns Director, Internal Audit Division Office of Internal Oversight Services

STATUS OF AUDIT RECOMMENDATIONS

Rec. no.	Recommendation	Critical ² / Important ³	C/ O ⁴	Actions needed to close recommendation	Implementation date ⁵
1	MICT should: (i) develop and execute a plan with specific deadlines and clearly documented follow- up procedures to ensure that all identified defects are fully rectified before the project is declared completed and closed;	Important	0	Receipt of evidence of: (i) completion of all items listed in the punch-list;	30 April 2018
2	MICT should: (i) finalize the improvements to the fire-fighting equipment to prevent pipe bursts; and (ii) review the installation of fire detection and fire-fighting equipment in the new office facility to ensure that all rooms are adequately covered and linked to the central control system.	Important	0	Receipt of evidence that essential improvements to fire-fighting equipment and detection systems have been carried out.	31 December 2018
3	MICT should take stock of all outstanding activities, define milestones and expected dates for completion for each activity, and closely monitor implementation to ensure the timely completion of the Court Building.	Important	Ο	Receipt of the results of the final tests and inspection.	30 June 2018
4		Important	0		30 September 2018

 $^{^{2}}$ Critical recommendations address critical and/or pervasive deficiencies in governance, risk management or control processes, such that reasonable assurance cannot be provided with regard to the achievement of control and/or business objectives under review.

³ Important recommendations address important (but not critical or pervasive) deficiencies in governance, risk management or control processes, such that reasonable assurance may be at risk regarding the achievement of control and/or business objectives under review.

 $^{^{4}}$ C = closed, O = open

⁵ Date provided by MICT in response to recommendations.

STATUS OF AUDIT RECOMMENDATIONS

Rec. no.	Recommendation	Critical ² / Important ³	C/ O ⁴	Actions needed to close recommendation	Implementation date ⁵
5	MICT should: (i) in consultation with the Office of Central Support Services, investigate the impact of sandstorms on the Office Building and take appropriate remedial action to address it;	Important	0	Receipt of evidence that the impact of sandstorms has been investigated and appropriate remedial action has been taken.	31 December 2018
6	MICT should: (ii) ensure that ablution facilities, including consideration of portable facilities, are provided for use by security personnel guarding the primary entry point.	Important	0		31 December 2018
7	MICT should: (i) re-route the water pipes and move the water-based cooling system outside the data centre; (ii) install a humidity and temperature detection system to protect the equipment from water damage; and (iii) connect each single-phase rack to at least two power sources in compliance with data centre's power circuit requirements.	Important	0	Receipt of evidence that water pipes have been re-routed, the water cooling system has been moved outside the data centre, and that each single-phase rack has been connected to at least two power sources.	30 April 2018
8	MICT should develop, promulgate and implement space allocation guidelines based on clearly defined criteria for all organs of MICT to ensure equitable allocation of space in the new office facility.	Important	0	Receipt of evidence that space allocation guidelines have been promulgated and implemented.	31 December 2018

APPENDIX I

Management Response

Rec. no.	Recommendation	Critical ¹ / Important ²	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client	comments
1	MICT should: (i) develop and execute a plan with specific deadlines and clearly documented follow-up procedures to ensure that all identified defects are fully rectified before the project is declared completed and closed;	Important	Yes	Project Manager/Legal Officer	Ongoing April 30 2018	deploye site to a list. Fu Mechar the com consolio 20 Febr defects	attractor has already ad manpower to the ddress the punch- rthermore, the itsm has instructed tractor to provide a dated schedule by uary 2018. The are scheduled to be d and inspected by 0 2018.
2	MICT should: (i) finalize the improvements to the fire-fighting equipment to prevent pipe bursts; and (ii) review the installation of fire detection and fire-fighting equipment in the new office facility to ensure that all rooms are adequately covered and linked to the central control system.	Important	Yes	Project Manager/General Services Officer	(i) Completed(ii) Ongoing31 December2018	 the fire adjusted desired (ii) To mee for indi detector enclose integrat Center, 	ssure switches for pumps have been d to operate as t the requirements vidual fire rs required for each d office and their ion to the Control the Mechanism iate the acquisition

¹ Critical recommendations address critical and/or pervasive deficiencies in governance, risk management or control processes, such that reasonable assurance cannot be provided with regard to the achievement of control and/or business objectives under review.

² Important recommendations address important (but not critical or pervasive) deficiencies in governance, risk management or control processes, such that reasonable assurance may be at risk regarding the achievement of control and/or business objectives under review.

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						process for the installation depending on funds availability.
3	MICT should take stock of all outstanding activities, define milestones and expected dates for completion for each activity, and closely monitor implementation to ensure the timely completion of the Court Building.	Important	Yes	Project Manager	Completed 30 June 2018	IT and power cables, cross talk attenuators, sound barriers, relocation of the fan coil from the data center, installation of cameras, and audio/video peripherals are all completed. Water proofing works are also done and currently awaiting final tests and inspection.
4		Important	Yes	Project Manager/Legal Officer	Ongoing 30 September 2018	

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5	MICT should: (i) in consultation with the Office of Central Support Services, investigate the impact of sandstorms on the Office Building and take appropriate remedial action to address it:	Important	Yes	Project Manager/Legal Officer	Ongoing 31 December 2018	 (i) There are two phases that need to be tackled. The design and implementation phases. The Mechanism is currently working on options to address the sand infiltration through the attic louvers. Once the design and specification for remediation works are completed, the works will be executed subject to the availability of funds. (ii)
6	MICT should: (ii) ensure that ablution facilities, including consideration of portable facilities, are provided for use by	Important		Chief, Security and Safety Services/General Services Officer	Depends on availability of funds 31 December 2018	Management acknowledges and shares OIOS' concerns, and the MICT will prioritize the correction of any defective work particularly those related to adherence to life- safety standards in the new facility.

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	security personnel guarding the primary entry point.					
7	MICT should: (i) re-route the water pipes and move the water-based cooling system outside the data centre; (ii) install a humidity and temperature detection system to protect the equipment from water damage; and (iii) connect each single-phase rack to at least two power sources in compliance with data centre's power circuit requirements.	Important	Yes	Project Manager/General Services Officer	Ongoing 30 April 2018	 (i) The Mechanism awaits quotations from the contractor in order to execute the re-routing of the water pipes. The Mechanism expects the required works to be completed by 30 April 2018. (ii) Once the pipes are re-routed there will be no need to install the humidity and temperature detection system to protect the equipment from water damage. (iii) Complete
8	MICT should develop, promulgate and implement space allocation guidelines based on clearly defined criteria for all organs of MICT to ensure equitable allocation of space in the new office facility.	Important		General Services Officer	Ongoing 31 December 2018	The space allocation per staff member continues to be a work in progress. The Mechanism is considering the issue of space allocation bearing in mind the unique functions of the organs and in some instances, among team members. This requires taking into consideration maintaining high confidentiality and the independence of some offices. The Mechanism notes that the space allocation per staff at the Mechanism cannot be applied using

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						the prescribed standard Secretariat ratios and therefore would have to be considered in the Mechanism's work context and the current configuration of the building.