INTERNAL AUDIT DIVISION

AUDIT REPORT

Audit of ICT governance and strategic management in the Office of Information and Communications Technology (OICT)

Overall results relating to effective governance and strategic management of the United Nations ICT operations were initially assessed as unsatisfactory. Implementation of three critical and four important recommendations remains in progress

FINAL OVERALL RATING: UNSATISFACTORY

24 December 2012
Assignment No. AT2012/517/01
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APPENDIX 1 Management response
AUDIT REPORT

Audit of ICT governance and strategic management in the Office of Information and Communications Technology

I. BACKGROUND

1. The Office of Internal Oversight Services (OIOS) conducted an audit of ICT governance and strategic management in the Office of Information and Communications Technology (OICT).

2. In accordance with its mandate, OIOS provides assurance and advice on the adequacy and effectiveness of the United Nations internal control system, the primary objectives of which are to ensure: (a) efficient and effective operations; (b) accurate financial and operational reporting; (c) safeguarding of assets; and (d) compliance with mandates, regulations and rules.

3. OICT was established in January 2009 by General Assembly resolution 63/262, which approved a five-year ICT strategy (2009-2014) for the United Nations Secretariat (the Secretariat). OICT’s role is to oversee the global management of ICT in the United Nations Secretariat. OICT has the responsibility to provide overall computing, telecommunications, office automation, software, hardware and infrastructure support at United Nations Headquarters (UNHQ) in New York. OICT is also responsible for setting the overall strategic ICT direction for the Organization, planning and coordinating Secretariat-wide ICT activities. The previous Information Technology Services Division (ITSD) has been integrated into OICT. OICT was located in the Executive Office of the Secretary-General but has (since December 2011) been placed in the Department of Management (DM). It is headed by the Chief Information and Communications Technology Officer (CITO) who now reports to the Head of DM. Structurally, OICT comprises the Office of the CITO with several services and sections.

4. The objectives of the Secretary-General’s ICT Strategy (A/62/793 of September 2008) in creating OICT were to bring harmonization under one new entity, with a more consistent approach to ICT project planning, budgeting and management across the Secretariat. The ICT Strategy of the Secretariat consists of three strategic programmes:

(a) The knowledge management programme, for providing and enabling an environment to capture, manage and share the Organization’s information assets;

(b) The resource management programme, for building upon the infrastructure management programme to create, process and store information on the Organization’s resources and enable their effective and efficient management; and

(c) The infrastructure management programme, for providing the foundation of essential ICT services employed globally by the Secretariat.

5. The ICT governance in the Secretariat follows a federated model, in which OICT and other units have respective roles and accountability on ICT. The ICT environment is decentralized and comprises over 70 different ICT units in various departments and offices, including Offices away from Headquarters (OAHs) and field missions. Some services such as data centre operations and hosting arrangements are outsourced. Hardware platform includes about 34 data centres and 177 server rooms across the Secretariat, about 4,557 servers and 1,994 applications, some of which (about 600) will be replaced by the enterprise resource planning system (Umoja). There are over 160 user locations with approximately 83,000 desktop and Internet users.
6. The ICT budget for the biennium 2010-2011 was $300 million from regular budget, reflecting the requirements for OICT of $72.1 million for posts and $36.7 million for non-post resources. ICT-related resources for peacekeeping operations for the period from 1 July 2010 to 30 June 2011 totalled $384.6 million, of which $171.8 million was allocated to information technology (IT) and $212.8 million to communications.

7. Comments provided by DM are incorporated in italics.

II. OBJECTIVE AND SCOPE

8. The audit was conducted to assess the adequacy and effectiveness of the OICT governance, risk management and control processes in providing reasonable assurance regarding the effective governance and strategic management of the United Nations ICT operations.

9. In the risk assessment conducted by OIOS, ICT governance and strategic management were rated as high risks, given the criticality, high value and novelty of the concept of a central responsibility for ICT in the Secretariat.

10. The key controls tested for the audit were: (a) strategic planning and risk management; (b) oversight mechanisms; (c) project management capacity; (d) mandate and delegation of authority systems; and (e) regulatory framework. For the purpose of this audit, OIOS defined these key controls as follows:

(a) **Strategic planning and risk management** - controls that provide reasonable assurance that an effective strategy has been established, with related risk management mechanisms in place to manage ICT resources strategically;

(b) **Oversight mechanisms** - controls that provide reasonable assurance that adequate oversight structures have been established and are functioning effectively to supervise and provide advice on the strategic management of ICT resources;

(c) **Project management capacity** - controls that provide reasonable assurance that there is sufficient ICT project management capacity to achieve strategic goals, including: (i) adequate financial resources; (ii) adequate and competent human resources; and (iii) appropriate project management tools, methodology and systems;

(d) **Mandate and delegation of authority** - controls that provide reasonable assurance on the clarity and appropriateness of the authority, roles and responsibilities of structures involved in governance and strategic management of ICT operations; and

(e) **Regulatory framework** - controls that provide reasonable assurance that policies and procedures: (i) exist to guide the governance and strategic management of the ICT operations; (ii) are implemented consistently; and (iii) ensure the reliability and integrity of financial and operational information.

11. The key controls were assessed for the control objectives shown in Table 1.

12. OIOS conducted the audit from February to December 2011. The audit covered the period from 2008 to 2011.
13. OIOS conducted an activity-level risk assessment to identify and assess specific risk exposures, and to confirm the relevance of the selected key controls in mitigating the associated risks. Through interviews, analytical reviews and tests of controls, OIOS assessed the existence and adequacy of internal controls and conducted necessary tests to assess their effectiveness.

III. AUDIT RESULTS

14. The OICT governance, risk management and control processes examined were unsatisfactory in providing reasonable assurance regarding the effective governance and strategic management of the United Nations ICT operations. OIOS made seven recommendations to address the issues identified in this audit. OICT had established ICT strategic objectives and management frameworks for implementing the programmes identified in its mandate; however, it had not managed its activities in a way that could best meet the strategic priorities approved by the General Assembly. Resource availability for ICT strategic management implementation had been limited. OICT had not taken corporate responsibility for ICT risk management, change management or disaster recovery planning, and had not introduced measures that enforce compliance with ICT standards.

15. The initial overall rating was based on the assessment of key controls presented in Table 1. The final overall rating is unsatisfactory as implementation of three critical and four important recommendations remains in progress.

Table 1: Assessment of key controls

<table>
<thead>
<tr>
<th>Business objective</th>
<th>Control objectives</th>
<th>Key controls</th>
<th>Efficient and effective operations</th>
<th>Accurate financial and operational reporting</th>
<th>Safeguarding of assets</th>
<th>Compliance with mandates, regulations and rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective governance and strategic management of ICT operations</td>
<td>(a) Strategic planning and risk management</td>
<td>Unsatisfactory</td>
<td>Partially satisfactory</td>
<td>Partially satisfactory</td>
<td>Partially satisfactory</td>
<td>Partially satisfactory</td>
</tr>
<tr>
<td></td>
<td>(b) Oversight mechanisms</td>
<td>Partially satisfactory</td>
<td>Partially satisfactory</td>
<td>Partially satisfactory</td>
<td>Partially satisfactory</td>
<td>Partially satisfactory</td>
</tr>
<tr>
<td></td>
<td>(c) Project management capacity</td>
<td>Unsatisfactory</td>
<td>Partially satisfactory</td>
<td>Partially satisfactory</td>
<td>Partially satisfactory</td>
<td>Partially satisfactory</td>
</tr>
<tr>
<td></td>
<td>(d) Mandate and delegation of authority</td>
<td>Partially satisfactory</td>
<td>Partially satisfactory</td>
<td>Partially satisfactory</td>
<td>Partially satisfactory</td>
<td>Partially satisfactory</td>
</tr>
<tr>
<td></td>
<td>(e) Regulatory framework</td>
<td>Unsatisfactory</td>
<td>Partially satisfactory</td>
<td>Partially satisfactory</td>
<td>Partially satisfactory</td>
<td>Partially satisfactory</td>
</tr>
</tbody>
</table>

FINAL OVERALL RATING: UNSATISFACTORY
A. Strategic planning and risk management

ICT strategy needs to be updated

16. OICT identified strategic planning and policy development as a priority, and proposed a series of ICT strategic initiatives. However, OICT had not implemented the ICT rationalization and strengthening initiatives, nor prioritized the ongoing enterprise-wide ICT initiatives in the context of its broader mandate to harmonize ICT investments. The relationship between the ICT strategy, Umoja, Inspira and the Integrated Management Information System (IMIS) were clearly stated in the Secretary-General report A/65/491 of 5 October 2010, and the General Assembly had made the completion of Umoja a requirement for any new major ICT proposal (A/C.5/66/L.18 dated December 2011).

(1) The Office of Information and Communications Technology should update the ICT strategy in accordance with the priorities established by the General Assembly, including Umoja and IPSAS.

OICT accepted recommendation 1 and stated that the strategy would be updated following consultation within the Department of Management and with other stakeholders and submitted to the fall 2013 session of the General Assembly. Recommendation 1 remains open pending approval of the ICT strategy.

Funding for ICT strategy requires further identification

17. OICT identified funding needs for implementing the ICT strategy of the Secretariat. The General Assembly approved partial funding of the related proposals, but mostly from existing resources. The total annual resources available for OICT operations (comprising regular budget, support account budget and charge-back amounts) in 2012 were $73 million. In 2010, OICT requested 51 additional posts to fulfil the new mandate under the ICT strategy and the funding of three strategic initiatives, in the total amount of $140 million for the period from 2011 to 2015 (A/65/491). Against this request, the General Assembly approved two general temporary assistance (GTA) posts with new appropriation and 10 GTA posts to be provided within the existing budget for the biennium 2010-2011. In 2011, OICT requested 14 additional posts to carry out the new mandate under the ICT strategy and three other strategic initiatives, in the total amount of $43 million for 2012-2013 (A/66/94). Against this request, the GA approved two initiatives in the total amount of $18 million, but asked the total amount to be provided within the existing budget for the biennium 2012-2013.

18. For the Office of Programme Planning, Budget and Accounts the GA decision to fund the ICT strategy from within existing resources meant using the existing OICT budget instead of identifying resources from within the Secretariat as a whole. As a result, the ICT strategy appeared to have competed with the operational requirements of OICT for funding. OIOS is of the opinion that the funds required for the implementation of the ICT strategy should be identified from resources within the Secretariat as a whole.

(2) The Department of Management should assess the funding needs in the Office of Information and Communications Technology.

DM accepted recommendation 2 and stated that in the context of the comprehensive review of the Secretariat’s ICT strategy, governance mechanisms, ICT operations and structure, ICT resources, and reallocation within the OICT resources would be also considered. Recommendation 2 remains open pending receipt of the comprehensive review of the Secretariat’s ICT strategy.
The ICT risk management framework has not been fully developed

19. Security and risk management are a priority function for OICT. OICT requested, but did not obtain, resources to perform this function as part of its proposals for strengthening OICT and improving enterprise ICT management.

20. Nevertheless, OICT took steps to develop a methodology to assess business continuity and disaster recovery risks, and to establish a project management methodology (Project in Controlled Environments, Prince 2) requiring the identification of risks associated with new projects. In 2010, OICT, working with the Business Continuity Management Unit (BCMU) of DM, undertook a review of all ICT units across the Organization as part of the ICT Structural Review. With this review, OICT identified critical business applications based on the criticality of information assets. The end purpose of this initiative was to rationalize and harmonize the ICT operations and structures of the Secretariat. OICT had also carried out an information security risk assessment based on the Carnegie Mellon’s OCTAVE methodology (“Operationally Critical Threat, Asset, and Vulnerability Evaluation”).

21. OICT was also cooperating with the enterprise risk management (ERM) initiative in DM, as well as with the BCMU, with the goals of: (a) aligning information risk management (IRM) and ERM; (b) ensuring that IRM results can be used as inputs to ERM; (c) providing common tools, definitions, and methodologies; and (d) raising awareness among offices and departments as the owners of both information risk and enterprise (and hence necessarily the ones responsible to assess these risks). Although these initiatives were started, the ICT risk assessment had not been completed; only ICT security risks had been addressed.

<table>
<thead>
<tr>
<th>(3) The Office of Information and Communications Technology should implement an Organization-wide ICT risk management framework and use it to inform the implementation of the ICT strategy and Organization-wide ICT initiatives.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OICT accepted recommendation 3, which will remain open pending receipt of documentation showing that ICT risk management has been considered and included in the update of the ICT strategy.</td>
</tr>
</tbody>
</table>

ICT change management programme should be completed

22. OICT established a Change Management Unit within its Client Services Function/Front Office and also included reference to change management in the ICT communication strategy that was issued in June 2010 and in the project management framework. Further, OICT prepared a draft change management framework that was discussed during the meetings of the ICT-Management Coordination Group (ICT-MCG). However, OICT is yet to complete the change management framework, especially in view of the implementation of the Organization-wide initiatives such as IPSAS and Umoja. In OIOS’ view, a sufficient change management capacity in OICT is needed to facilitate implementation of the ICT strategy. For example, the hosting of Inspira continues to be outsourced as the data centre project and related infrastructure is not fully implemented three years after system roll-out. Similarly, a formal change management framework is critical for the introduction of Umoja, since it will have a significant impact on ICT infrastructure and operations, including help desk, support, assistance, maintenance and security.

| (4) The Office of Information and Communications Technology should develop a change management programme addressing all the requirements for the ICT strategy and Organization-wide ICT initiatives. |
OICT accepted recommendation 4 and stated that the Office had established a change management function, which had been working with the related organizational initiative (“Change Management Team” and “Change Implementation Team”). There was also a much stronger change management capacity within the Umoja project. The specific roles and responsibilities of these entities, including those of OICT, would have to be clarified. Recommendation 4 remains open pending receipt of documentation clarifying the roles for organization-wide ICT change management.

ICT business continuity and disaster recovery plan should be completed

23. OICT developed a disaster recovery plan (the initiative Create a Resilient ICT Infrastructure), but had not established mechanisms for ensuring its effective application across the Organization. Further, the plan needed to be complemented with documentation identifying the critical staff, systems and functions required to ensure OICT’s timely response in case of disaster.

(5) The Office of Information and Communications Technology should finalize and test the Organization-wide ICT business continuity and disaster recovery plans.

OICT accepted recommendation 5 and stated that it accepts responsibility for: (a) finalizing and testing the ICT disaster recovery and ICT business continuity plans for the ICT services it provides at UNHQ; and (b) coordinating ICT disaster recovery and ICT business continuity activities across the Secretariat. However, OICT emphasized that “business continuity” comprises many non-ICT related domains which were not under its responsibility. Recommendation 5 remains open pending the finalization and testing of the disaster recovery plans across the Organization in the context of the broader Organization-wide ICT business continuity.

B. Oversight mechanisms

ICT management framework had been strengthened

24. OICT designed a new ICT management framework in line with leading practices, including:

(a) The ICT Executive Committee (ICT-EC), the highest-level decision making body on ICT matters, chaired by the Deputy Secretary-General and composed of fifteen members at the Under Secretary-General level. The terms of reference of the ICT-EC were last updated and endorsed by the ICT-EC in January 2010.

(b) The ICT Advisory Group (ICT-AG), chaired by a representative of the business users, with members nominated by heads of departments and offices. The ICT-AG contributes to the development of the ICT strategy of the Secretariat by providing, inter-alia, advice to the CITO on important ICT programs and services, and its views to ICT-EC as needed. The Client Services Unit (CSU), Strategic Management Services (SMS) within OICT acts as secretariat to the ICT-AG.

(c) The ICT management coordination group (ICT-MCG) which provides strategic direction on strategic programmes.

(d) Local ICT committees to be established in each department and office to ensure that local ICT priorities are aligned with the Secretariat-wide ICT strategy. The head of each Local ICT committee represents their respective office/department in the ICT-AG committee.
25. Although the ICT-AG was created to ensure adequate representation and contribution of user departments and offices in the ICT-decision making process of the Secretariat, its effectiveness was limited as business owners’ representation was often delegated to ICT Chiefs/experts rather than the head of the local ICT committees and/or officers with substantive knowledge of the business functions, thereby reducing the content of user input. The advisory role of the ICT-AG was unclear. The CITO was of the view that the ICT-AG was mainly to advise the ICT-EC. Minutes of the ICT-AG showed that some of the ICT proposals had not been reviewed and endorsed by ICT-AG prior to their submission to the ICT-EC.

26. OICT confirmed that the ICT-AG is currently not functioning as envisioned due to the lack of local ICT committees in departments and offices. In accordance with the ICT strategy, the CITO has requested department heads to establish their respective local ICT committees. The response received from department heads indicated that 21 departments had already established their local ICT committees by July 2012. Based on the recent actions taken by the 21 departments, OIOS is not making any additional recommendation in this area.

ICT standardization policy was completed

27. Until 2009, the Information and Communications Technology Board (ICTB) was the approving authority for ICT standards. The ICT Standards Task Force, a sub-group of the previous ICTB, was responsible for the technical review of the ICT standards proposed by departments and offices of the Secretariat. The ICTB was dissolved in 2009 when a new ICT strategy and governance framework was issued by the Secretary-General (A/62/793). The new ICT strategy replaced the ICTB with the overall ICT governance structure.

28. The new strategy redefined the ICT governance structure and its operational mechanisms, and included standardization activities in the terms of reference of the ICT-MCG. A memo issued by the Chief of Technology Policy and Standards Section (TPSS) of OICT in November 2009 stated that the members of the previous ICT Standards Task Force would continue to serve under the new governance structure.

29. On 19 April 2012, OICT issued the new Organization-wide policy on the ICT Architecture and Standards Management Process. In addition, OICT established the new Architecture and Review Board (ARB) to assist in managing the enterprise technology architecture and standards. Based on the recent actions taken by OICT, OIOS is not making any additional recommendation in this area.

C. Project management capacity

ICT proposals for improvements in human resources were not funded

30. ICT job profiles, dating back to 2008, were generic in nature and were not specifically aligned with the ICT market. OICT developed a state of the art “ICT Global Staffing Model”, which was meant to modernize the ICT career paths, and which was to be implemented as part of the “Rationalize ICT Organization” project. However, while this project was approved by the General Assembly, no additional funding was provided. Further, in the 2010 Secretary-General’s report on the “Status of Implementation of the ICT Strategy for the UN Secretariat” (A/65/491), OICT provided the General Assembly with the results of a comprehensive review of ICT capacities and resources across the Secretariat. This ICT review identified a number of key areas for improvement, and proposed projects in this regard. However, these
proposals received limited new funding, $0.3 million, and the General Assembly requested new/revised proposals in the context of the 2012-2013 budget exercise.

31. OICT stated that it has addressed the issues of staffing by revising its proposal (A/66/94) to reduce resource requirements, aligning the financial budget with the strategic initiatives. In OIOS’ opinion, the proposal for human resources should be fully integrated into the ICT strategy which OIOS has identified as itself requiring improvements. OIOS is not making a separate recommendation on this issue, which would be addressed by the above recommendations 1, 2 and 4, as their scope includes the human resources component of the ICT strategy.

ICT project management framework has progressed

32. OICT established a project management tracking tool, e-Portfolio, and had an ICT procurement plan in place for 2011. This tool contained templates compliant with the standard project management methodology adopted by the Secretariat (Prince2), that were used to track and monitor the progress of ICT projects Secretariat-wide. In addition, as a control mechanism, the Controller included in the guidelines for budget preparation issued to departments and offices of the Secretariat, provisions for a mandatory review by OICT of all ICT project proposals. For the budget 2012/2013, OICT received and reviewed several ICT business cases submitted by departments and offices. OIOS identified various cases in which departments and offices enacted ICT investments without review by OICT, which led to possible divergence of efforts. One case, the acquisition of NOVA, represented a significant departure from established procedures. NOVA is an application developed by an external consultant and used in several parts of the Organization, including the ICT budgeting process. This application has not been supported by a high level business case and a standardization proposal for its acquisition.

33. In addition, the adoption of project management tools was not required. OICT stated that this was due to the lack of resources in its Project Management Office, which prevented OICT from fully deploying a compliance monitoring function. This condition further resulted in inconsistent ICT project reporting across the Secretariat and OICT’s inability to perform post-implementation reviews. For example, in the horizontal audit of ICT governance and security management in peacekeeping missions (AT2011/615/01), OIOS observed that an ICT governance, risk and compliance tool was acquired by DFS to implement risk management and compliance monitoring across all peacekeeping missions. This project was not reviewed by OICT because it was not properly documented in accordance to OICT’s project management procedures.

34. OICT has since started two initiatives for enhancing its project management function, with the establishment of a performance management framework for reporting on both business and ICT attainment of goals, and a needs assessment process for creating a better link between substantive requirements (demand) and ICT supply.

35. OICT also advised that that in the Senior Managers’ Compact for 2010 and 2011, the following ICT indicators for ICT performance assessment have been included: “All ICT project proposals are submitted to OICT in accordance with the ICT Project Management framework”. Based on the progress made, OIOS is not making any additional recommendation in this area.
D. Mandate and delegation of authority

Delegation of ICT authority needs to be formalized

36. Authority for managing ICT operations across the Secretariat was not clearly delegated to OICT. There were no Secretary-General’s Bulletin (high level policy document) based on the General Assembly resolution regulating the implementation of the ICT global mandate, and no administrative instructions (operational procedures) defining how OICT should work with departments, offices and field locations in order to achieve the ICT strategic objectives of the Organization. The roles and responsibilities of key user departments and offices were not clearly defined, and there were no mechanisms for supporting compliance with ICT policies and standards across the various departments, OAHs, and field locations.

(6) The Department of Management should develop a proposal for delegating ICT authorities across the Secretariat, including field locations.

OICT accepted recommendation 6 and stated that based on the 6 May 2011 decision of the Management Committee, all departments and offices would be requested to manage activities globally and follow the model in which policies, regulations, rules, procedures and standards – including global technological systems related to ICT – that were set by Headquarters, with implementation delegated to the Offices away from Headquarters (OAHs) and Regional Commissions (RCs). Recommendation 6 remains open pending completion of the proposal for delegation of authority for ICT operations across the Organization.

E. Regulatory framework

ICT standard policies and frameworks need to be formalized

37. OICT has adopted, documented and formalized some industry leading practices and management control frameworks for managing ICT operations. For example, the Information Technology Infrastructure Library (ITIL) is the main framework for OICT’s internal processes related to ICT incident, problem and change management, as well as project management, enterprise architecture standards, and security policies. However, several of these ICT policies and procedures were not approved and outdated. The ICT security programme, policy and guidelines were under review; and the procedures for reporting ICT security incidents were last revised in March 2010. While the updated list of approved technology standards was available on iSeek, no network diagram was documented and infrastructure requirements provided. OICT did not have ICT handbooks or guidelines on infrastructure management.

38. Enterprise architecture, technology research and standardization were identified as priority functions for OICT in Secretary-General report A/65/491/Add.1. OICT drafted an enterprise architecture framework (Version 1, 11 November 2010) and included references to its development in the report to the General Assembly (A/66/94). However, this framework had not been completed with details about current ICT applications and how they will continue to function along with the new enterprise resource planning system Umoja.

39. Notwithstanding the policies and procedures in place, OICT lacked the authority to monitor and enforce compliance with these standards by departments, offices and field missions, in keeping with its role to maintain and support infrastructure and application development.

(7) The Office of Information and Communications Technology should: (a) complete the enterprise architecture; and (b) put in place mechanisms for monitoring and supporting the
adoption of policies, procedures and technical guidelines initiatives, and ensure their adoption Organization-wide, starting from the early stage of ICT strategy initiatives.

OICT accepted recommendation 7 and stated that: (a) the enterprise architecture was an ongoing process that could not be “completed” but noted that it would finalize the “enterprise architecture framework” for the UN Secretariat and would develop the institutional capacity to implement the associated processes; and (b) it would put in place mechanisms for monitoring and supporting the adoption of policies. Recommendation 7 remains open pending finalization of the enterprise architecture framework and issuance of related ICT policies, procedures, and mechanisms for its implementation.

ICT performance management framework has progressed

40. Performance management had been identified as a priority function for OICT in the Secretary-General’s report issued in 2010 (A/65/491/Add.1). OICT submitted a proposal to the General Assembly for establishing an ICT performance management programme in the context of “Improve Enterprise ICT Management” initiative in 2011 (A/66/94). OICT also conducted ICT surveys to measure the level of satisfaction of user departments and offices. OICT had started defining the metrics, procedures and responsibilities for ICT performance management and reporting.

41. OICT has started to address this issue by establishing a list of agreed upon performance metrics, and has plans to issue a formal memorandum on performance metrics, procedures and reporting.

ICT service management framework has progressed

42. OICT defined standard problem and incident management procedures, complete with roles and responsibilities. However, OICT did not develop a service management framework, and its Service Desk Operations Section was unable to package technical services into clear deliverables to end-users with the required documentation, charge-back mechanisms and criteria for standard ICT services. OICT had not developed a method for capturing and calculating the costs of its activities and had not established charge-back mechanisms of the services provided. For example, the total cost of the ICT strategic initiatives did not account for the financial resources needed for implementation, training, maintenance, and storage and business continuity. While a UNHQ ICT service catalogue was in place, there was no global catalogue of ICT services covering all locations, as mandated by the General Assembly. The service level agreements established with many departments and offices did not include criteria for costing the services provided internally by OICT and for managing requests for services. The lack of an accounting system for ICT charge-back precluded OICT from fully recovering all funds expended that could otherwise be redeployed towards ICT strategic initiatives.

43. OICT confirmed that the issue relating to service management framework is being addressed with the proposed “Enhance Enterprise ICT Service Delivery” in A/66/94. For each regular budget cycle, OICT has developed the list of services to be offered and its rates validated by the Controller’s Office. In addition, for the past several months, OICT has made significant progress in developing the Global Service Catalogue and its implementation details, including the harmonization of charge-back mechanisms with UNOG, UNOV, and UNON.

44. OICT further indicated that it has initiated several actions aiming at the improvement of the management of OICT services. In accordance with the Secretariat-wide ICT strategy (A/62/793, A/65/491) and ACABQ recommendation (A/65/576) of 16 November 2010, OICT is currently in the process of reviewing budget proposals from all funding resources for ICT applications and services of all departments, offices and field missions to establish the Global ICT Financial Framework. Such
framework will not only address help consolidate ICT budget organization wide but will also clarify the charge-back process for ICT services.

45. Based on progress made, OIOS is not making any additional recommendation in this area.

IV. ACKNOWLEDGEMENT

46. OIOS wishes to express its appreciation to the Management and staff of DM for the assistance and cooperation extended to the auditors during this assignment.

Ms. Fatoumata Ndiaye, Director
Internal Audit Division, OIOS
## STATUS OF AUDIT RECOMMENDATIONS

**AT2012/517/01 – Audit of governance and strategic management in the Office of Information and Communications Technology**

<table>
<thead>
<tr>
<th>Recom. no.</th>
<th>Recommendation</th>
<th>Critical¹/ Important²</th>
<th>C/O³</th>
<th>Actions needed to close recommendation</th>
<th>Implementation date⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The Office of Information and Communications Technology should update the ICT strategy in accordance with the priorities established by the General Assembly, including Umoja and IPSAS.</td>
<td>Critical</td>
<td>O</td>
<td>Submission to OIOS of approved ICT strategy</td>
<td>Fourth quarter of 2013</td>
</tr>
<tr>
<td>2.</td>
<td>The Department of Management should assess the funding needs in the Office of Information and Communications Technology and identify additional resources as appropriate.</td>
<td>Critical</td>
<td>O</td>
<td>Submission to OIOS of the results of the comprehensive review of the Secretariat’s ICT strategy</td>
<td>Third quarter of 2013</td>
</tr>
<tr>
<td>3.</td>
<td>The Office of Information and Communications Technology should implement an Organization-wide ICT risk management framework and use it to inform the implementation of the ICT strategy and Organization-wide ICT initiatives.</td>
<td>Important</td>
<td>O</td>
<td>Submission to OIOS of documentation showing that ICT risk management has been considered and included in the update of the ICT strategy</td>
<td>Fourth quarter of 2013</td>
</tr>
<tr>
<td>4.</td>
<td>The Office of Information and Communications Technology should develop a change management programme addressing all the requirements for the ICT strategy and Organization-wide ICT initiatives.</td>
<td>Important</td>
<td>O</td>
<td>Submission to OIOS of documentation clarifying the roles for organization-wide ICT change management</td>
<td>Second quarter of 2013</td>
</tr>
<tr>
<td>5.</td>
<td>The Office of Information and Communications Technology should finalize and test the Organization-wide ICT business continuity and disaster recovery</td>
<td>Important</td>
<td>O</td>
<td>Finalization and testing of the disaster recovery plans across the Organization in the context of the broader Organization-wide ICT business</td>
<td>First quarter of 2013</td>
</tr>
</tbody>
</table>

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1. Critical recommendations address significant and/or pervasive deficiencies or weaknesses in governance, risk management or internal control processes, such that reasonable assurance cannot be provided regarding the achievement of control and/or business objectives under review.

2. Important recommendations address important deficiencies or weaknesses in governance, risk management or internal control processes, such that reasonable assurance may be at risk regarding the achievement of control and/or business objectives under review.

3. C = closed, O = open

4. Date provided by DM in response to recommendations
<table>
<thead>
<tr>
<th>Recom. no.</th>
<th>Recommendation</th>
<th>Critical¹/Important²</th>
<th>C/ O³</th>
<th>Actions needed to close recommendation</th>
<th>Implementation date⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>The Department of Management should develop a proposal for delegating ICT authorities across the Secretariat, including field locations.</td>
<td>Important O</td>
<td>O</td>
<td>completion of the proposal for delegation of authority for ICT operations across the Organization</td>
<td>Third quarter of 2013</td>
</tr>
<tr>
<td>7.</td>
<td>The Office of Information and Communications Technology should: (a) complete the enterprise architecture; and (b) put in place mechanisms for monitoring and supporting the adoption of policies, procedures and technical guidelines initiatives, and ensure their adoption Organization-wide, starting from the early stage of ICT strategy initiatives.</td>
<td>Critical O</td>
<td>O</td>
<td>finalization of the enterprise architecture framework and issuance of related ICT policies, procedures, and mechanisms for its implementation</td>
<td>Second quarter of 2013</td>
</tr>
</tbody>
</table>
**APPENDIX I**

**MANAGEMENT RESPONSE**

**AT2012/517/01 – Audit of governance and strategic management in the Office of Information and Communications Technology (OICT)**

<table>
<thead>
<tr>
<th>Rec. no.</th>
<th>Recommendation</th>
<th>Critical1/ important2</th>
<th>Accepted? (Yes/No)</th>
<th>Title of responsible individual</th>
<th>Implementation date</th>
<th>Client comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The Office of Information and Communications Technology should update the ICT strategy in accordance with the priorities established by the General Assembly, including Umoja and IPSAS.</td>
<td>Critical</td>
<td>Yes</td>
<td>Head of OICT</td>
<td>Fourth quarter of 2013</td>
<td>Strategy will be updated following consultation within the Department of Management as well as with other stakeholders and submitted to the fall 2013 session of the General Assembly</td>
</tr>
<tr>
<td>2.</td>
<td>The Department of Management should assess the funding needs in the Office of Information and Communications Technology and identify additional resources as appropriate.</td>
<td>Critical</td>
<td>Yes</td>
<td>USG/DM &amp; Head of OICT</td>
<td>Third quarter of 2013</td>
<td>In the context of the comprehensive review of the Secretariat’s ICT strategy, the governance, mechanisms, ICT operations and structure and ICT resources, reallocation within the OICT resources will be also considered.</td>
</tr>
<tr>
<td>3.</td>
<td>The Office of Information and Communications Technology should consolidate the ICT budgets for applications and services of all departments, offices and field locations into a comprehensive budget document.</td>
<td>Critical</td>
<td>No</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>The Administration foresees a governance structure under which some decisions will be taken centrally and others delegated locally. This is coherent with the decision of the Management Committee on 6 May 2011: a) To request all Departments and</td>
</tr>
</tbody>
</table>

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1 Critical recommendations address significant and/or pervasive deficiency or weakness in governance, risk management or internal control processes, such that reasonable assurance cannot be provided regarding the achievement of control and/or business objectives under review.

2 Important recommendations address important deficiencies or weaknesses in governance, risk management or internal control processes, such that reasonable assurance may be at risk regarding the achievement of control and/or business objectives under review.
<table>
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<tr>
<th>Rec. no.</th>
<th>Recommendation</th>
<th>Critical(^1)/ important(^2)</th>
<th>Accepted? (Yes/No)</th>
<th>Title of responsible individual</th>
<th>Implementation date</th>
<th>Client comments</th>
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</table>

Offices that manage activities globally to follow the model in which policies, regulations, rules, procedures and standards – including global technological systems related to information and communications technology – are set by Headquarters, with implementation delegated to the Offices away from Headquarters (OAHs) and Regional Commissions (RCs)…” The requirement that all ICT budget proposals should be submitted through the Office of Information and Communications Technology (OICT) - and in accordance with the project management frameworks developed by that office – will be maintained. In addition, effective mechanisms to monitor and assess the actions undertaken by the departments and offices after the respective budgets were approved will be introduced. However, centralization of ICT budgets would not be practical and effective. Administration therefore believes that the current decentralized structure of the ICT budgets be maintained, albeit with more transparency and monitoring...
<table>
<thead>
<tr>
<th>Rec. no.</th>
<th>Recommendation</th>
<th>Client comments</th>
<th>Critical\ importante</th>
<th>Accepted? (Yes/No)</th>
<th>Title of responsible individual</th>
<th>Implementation date</th>
<th>OICT comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td>The Office of Information and Communications Technology should implement an Organization-wide ICT risk management framework and use it to inform the implementation of the ICT strategy and Organization-wide ICT initiatives.</td>
<td></td>
<td>Important</td>
<td>Yes</td>
<td>Head of OICT</td>
<td>Fourth quarter of 2013</td>
<td>OICT had established a change management function which has been working with the related organizational initiative (&quot;Change Management Team&quot; and &quot;Change Implementation Team&quot;). There is also a much stronger change management capacity within the Muja project. The specific roles and responsibilities of these entities, including that of OICT will have to be clarified.</td>
</tr>
<tr>
<td>5.</td>
<td>The Office of Information and Communications Technology should develop a change management programme addressing all the requirements for the ICT strategy and Organization-wide ICT initiatives.</td>
<td></td>
<td>Important</td>
<td>Yes</td>
<td>Head of OICT with the Change Implementation Team</td>
<td>Second quarter of 2013</td>
<td>OICT had established a change management function which has been working with the related organizational initiative (&quot;Change Management Team&quot; and &quot;Change Implementation Team&quot;). There is also a much stronger change management capacity within the Muja project. The specific roles and responsibilities of these entities, including that of OICT will have to be clarified.</td>
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<td>6.</td>
<td>The Office of Information and Communications Technology should finalize and test the Organization-wide ICT business continuity and disaster recovery plans.</td>
<td></td>
<td>Important</td>
<td>Yes</td>
<td>Head of OICT</td>
<td>First quarter of 2013</td>
<td>OICT accepts responsibility for (a) finalizing and testing the ICT disaster recovery and ICT business continuity plans for the ICT services it provides at UNHQ, and (b) Coordinating ICT disaster recovery and ICT business continuity activities across the Secretariat. However, OICT emphasizes that &quot;business continuity&quot; comprises of many non-ICT related domains which are not under its responsibility.</td>
</tr>
<tr>
<td>Rec. no.</td>
<td>Recommendation</td>
<td>Critical¹/important²</td>
<td>Accepted? (Yes/No)</td>
<td>Title of responsible individual</td>
<td>Implementation date</td>
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<td>7.</td>
<td>The Department of Management should develop a proposal for delegating ICT authorities across the Secretariat, including field locations.</td>
<td>Important</td>
<td>Yes</td>
<td>USG/DM and Head of OICT</td>
<td>Third quarter of 2013</td>
<td>Please refer to comments in recommendation 3.</td>
<td></td>
</tr>
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<td>8.</td>
<td>The Office of Information and Communications Technology should: (a) complete the enterprise architecture; and (b) put in place mechanisms for monitoring and supporting the adoption of policies, procedures and technical guidelines initiatives, and ensure their adoption Organization-wide, starting from the early stage of ICT strategy initiatives.</td>
<td>Critical</td>
<td>Yes</td>
<td>Head of OICT</td>
<td>Second quarter of 2013</td>
<td>(a) “Enterprise Architecture” is an ongoing process that cannot be “completed”. OICT accepts the recommendation to finalize the Enterprise Architecture framework for the UN Secretariat and to develop the institutional capacity to implement the associated processes. (b) OICT accepts the recommendation to “put in place mechanisms for monitoring and supporting the adoption of policies [...].”</td>
<td></td>
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