



INTERNAL AUDIT DIVISION

REPORT 2016/117

Audit of records management at the United Nations Headquarters in New York

Overall results relating to the effective management of records were initially assessed as partially satisfactory. Implementation of 16 important recommendations remains in progress

FINAL OVERALL RATING: PARTIALLY SATISFACTORY

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AUDIT REPORT

Audit of records management at the United Nations Headquarters in New York

I. BACKGROUND

1. The Office of Internal Oversight Services (OIOS) conducted an audit of records management at the United Nations Headquarters in New York.
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. The United Nations, in the Secretary-General's bulletin on record-keeping and the management of United Nations archives (ST/SGB/2007/5), defines records as any data or information, regardless of form or medium, maintained by the United Nations as evidence of a transaction. While most records created as a result of United Nations business have a finite value and can be destroyed when this value has passed, a small percentage of the records is preserved as United Nations archives, because they are of enduring value to the United Nations and/or to the public. Records form part of the Organization's assets because in addition to serving as evidence of the Organization's transactions, they provide insight into the Organization's history, institutional memory and identity and help to foster greater accountability, transparency and efficiency.
4. Staff members are responsible to create, receive, retain and destroy documents and records in keeping with the provisions of retention policy guidelines approved by the United Nations Archives and Records Management Section (ARMS). Departments and offices are responsible to develop and implement policies regarding the retention of their records and identification and management of their vital records through a records retention schedule and guidelines approved by ARMS.
5. ARMS in the Office of Central Support Services (OCSS) in the Department of Management (DM) is responsible for establishing policy and setting standards, including the design of record-keeping systems and procedures for the management of the records and archives of the United Nations, including their use, storage, retention and disposition, and access rights. The Section consists of 8 professional and 12 general service staff and had a regular budget of \$4.6 million in the 2014-2015 biennium.
6. The Office of Information and Communications Technology (OICT) and the Information and Communications Technology Division (ICTD) in the Department of Field Support (DFS) are responsible for information and communications technology (ICT) activities in the Secretariat and implementation of innovative technologies to support and facilitate the work of the United Nations.
7. Comments provided by DM, Office of Legal Affairs (OLA), DFS, Department of Peacekeeping Operations (DPKO) and Office of Disarmament Affairs (ODA) are incorporated in italics.

II. OBJECTIVE AND SCOPE

8. The audit was conducted to assess the adequacy and effectiveness of the United Nations Secretariat's governance, risk management and control processes in providing reasonable assurance regarding the **effective management of records at the United Nations Headquarters in New York**.

9. The audit was included in the 2015 risk-based work plan of OIOS due to the risk that official records of the United Nations may not be effectively managed, leading to loss of essential records or unauthorised access to sensitive information.

10. The key controls tested for the audit were: (a) governance and monitoring mechanisms; (b) electronic content management systems; and (c) regulatory framework. For the purpose of this audit, OIOS defined these key controls as follows:

(a) **Governance and monitoring mechanisms** – controls that provide reasonable assurance that adequate and effective processes are established to ensure that responsibility for records management is clearly defined and monitored.

(b) **Electronic content management systems** - controls that provide reasonable assurance that information technology systems that are used to organize and store the Organization's documents and other content meet users' requirements and are operating efficiently.

(c) **Regulatory framework** - controls that provide reasonable assurance that policies and procedures: (i) exist to guide the management of records; (ii) are implemented consistently; and (iii) ensure financial and operational information is reliable and produced with integrity.

11. The key controls were assessed for the control objectives shown in Table 1. One control objective shown in Table 1 as "Not assessed" was not relevant to the scope defined for this audit.

12. OIOS conducted this audit from December 2015 to April 2016. The audit covered the period from January 2014 to April 2016.

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 associated risks. Through interviews, analytical reviews and tests of controls, OIOS assessed the existence and adequacy of internal controls and conducted necessary tests to determine their effectiveness. Records management practices were reviewed in three departments: DPKO, OLA and ODA, to test compliance with United Nations policies on record keeping and procedures established by ARMS.

14. In DPKO, the audit covered records management activities by the Peacekeeping Information Management Unit (PKIMU) and records maintained by the Office of Military Affairs. PKIMU is responsible for streamlining and strengthening records management in DPKO and DFS and acts as the office of record for the Offices of Under-Secretaries-General, DPKO and DFS, and Office of the Assistant Secretary-General, DFS.

15. In OLA, the audit reviewed records of the Treaty Section, Codification Division and Division for Ocean Affairs and the Law of the Sea (DOALOS). OIOS also reviewed records of the Weapons of Mass Destruction Branch and Conventional Arms Branch in ODA.

16. The audit was carried out by identifying and reviewing record-keeping practices in the selected departments and offices. The audit focused on substantive records, since OIOS covered management of administrative and financial records in other audits. OIOS sampled a total of 130 records (45 paper and 85 electronic records) and reviewed: (i) file classification; (ii) security classification; (iii) protection; (iv) access controls; and (v) storage conditions.

III. AUDIT RESULTS

17. The United Nations Secretariat’s governance, risk management and control processes in the departments examined were initially assessed as **partially satisfactory**¹ in providing reasonable assurance regarding the **effective management of records at the United Nations Headquarters in New York**. OIOS made 19 recommendations to address issues identified in this audit.

18. DM needed to strengthen governance over records management; issue a policy on digital signatures; and integrate ARMS in advisory groups on new information technology initiatives that have an impact on information, document and records management. OCSS needed to: (i) establish a governance framework for electronic records; (ii) develop mandatory records management training for Secretariat staff; (iii) provide guidance on what constitutes a record; (iv) revise its guidance on retention schedules including electronic records; (v) develop and implement an action plan for archiving important e-mail records; and (vi) request security and safety assessment of ARMS storage facilities.

19. With regards to information technology supporting records management, OICT needed to develop affordable storage solutions for electronic records. DFS needed to review the security of existing document management systems to ensure adequate protection of sensitive information. OLA needed to assess its requirements for an electronic content management system to enable it fulfil its mandates, and identify resources and mechanisms to digitize past records.

20. The initial overall rating was based on the assessment of key controls presented in Table 1. The final overall rating is **partially satisfactory** as implementation of 16 important recommendations remains in progress.

Table 1: Assessment of key controls

Business objective	Key controls	Control objectives			
		Efficient and effective operations	Accurate financial and operational reporting	Safeguarding of assets	Compliance with mandates, regulations and rules
Effective management of records at the United Nations Headquarters in New York	(a) Governance and monitoring mechanisms	Partially satisfactory	Not assessed	Partially satisfactory	Partially satisfactory
	(b) Electronic content management systems	Partially satisfactory	Not assessed	Partially satisfactory	Partially satisfactory
	(c) Regulatory framework	Partially satisfactory	Not assessed	Partially satisfactory	Partially satisfactory
FINAL OVERALL RATING: PARTIALLY SATISFACTORY					

¹ A rating of “**partially satisfactory**” means that important (but not critical or pervasive) deficiencies exist 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.

A. Governance and monitoring mechanisms

DM needed to strengthen governance over records management

21. Best practices (such as the International Organization for Standardization standard ISO-15489 on information and documentation - records management) suggest that an organization should have integrated information governance incorporated into its overall corporate infrastructure and business processes to such an extent that compliance with programme requirements and legal, regulatory, and other responsibilities are routine.

22. While the Secretary-General's bulletin on record-keeping and the management of United Nations archives (ST/SGB/2007/5) stated respective responsibilities of staff members, departments and offices, and ARMS, overall responsibility for records management was not specifically assigned to any senior official. Therefore, strategic level objectives such as protection of sensitive information and compliance with the requirement to establish and periodically review retention schedules were not monitored to safeguard the reputation of the United Nations and ensure that records of archival value are not lost.

23. In departments and offices, responsibility for records management was left to individual staff members/focal points who were not at an appropriate level to ensure staff members comply with organizational policies. These staff lacked authority and were themselves sometimes not aware of records management policies and standards to ensure compliance.

24. Although the Secretary-General's bulletin indicated that ARMS may inspect existing records management systems and prescribe changes and/or improvements in those systems as may be required, the position of ARMS in the organizational structure (as a section in the Commercial Activities Service, Facilities and Commercial Services Division of OCSS) often did not provide it with the visibility, authority or resources to perform this function effectively. In addition, according to ARMS, the Secretary-General's bulletin was ambiguous as it did not specify clearly whether the scope of ARMS responsibility covered the entire United Nations Secretariat including economic commissions and offices away from Headquarters or was for Headquarters only.

25. Consequently, records management issues did not have the requisite high-level support and attention of management. Inappropriate position of ARMS in the organizational structure, unclear mandate, and insufficient resources for monitoring of the records management systems resulted in the following deficiencies:

- a) There was a risk of duplication of efforts and divergent standards on records keeping and archives between offices.
- b) Three of 15 departments at Headquarters did not respond to a request from the Under-Secretary-General for Management to nominate focal points for records and 6 of 23 departments in the Secretariat did not establish retention schedules. Many existing retention schedules were outdated.
- c) Although ARMS provided ad-hoc services on request, for example at the closing of field missions, there was no structured monitoring of record-keeping standards. ARMS created self-assessment sheets for departments to complete, but did not review the responses or follow up on issues identified.

- d) In one case, ODA transferred highly sensitive materials relating to investigations to ARMS with the chain-of-custody intact. However, 12 other sensitive records out of 24 paper records reviewed by OIOS were kept in unprotected cabinets, which could have resulted in inappropriate disclosure of classified information with an impact on operations or reputation of the Organization. ODA informed OIOS that the records were subsequently destroyed or moved to more secure cabinets.
- e) Vital records were not always identified in retention schedules. In the event of a disaster, electronic vital records that are stored in non-critical systems might not be recovered in a timely manner, which could result in inability to restore critical functions.

26. OCSS was of the view that ARMS position in the organizational structure is appropriate, but concurred that ARMS should be provided with a clearer mandate, scope of work, authority and resources to ensure it can effectively implement a monitoring mechanism for records management and implement the recommendations in the present report.

27. The above deficiencies were also because a coordinated records management training programme did not exist as a core learning programme in the Secretariat. ARMS explained that it did not have the resources to create the content for self-learning training materials. However, compliance with records management policies could not be achieved without adequate staff awareness.

(1) DM should, in consultation with OLA, revise the Secretary-General’s bulletin on record-keeping and the management of United Nations archives to clearly define the scope of responsibility of the Archives and Records Management Section.

DM accepted recommendation 1 and stated that the revision of the Secretary-General’s bulletin on record-keeping and the management of United Nations archives had begun. An initial draft will be completed for OLA review by the end of the year. Its issuance was contingent on various stakeholders including OICT and OLA. Recommendation 1 remains open pending receipt of the revised Secretary-General’s bulletin.

(2) OCSS should, in coordination with the Office of Human Resources Management, develop and implement an action plan, including mandatory training, to raise awareness of staff on the importance of records management and their associated responsibilities.

OCSS accepted recommendation 2 and stated that it would start coordinating with the Office of Human Resources Management (OHRM) in the first quarter of 2017, with a view to implementing an action plan in 2018. Recommendation 2 remains open pending receipt of evidence of the implementation of an action plan to provide mandatory training on records management.

OCSS needed to establish a governance framework for electronic records

28. The Secretary-General’s bulletin on record-keeping and the management of United Nations archives requires ARMS to establish policy and standards for the structure, content and context of electronic records to ensure that they are accurately created and captured, and their integrity preserved without alteration and remain accessible for as long as the electronic record is retained.

29. ARMS did not develop a governance framework for maintenance of electronic records. ARMS conducted a gap analysis of electronic records governance with the aid of a consultant in January 2015 but no action plan followed to remedy the identified shortcomings. In November 2015, ARMS published guidelines for records stored in shared drives but there was still an absence of overall policy on

maintenance of electronic records outlining accountability, integrity, protection, availability, retention, disposition and preservation of electronic records.

30. The Secretariat did not have digital archives or repository for electronic records that will ensure long-term or permanent accessibility. The current volume of digital content amounts to around three terabytes of data managed by ARMS. However, digital records of the United Nations Monitoring, Verification and Inspection Commission in Iraq for example were sealed in locked cabinets that were not accessible to ARMS in accordance with procedures stated in the relevant Secretary-General's bulletin (ST/SGB/2009/12). Due to these restrictions, ARMS was not able to determine the condition of the digital records and assess whether they would meet long-term digital storage standards and ability to retrieve such documents. At the time of the audit, ARMS was developing a business case to acquire, implement and support a Digital Continuity and Preservation System for the long-term preservation and use of United Nations digital archives.

31. ARMS did not establish policy and standards for electronic records due to lack of necessary resources. With the increasing amount of documents and records maintained in electronic format, there is a risk that records will not be easily retrieved, protected, retained and archived. Digital archives may also become obsolete, data corrupted and irretrievable in the future leading to a loss of official and historical records.

(3) OCSS should, in consultation with OLA, establish a governance framework for electronic records to ensure their digital continuity and preservation.

OCSS accepted recommendation 3 and stated that the framework would be reflected in the revised Secretary-General's bulletin on record-keeping and management of United Nations archives. However, issuance of the revised Secretary-General's bulletin was contingent on various stakeholders. Recommendation 3 remains open pending issuance of a governance framework for electronic records.

DM needed to issue a policy on digital signatures

32. A digital secretariat initiative, launched by a Secretary-General Decision in April 2011, was aimed at creating a modern workplace with a high degree of digitization and virtualization of business workflows. The move to a "paperless" office environment was to be completed by 2015.

33. OIOS noted that departments' documents created in electronic systems are first printed, in order to be signed and disseminated. Classified information received electronically are also printed and maintained in hard copies in accordance with the Secretary-General's bulletin on information sensitivity, classification and handling (ST/SGB/2007/6). This was because although the Secretary-General's bulletin on authenticity, integrity and reliability of electronic records including a policy on digital signatures had been drafted, it was not issued due to delays in developing implementing guidelines.

(4) DM should facilitate issuance of the Secretary-General's bulletin on authenticity, integrity and reliability of electronic records with accompanying guidance.

DM accepted recommendation 4 and stated that OICT was leading a working group on digital signatures that included ARMS. OICT would support the formulation and issuance of the Secretary-General's bulletin. Recommendation 4 remains open pending receipt of the Secretary-General's bulletin and accompanying guidance.

(5) DM should update the Secretary-General's bulletin on information sensitivity,

classification and handling (ST/SGB/2007/6) to reflect a move of the Secretariat to a paperless environment.

DM accepted recommendation 5 and stated that revision of the Secretary-General's bulletin on information sensitivity, classification and handling had begun and its issuance was contingent on various stakeholders. Recommendation 5 remains open pending receipt of the revised Secretary-General's bulletin.

B. Electronic content management systems

DM needed to integrate ARMS into advisory groups on new ICT initiatives that have an impact on information, document and records management

34. The ICT project management handbook requires that key stakeholders are assigned to ICT projects and their requirements analyzed to prevent project failures due to lack of user commitment or stakeholder support.

35. OICT did not conduct formal consultations with ARMS and user departments before selecting Unite Docs as the Organization's enterprise content management system in 2014. OICT commented that it formed a working group on knowledge management with representatives from all offices in 2008. The working group was dissolved in 2013 but information on different aspects of the solution continued to be disseminated through meetings and a Unite Connections community. However, OICT did not provide OIOS with documentary evidence of formal consultations with key stakeholders.

36. DPKO/DFS also introduced a document management system COSMOS, developed in 2016 by ICTD. PKIMU specialists were not properly consulted prior to developing and launching the system, although COSMOS governance document identified PKIMU as a stakeholder. Consequently, some of the functionalities, such as the file classification scheme, metadata, and confidentiality classification were put in place in collaboration with PKIMU only after COSMOS had been implemented.

37. As a result of the above, the systems may not meet users' requirements leading to waste of resources and loss of synergies. For example, the Codification Division only began implementing Unite Docs on a trial basis for servicing the International Law Commission subsequent to the present audit. The Treaty Section in OLA also commented that transferring their document management system to Unite Docs would be challenging. OICT stated that Unite Docs had more than 3,000 users globally and the underlying technology was proven to be the best fit for the United Nations environment. However, without adequate involvement of ARMS and other stakeholders, implementation of new document and records management systems may not be successful.

(6) DM should establish a mechanism to integrate the Archives and Records Management Section into OICT advisory groups on new information technology initiatives that have an impact on information, document and records management.

DM accepted recommendation 6 and stated that OICT would ensure that new information technology initiatives satisfy record management-related policy. OICT would also ensure OCSS representation at relevant governance bodies. Recommendation 6 remains open pending receipt of a mechanism to integrate ARMS into OICT advisory groups on document and records management ICT initiatives.

DFS needed to review the security of documents and records management systems to ensure adequate protection of sensitive information

38. The Information Security Policy Directive for the United Nations Secretariat states that the Organization's information, independent of its form, is an important asset that needs to be appropriately protected to prevent misuse, unavailability, destruction, unauthorized disclosure or modification. Therefore, appropriate security controls should be established for information systems.

39. Confidential and strictly confidential documents in electronic format were stored on DFS systems that did not have security certifications (i.e. COMET, COSMOS, and Peacekeeping Content Management system). ICTD informed OIOS that it complied with security requirements for system development; however, there was no independent security assessment available for verification. The only document and records management system in the Secretariat certified for storing confidential records is Unite Docs. OICT expected that the Unite Docs certification for storing strictly confidential documents would be achieved by the end of 2016.

40. ICTD informed OIOS that it was working with OICT to deploy an Enterprise Data Rights Management system to provide information protection and control of data during its life cycle. The implementation is scheduled to be completed in 2017. Sensitive information on DFS systems may not be adequately protected until then.

(7) DFS should, in consultation with OICT, review the security of existing document management systems to ensure adequate protection of sensitive information.

DFS accepted recommendation 7 and stated that it would consult with OICT to review the security of current document management systems and continue to verify that there are adequate protection measures in place for sensitive information. OICT further noted that the General Assembly established a Chief Information Technology Officer as the Secretariat-wide authority for information security. Recommendation 7 remains open pending issuance of the results of DFS/OICT review of DFS existing document management systems to ensure adequate protection of sensitive information.

OICT needed to develop affordable storage solutions for electronic records

41. As a best practice, reliable and readily accessible electronic records storage should be cost-effective.

42. Storage of records in Unite Docs and shared drives was expensive for some departments. For example, DOALOS storage needs for legacy documents relating to the Commission on the Limits of the Continental Shelf were approximately two terabytes and growing. Storing this amount of data on shared drives or Unite Docs (including backups and recovery) would respectively cost \$50,000 and \$39,000 annually, as opposed to a one-off expense of \$200 for an external drive. Therefore some offices, including DOALOS and the Codification Division, moved older electronic records to external hard drives, USB sticks and other devices like CD-ROMs.

43. The above occurred because OICT had not explored best practices to reduce the cost of storage of electronic records. Some international organizations had adopted procedures whereby static data were backed-up only once and moved to a slower storage medium thereby reducing the cost. Use of external storage devices for storage of electronic records posed a risk that such records may not be adequately protected and preserved. OICT commented that storage costs within the information technology industry are decreasing and over time, will also decrease within the United Nations.

(8) OICT should implement mechanisms to provide affordable and secure storage solutions for electronic records in departments and offices.

OICT accepted recommendation 8 and stated that it would achieve economies of scale due to the implementation of the new ICT strategy which includes the system move to the United Nations Enterprise Data Centre in Valencia, Spain. OICT expects that costs would decrease over time. Recommendation 8 remains open pending receipt of evidence that mechanisms to provide affordable and secure storage solutions for electronic records have been implemented.

OLA needed to assess its requirements for electronic content management systems

44. The Treaty Section in OLA is required to analyse, register, file, record and publish treaties, international agreements and treaty actions in the Treaty Series, and to maintain and update the United Nations Treaty collection on the Internet. Accordingly, the Section needed cost-effective electronic content management systems to fulfill its mandates.

45. The Treaty Section implemented the Treaty Information and Publication System (TIPS) in 1998 for its information technology needs. It was based on previously approved OICT enterprise content management platform. The annual direct cost of maintaining the system (servers and infrastructure only as per the service level agreement) was \$113,933 and \$112,173 in 2015 and 2014 respectively, with \$44,500 allocated for software maintenance and updates performed by an external service provider. The Treaty Section estimated that it would need an additional \$100,000 to \$120,000 annually to ensure adequate long-term maintenance of the TIPS application, including storage and mandatory levels of security validation for its website.

46. While the TIPS database continued to grow since the system was introduced, more economical ways of securing records within available resources had not been considered. With the continuous growth of the TIPS database by approximately 60 gigabytes annually, attendant costs of keeping the data safe may be uneconomical.

(9) OLA should conduct an assessment of its needs for electronic content management systems for the purposes of fulfilling its mandates, and request guidance from OICT on possible technological solutions.

OLA accepted recommendation 9 and stated that it would develop a needs assessment of electronic content management systems for the purposes of fulfilling its mandates, and request guidance from OICT on possible technological solutions. Recommendation 9 remains open pending receipt of OLA needs assessment for electronic content management systems.

C. Regulatory framework

OCSS needed to provide guidance to departments on what constitutes a record

47. The Secretary-General's bulletin on record-keeping defines records as any data or information regardless of form or medium maintained by the United Nations as evidence of transactions. ARMS guidance further specifies that a record is the documentary evidence of any action or decision made as part of the official duties.

48. In DPKO, PKIMU considered, with few exceptions, that only final signed document constitutes a record. However, this definition did not comply with ARMS guidance. For example, the Office of Operations in DPKO produces many working documents and e-mails to support final decisions.

49. In ODA, the Conventional Arms Branch informed OIOS that it had no records. The Weapons of Mass Destruction Branch also indicated that it had no records aside from documents received from certain United Nations special commissions and records pertaining to the roster of experts for the Secretary-General's Mechanism. The Director's Office informed OIOS that all records were centrally kept electronically in correspondence files.

50. OLA informed OIOS that, given the nature of its work, the Office tended to keep all documents relating to substantive matters, including copies of drafts for future reference.

51. The above occurred because guidance on what constitutes a record in the context of the operations of departments and offices may not be adequate. This could lead to inconsistent record-keeping and possible destruction of historic, vital and sensitive records or any other records that support actions or decisions made. It could also lead to maintenance of unnecessary records leading to excessive storage costs.

(10) OCSS should develop guidance on what constitutes records.

OCSS accepted recommendation 10 and stated that revised definition of records would be included in the Secretary-General's bulletin on record-keeping and the management of United Nations archives, whose issuance was contingent on various stakeholders. Recommendation 10 remains open pending receipt of the revised Secretary-General's bulletin.

(11) DPKO should, in consultation with OCSS, determine what constitutes a record in their operations and issue internal guidance to staff.

DPKO accepted recommendation 11 and stated that it had been implemented. DPKO and DFS, in consultation with ARMS released a revised policy on records management that included updated guidance on what constitutes a record. The policy took effect on 1 July 2016. Based on the action taken by DPKO, recommendation 11 has been closed.

(12) ODA should, in consultation with OCSS, determine what constitutes a record in their operations and issue internal guidance to staff.

ODA accepted recommendation 12 and stated that it would implement it immediately after receiving feedback from OCSS on what constitutes a record. Recommendation 12 remains open pending receipt of guidance on what constitutes a record within the context of ODA.

(13) OLA should, in consultation with OCSS, determine what constitutes a record in their operations and issue internal guidance to staff.

OLA accepted recommendation 13 and stated that it would consult with OCSS and issue guidance to OLA staff members. Recommendation 13 remains open pending receipt of guidance on what constitutes a record in OLA operations.

OCSS needed to revise its guidance on retention schedules

52. The Secretary-General's bulletin on record-keeping requires departments and offices to develop and implement a policy regarding the retention of their records, including transitory records, through a records retention schedule subject to approval by ARMS. Electronic records are also subject to retention provisions.

53. Only 6 of the 23 departments in the Secretariat in New York had retention schedules. DPKO retention schedule was revised in November 2015 and approval of its front office was pending at the time of the audit. ODA finalized its retention schedule subsequent to the audit on 2 May 2016. OLA retention schedule was issued in December 2015 but it was highly summarized, and may be insufficient to serve as a guide on document retention. It also did not identify vital records but that was rectified subsequent to the audit in May 2016. The guidelines also did not specify the level of staff that should approve retention schedules.

54. Umoja and departmental systems (such as COSMOS, COMET, and the Peacekeeping Content Management system) did not have built-in retention schedules. Some obsolete electronic documents and records were being retained indefinitely as there was no reliable process for identifying and destroying obsolete electronic documents and records stored in shared drives and various systems. The only electronic system with a built-in retention schedule and automated disposition is Unite Docs.

55. Outdated or non-existent retention schedules were due to lack of staff awareness and inadequate monitoring and guidance from ARMS. Two of the retention schedules on ARMS website did not include an issuance date and ARMS guidelines did not contain details on the retention schedule approval process. Lack of updated retention schedules may lead to loss of important departmental records and/or undue maintenance of transitory records that can be costly.

(14) OCSS should revise its guidance on retention schedules to include: (i) periodic review; (ii) issuance date to identify outdated ones; (iii) a requirement for a formal approval process by senior officials of departments and offices; and (iv) retention and disposal of electronic records (in consultation with OICT).

OCSS accepted recommendation 14 and stated that the project would start in the first quarter of 2017. Recommendation 14 remains open pending receipt of revised guidance on retention schedules.

OCSS and OICT needed to develop and implement an action plan for archiving important e-mail records

56. The Secretary-General's bulletin on record-keeping states that departments and offices shall ensure that e-mail records are identified, managed and stored in accordance with the requirements for record-keeping. This includes managing e-mail records of staff members who have left the organization.

57. There were no procedures in departments and offices to identify, manage and store important e-mail records especially those of senior officials. There were also no procedures to ensure that e-mails of departing staff were transferred to ARMS. OICT deleted e-mails, whether or not locally archived, from Lotus Notes after 90 days. OICT commented that its backup procedures focused on disaster recovery and were not meant for archiving. However, after an initial two-week period, backup data were shipped to a remote location where they are stored for 10 years.

58. In March 2015, ARMS proposed a solution called the Capstone Approach. This best practice involves identifying senior officials who are likely to have e-mails of important or critical nature and

target the entire e-mail accounts for permanent preservation. ARMS plans to start this Capstone Approach with the e-mails of the current Secretary-General.

59. Generally, there was inadequate understanding of the importance of e-mails as part of official records and inadequate options for easy storage of e-mails. There was therefore a risk that important records and evidence of important decisions originating through e-mails could be lost.

(15) OCSS should, in consultation with OICT, develop guidance to address the risk associated with the loss of important e-mail records.

OCSS accepted recommendation 15 and stated that coordination with OICT would start from the fourth quarter of 2016 and the guidance completed at the end of 2017. Recommendation 15 remains open pending receipt of guidance that addresses the risk associated with the loss of important e-mail records.

(16) OICT should develop and implement an action plan to ensure e-mail records of archival value are preserved.

OICT accepted recommendation 16 and stated that it would, in consultation with ARMS, assess the digital preservation business needs and provide an appropriate technology solution. OICT would support the United Nations digital preservation policies provided additional funding requests are submitted to legislative bodies. Recommendation 16 remains open pending receipt of an action plan to preserve e-mail records of archival value.

OLA needed to establish a mechanism to digitize past records

60. ARMS criteria for digitization of past records includes: (i) frequent use and access by multiple staff; (ii) lasting historical value; (iii) vital records to be protected as disaster mitigation strategy; and (iv) lack of space to store physical records.

61. OLA maintained a large volume of paper records that had not been digitized. Unique records such as DOALOS collection of non-parliamentary materials and the complete DOALOS collection of national legislations transmitted over a period of 40 years exist in hard copies only and need to be digitized to provide backup in case of loss. OLA identified resource constraints in digitizing the large volume of records in DOALOS and the Treaty Section. There was a risk that unique paper records that do not have digital backups could be susceptible to damage and loss.

(17) OLA should, in consultation with the Department of Management, identify resources and mechanisms to digitize its past records.

OLA accepted recommendation 17 and stated that it would consult with the Department of Management to identify resources and mechanisms to digitize its past records, and submit budget proposals as appropriate. Recommendation 17 remains open pending receipt of an action plan by OLA to identify and digitize its past records.

OCSS needed to request security and safety assessment of ARMS storage facilities

62. According to the standard operating procedures of the Department of Safety and Security (DSS), the Department should carry out periodic security and safety assessments of buildings where United Nations employees carry out their activities. Safety and security assessments had not been carried out at ARMS storage facilities in Long Island City since 1999. The safety and security of ARMS facilities were

not being properly and regularly monitored. In the absence of specific safety and security assessments, preventable fire and security threats may be overlooked resulting in loss of records to fire, water damage or access to materials by unauthorized persons.

(18) OCSS should request DSS to carry out security and safety assessments for all storage facilities of the Archives and Records Management Section.

OCSS accepted recommendation 18 and stated that DSS conducted security risk assessment of ARMS repositories in May and July 2016. Based on the action taken by OCSS, recommendation 18 has been closed.

OCSS needed to periodically check conditions of storage facilities

63. According to ARMS guidance, microfilms and electronic records should be stored at temperatures between 60.8 to 64 degrees Fahrenheit and humidity of 30-40 per cent to be properly protected. OIOS observed that the storage room of two ARMS facilities containing electronic records, such as audiovisuals, magnetic tapes and hard drives had a temperature of 79 degrees Fahrenheit. ARMS did not conduct periodic checks or monitoring of storage conditions to ensure compliance with generally accepted storage standards as well as those issued by ARMS. The absence of proper storage conditions could lead to rapid deterioration of records and future irretrievability leading to loss of institutional memory.

(19) OCSS should establish a mechanism to periodically check temperature and humidity conditions of its records storage facilities.

OCSS accepted recommendation 19 and stated that ARMS had implemented a mechanism based on its emergency plan, outlining requirements and reporting for facility monitoring using a digital monitoring system that checks the temperatures and humidity condition of ARMS repositories on a daily basis and sends e-mail reports to designated ARMS staff. Based on the action taken by OCSS, recommendation 19 has been closed.

IV. ACKNOWLEDGEMENT

64. OIOS wishes to express its appreciation to the management and staff of DM, OLA, DFS, DPKO and ODA 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

Audit of records management at the United Nations Headquarters in New York

Department of Management

Recom. no.	Recommendation	Critical ¹ / Important ²	C/ O ³	Actions needed to close recommendation	Implementation date ⁴
1	DM should, in consultation with OLA, revise the Secretary-General's bulletin on record-keeping and the management of United Nations archives to clearly define the scope of responsibility of the Archives and Records Management Section.	Important	O	Submission of the revised Secretary-General's bulletin on record-keeping and the management of United Nations archives.	31 December 2017
4	DM should facilitate issuance of the Secretary-General's bulletin on authenticity, integrity and reliability of electronic records with accompanying guidance.	Important	O	Submission of the Secretary-General's bulletin on authenticity, integrity and reliability of electronic records and accompanying guidance.	30 June 2017
5	DM should update the Secretary-General's bulletin on information sensitivity, classification and handling (ST/SGB/2007/6) to reflect a move of the Secretariat to a paperless environment.	Important	O	Submission of the revised Secretary-General's bulletin on information sensitivity, classification and handling.	31 December 2017
6	DM should establish a mechanism to integrate Archives and Records Management Section into OICT advisory groups on new information technology initiatives that have an impact in information, document and records management.	Important	O	Submission of a mechanism to integrate ARMS into OICT advisory groups on document and records management ICT initiatives.	31 December 2016

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.

³ C = closed, O = open

⁴ Date provided by DM, DFS, OLA and ODA in response to recommendations.

STATUS OF AUDIT RECOMMENDATIONS

Office of Central Support Services

Recom. no.	Recommendation	Critical ¹ / Important ²	C/ O ³	Actions needed to close recommendation	Implementation date ⁴
2	OCSS should, in coordination with the Office of Human Resources Management, develop and implement an action plan, including mandatory training, to raise awareness of staff on the importance of records management and their associated responsibilities.	Important	O	Submission of evidence of the implementation of an action plan to provide mandatory training on records management.	31 December 2018
3	OCSS should, in consultation with OLA, establish a governance framework for electronic records to ensure their digital continuity and preservation.	Important	O	Submission of a governance framework for electronic records.	30 June 2018
10	OCSS should develop guidance on what constitutes records.	Important	O	Submission of evidence that ARMS has updated the definition of a record in its policies and guidance.	30 June 2018
14	OCSS should revise its guidance on retention schedules to include: (i) periodic review; (ii) issuance date to identify outdated ones; (iii) a requirement for a formal approval process by senior officials of departments and offices; and (iv) retention and disposal of electronic records (in consultation with OICT).	Important	O	Submission of revised guidance on retention schedules.	31 December 2017
15	OCSS should, in consultation with OICT, develop guidance to address the risk associated with the loss of important e-mail records.	Important	O	Submission of guidance that addresses the risk associated with the loss of important e-mail records.	31 December 2017
18	OCSS should request DSS to carry out security and safety assessments for all storage facilities of the Archives and Records Management Section.	Important	C	Action completed.	Implemented
19	OCSS should establish a mechanism to periodically check temperature and humidity conditions of its records storage facilities.	Important	C	Action completed.	Implemented

STATUS OF AUDIT RECOMMENDATIONS

Office of Information and Communications Technology

Recom. no.	Recommendation	Critical ¹ / Important ²	C/ O ³	Actions needed to close recommendation	Implementation date ⁴
8	OICT should implement mechanisms to provide affordable and secure storage solutions for electronic records in departments and offices.	Important	O	Submission of evidence that mechanisms to provide affordable and secure storage solutions for electronic records have been implemented.	30 June 2017
16	OICT should develop and implement an action plan to ensure e-mail records of archival value are preserved.	Important	O	Submission of an action plan to preserve e-mail records of archival value.	31 March 2018

Department of Peacekeeping Operations/Department of Field Support

Recom. no.	Recommendation	Critical/ Important	C/ O	Actions needed to close recommendation	Implementation date
7	DFS should, in consultation with OICT, review the security of existing document management systems to ensure adequate protection of sensitive information.	Important	O	Submission of the results of DFS/OICT review of DFS existing document management systems to ensure adequate protection of sensitive information.	30 September 2017
11	DPKO should, in consultation with OCSS, determine what constitutes a record in their operations and issue internal guidance to staff.	Important	C	Action completed.	Implemented

STATUS OF AUDIT RECOMMENDATIONS

Office of Legal Affairs

Recom. no.	Recommendation	Critical/ Important ²	C/ O ³	Actions needed to close recommendation	Implementation date ⁴
9	OLA should conduct an assessment of its needs for electronic content management systems for the purposes of fulfilling its mandates, and request guidance from OICT on possible technological solutions.	Important	O	Submission of OLA needs assessment for electronic content management systems.	31 December 2019
13	OLA should, in consultation with OCSS, determine what constitutes a record in their operations and issue internal guidance to staff.	Important	O	Submission of guidance on what constitutes a record in OLA operations.	31 December 2017
17	OLA should, in consultation with the Department of Management, identify resources and mechanisms to digitize its past records.	Important	O	Submission of an action plan by OLA to identify and digitize past records.	31 December 2019

Office of Disarmament Affairs

Recom. no.	Recommendation	Critical/ Important	C/ O	Actions needed to close recommendation	Implementation date
12	ODA should, in consultation with OCSS, determine what constitutes a record in their operations and issue internal guidance to staff.	Important	O	Submission of guidance on what constitutes a record within the context of ODA.	31 December 2018

APPENDIX I

Management Response

Management Response

Audit of records management at the United Nations Headquarters in New York

Department of Management

Rec. no.	Recommendation	Critical ¹ / Important ²	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
1	DM should, in consultation with OLA, revise the Secretary-General's bulletin on record-keeping and the management of United Nations archives to clearly define the scope of responsibility of the Archives and Records Management Section.	Important	Yes	Chief of ARMS	31 December 2017	Revision of ST/SGB/2007/5 has begun and the initial draft will be submitted to OLA for review by the end of 2016. Issuance of the revised Secretary-General's Bulletin will be contingent on various stakeholders, including OICT and OLA.
4	DM should facilitate issuance of the Secretary-General's bulletin on authenticity, integrity and reliability of electronic records with accompanying guidance.	Important	Yes	Director, Global Services Division	30 June 2017	OICT is leading a working group on digital signatures. OICT will support the formulation and issuance of the Secretary General's Bulletin.
5	DM should update the Secretary-General's bulletin on information sensitivity, classification and handling (ST/SGB/2007/6) to reflect a move of the Secretariat to a paperless environment.	Important	Yes	Chief of ARMS	31 December 2017	Revision of ST/SGB/2007/6 has begun and the initial draft will be submitted to OLA for review by the end of 2016. Issuance of the revised Secretary-General's Bulletin will be contingent on various stakeholders, including OICT and OLA.
6	DM should establish a mechanism to integrate ARMS into OICT advisory groups on new information technology initiatives that have an impact in information, document and records management.	Important	Yes	Director, Global Services Division	31 December 2016	OICT concurs that business needs should underpin ICT initiatives and will ensure that new information technology initiatives can satisfy Records Management-related policy. OICT will ensure that OCSS has representation at governance bodies.

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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.

Management Response

Audit of records management at the United Nations Headquarters in New York

Office of Central Support Services

Rec. no.	Recommendation	Critical ³ / Important ⁴	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
2	OCSS should, in coordination with the Office of Human Resources Management, develop and implement an action plan, including mandatory training, to raise awareness of staff on the importance of records management and their associated responsibilities.	Important	Yes	Chief of ARMS	31 December 2018	Coordination with OHRM will start in the first quarter of 2017; implementation of action plan in 2018.
3	OCSS should, in consultation with OLA, establish a governance framework for electronic records to ensure their digital continuity and preservation.	Important	Yes	Chief of ARMS	30 June 2018	The governance framework will be outlined in the revised ST/SGB/2007/5. Issuance of the revised SGB will be contingent on various stakeholders, including OICT and OLA.
10	OCSS should develop guidance on what constitutes records.	Important	Yes	Chief of ARMS	30 June 2018	Revised definition of “records” will be included in the revised ST/SGB/2007/5. Issuance of the revised SGB will be contingent on various stakeholders, including OICT and OLA.
12	OCSS should revise its guidance on retention schedules to include: (i) periodic review; (ii) issuance date to identify outdated ones; (iii) a requirement for a formal approval process by senior officials of departments and offices; and (iv)	Important	Yes	Chief of ARMS	31 December 2017	Project will start from the first quarter of 2017.

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⁴ 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.

Management Response

Audit of records management at the United Nations Headquarters in New York

Rec. no.	Recommendation	Critical ³ / Important ⁴	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
	retention and disposal of electronic records (in consultation with OICT).					
13	OCSS should, in consultation with OICT, develop guidance to address the risk associated with the loss of important e-mail records.	Important	Yes	Chief of ARMS	31 December 2017	Coordination with OICT will start from the fourth quarter of 2016; guidance completed end 2017.
16	OCSS should request DSS to carry out security and safety assessments for all storage facilities of the Archives and Records Management Section.	Important	Yes	Chief of ARMS	Implemented	DSS conducted Security Risk Assessments (SRAs) at ARMS FF repository in May 2016 and at ARMS Falchi repository in July 2016. ARMS also have storage space in the Library Building which was provided when the North Lawn Building was decommissioned in December 2015. DSS approved the space for ARMS' needs, i.e., to store highly sensitive records that should remain on the United Nations campus.
17	OCSS should establish a mechanism to periodically check temperature and humidity conditions of its records storage facilities.	Important	Yes	Chief of ARMS	Implemented	ARMS has a mechanism based on its Emergency Plan, outlining requirements and reporting for facility monitoring using a digital monitoring system that checks the temperature and humidity condition of both FF and Falchi repositories on a daily basis and sends email reports to designated ARMS staff.

Management Response

Audit of records management at the United Nations Headquarters in New York

Office of Information and Communications Technology

Rec. no.	Recommendation	Critical ⁵ / Important ⁶	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
8	OICT should implement mechanisms to provide affordable and secure storage solutions for electronic records in departments and offices.	Important	Yes	Director, Global Operations Division	30 June 2017	OICT will achieve economies of scale due to the implementation of the new ICT Strategy which includes the system move to the United Nations Enterprise Data Centre (EDC) in Valencia, Spain. Costs will decrease over time.
14	OICT should develop and implement an action plan to ensure e-mail records of archival value are preserved.	Important	Yes	Chief, Regional Technology Center of Americas	31 March 2018	Current Technical Procedure focuses more on disaster recovery as follows: "Backup is NOT meant for archiving but for the disaster recovery of the email system or for accidental deletion within a two week period. After two weeks, the backup data is cloned from the virtual tape into the physical tape library and shipped to external site for storage. Email backups are kept ten years on tape at a remote location." However, so far the backed up emails have been kept and never been discarded. OICT and ARMS will assess the digital preservation business needs and will provide an appropriate technology solution.

⁵ 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.

⁶ 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.

Management Response

Audit of records management at the United Nations Headquarters in New York

Rec. no.	Recommendation	Critical ⁵ / Important ⁶	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
						<p>OICT will support the United Nations' needs related to Digital Preservation to ensure that ICT systems can support United Nations Digital Preservation policies. This is based on the premise that additional funding requests may need to be submitted to the legislative bodies.</p>

⁷ 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.

⁸ 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.

Management Response

Audit of records management at the United Nations Headquarters in New York

Department of Peacekeeping Operations/Department of Field Support

Rec. no.	Recommendation	Critical/ Important	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
7	DFS should, in consultation with OICT, review the security of existing document management systems to ensure adequate protection of sensitive information.	Important	Yes	Directors ICTD and OICT	Third quarter of 2017	DFS' comments are reflected in the report.

Management Response
Audit of records management at the United Nations Headquarters in New York

Office of Legal Affairs

Rec. no.	Recommendation	Critical ¹ / Important ²	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
9	OLA should develop a needs assessment of electronic content management systems for the purposes of fulfilling its mandates, and request guidance from OICT on possible technological solutions.	Important	Yes	Special Assistant to the USG - OUSG, OLA	By the end of the 2018-2019 biennium	OLA accepted recommendation 9, and stated that it will develop a needs assessment of electronic content management systems for the purposes of fulfilling its mandates, and request guidance from OICT on possible technological solutions.
11(c)	OLA should, in consultation with OCSS, determine what constitutes a record in their operations and issue internal guidance to staff.	Important	Yes	Special Assistant to the USG - OUSG, OLA	By the end of the 2016-2017 biennium, <u>subject</u> to the completion of recommendation 10 (OCSS should develop guidance on what constitutes records).	OLA accepted recommendation 11(c), and stated that it will consult with OCSS and issue guidance to OLA staff members.
15	OLA should, in consultation with the Department of Management, identify resources and mechanisms to digitize its past paper records.	Important	Yes	Special Assistant to the USG - OUSG, OLA	By the end of the 2018-2019 biennium	OLA accepted recommendation 15, and stated that it will consult with the Department of Management to identify resources and mechanisms to digitize its past paper records, and submit budget proposals as appropriate.

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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.

Management Response

Audit of records management at the United Nations Headquarters in New York

Office of Disarmament Affairs

Rec. no.	Recommendation	Critical ⁹ / Important ¹⁰	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
11(b)	ODA should, in consultation with OCSS, determine what constitutes a record in their operations and issue internal guidance to staff.	Important	YES	Director and Deputy to the High Representative for Disarmament Affairs	Immediately after receiving feedback from OCSS on what constitutes a record.	

⁹ 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.

¹⁰ 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.