



INTERNAL AUDIT DIVISION

AUDIT REPORT

Enterprise Resource Planning project
at the United Nations Secretariat

Additional controls are needed to ensure that the ERP project is not adversely affected by unmitigated risks relating to the governance structure, project management, system integration and fund monitoring

23 August 2010
Assignment No. AT2009/510/02

United Nations  Nations Unies

INTEROFFICE MEMORANDUM

MEMORANDUM INTERIEUR

OFFICE OF INTERNAL OVERSIGHT SERVICES · BUREAU DES SERVICES DE CONTRÔLE INTERNE
INTERNAL AUDIT DIVISION · DIVISION DE L'AUDIT INTERNE

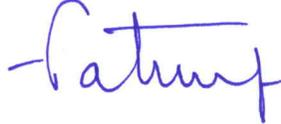
TO: Ms. Angela Kane, Under-Secretary-General
A: Department of Management

DATE: 23 August 2010

REFERENCE: IAD: 10- **00745**

Mr. Choi Soon-hong, Assistant Secretary-General
Chief Information Technology Officer
Office of Information and Communications Technology

FROM: Fatoumata Ndiaye, Director
DE: Internal Audit Division, OIOS



SUBJECT: Assignment No. AT2009/510/02 - Audit of the ERP project at the United Nations Secretariat
OBJET:

1. I am pleased to present the report on the above-mentioned audit.
2. Based on your comments, we are pleased to inform you that we will close recommendation 7 in the OIOS recommendations database as indicated in Annex 1. In order for us to close the remaining recommendations, we request that you provide us with the additional information as discussed in the text of the report and also summarized in Annex 1.
3. The Department of Management indicated partial acceptance of recommendations 6, 12 and 15, and did not accept recommendation 8. In OIOS' opinion however, these recommendations seek to address significant risk areas. We are therefore reiterating them and requesting that you reconsider your initial response based on the additional information provided in the report.
4. Please note that OIOS will report on the progress made to implement its recommendations, particularly those designated as high risk (i.e., recommendations 1, 3, 5, 6, 7, 10, 11 and 15), in its annual report to the General Assembly and semi-annual report to the Secretary-General.

cc: Mr. Paul Van Essche, ERP Director, Department of Management
Mr. Swatantra Goolsarran, Executive Secretary, UN Board of Auditors
Ms. Susanne Frueh, Executive Secretary, Joint Inspection Unit
Mr. Moses Bamuwamye, Chief, Oversight Support Unit, Department of Management
Mr. Byung-Kun Min, Special Assistant to the USG-OIOS

INTERNAL AUDIT DIVISION

FUNCTION

“The Office shall, in accordance with the relevant provisions of the Financial Regulations and Rules of the United Nations examine, review and appraise the use of financial resources of the United Nations in order to guarantee the implementation of programmes and legislative mandates, ascertain compliance of programme managers with the financial and administrative regulations and rules, as well as with the approved recommendations of external oversight bodies, undertake management audits, reviews and surveys to improve the structure of the Organization and its responsiveness to the requirements of programmes and legislative mandates, and monitor the effectiveness of the systems of internal control of the Organization” (General Assembly Resolution 48/218 B).

CONTACT INFORMATION

DIRECTOR:

Fatoumata Ndiaye: Tel: +1.212.963.5648, Fax: +1.212.963.3388,
e-mail: ndiaye@un.org

DEPUTY DIRECTOR:

Gurpur Kumar: Tel: +1.212.963.5920, Fax: +1.212.963.3388,
e-mail: kumarg@un.org

EXECUTIVE SUMMARY

Audit of the ERP project at the United Nations Secretariat

The Office of Internal Oversight Services (OIOS) conducted an audit of the Enterprise Resource Planning project (ERP or Umoja) at the United Nations Secretariat. The overall objective of the audit was to determine whether the project implementation processes have adhered to best practices in the areas of governance, risk management and controls. The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.

OIOS found that some relevant controls have been established to support the management of the ERP project, as follows:

- (a) A highly committed and present ERP Steering Committee;
- (b) An estimation of the project costs documented until the planned completion of the initiative (2012);
- (b) Documented communication and training plans;
- (c) Automated project scheduling tools;
- (d) Business process analysis conducted on the basis of modeling standards, using a common language;
- (e) Frequent meetings and reports of the ERP sub-teams; and
- (f) A well documented quality review completed by an external firm.

However, given the complexity, scope and sensitivity of the initiative, OIOS found that there are still some unmitigated risks that require urgent attention by Management. These include:

- (a) An incomplete programme charter;
- (b) Lack of clearly defined roles and responsibilities within the project governance structures;
- (c) Inadequate procedures to ensure the timely submission of documentation, including timelines, to the Steering Committee;
- (d) Uncertainties with regard to the funding of the project and inadequate budget monitoring mechanisms;
- (e) Unclear consideration of the best practices embedded in the commercial software application during the design of new processes;

- (f) Undefined integration requirements with existing and new enterprise systems;
- (g) Lack of consistent follow-up to quality assurance reviews and undefined mitigating actions; and
- (h) Inadequate procedures and controls for project risk management.

Also of particular concern was the limited role being played by the Chief Information Technology Officer (CITO) in the day to day management of the project, and the limited collaboration between the Office of Information Communications Technology (OICT) and the ERP team on technological matters.

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I. INTRODUCTION

1. The Office of Internal Oversight Services (OIOS) conducted an audit of the Enterprise Resource Planning (ERP or Umoja) project at the United Nations Secretariat. The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.

2. An ERP system is a way to integrate data and processes of an organization into one single system with a modular software application. All the modules are usually linked into one shared database.

3. As stated in the programme documentation, the ERP project, named 'Umoja', will integrate and support the fundamental administrative and management functions at the United Nations Secretariat's Headquarters (Secretariat) and field office locations. The project will cover over 200 locations in over 100 countries, spanning four functional areas – finance, supply chain, human resources and central support services. It will provide critical support to all activities, including the Organization's peacekeeping operations.

4. The defined goals of the project are:

(a) Adopt leading practices and standards to meet the needs of the Secretariat;

(b) Support the Secretariat's implementation of the International Public Sector Accounting Standards (IPSAS);

(c) Empower staff with the training and tools they need to meet their responsibilities;

(d) Deliver improved service and faster transaction cycle times;

(e) Improve alignment of authority, accountability and internal controls;

(f) Reduce the Secretariat's administrative burden and focus more resources on mandates; and

(g) Help the Secretariat to be more responsive to Member States and beneficiaries.

5. The ERP project is being implemented in four distinct phases: (a) prepare; (b) design; (c) build; and (d) deploy. The General Assembly, in its resolution 63/262, approved a start-up budget of \$20,000,000 and in draft resolution 64/243 approved \$24,192,200 from the regular budget for the 2010-2011 biennium, and \$28,516,500 from the support account for period from 1 July 2009 to 30 June 2010, and it further noted that "future remaining requirements for the enterprise resource planning system will be included in subsequent budget proposals for the regular budget and the support account for peacekeeping operations, respectively, for the financial periods until 2013".

6. The original ERP project timeline is depicted below¹:



7. The original ERP project timeline has been revised with the adoption of a “Pilot First” option proposed by the Secretary-General with his report A/64/380, and approved by the General Assembly with A/RES/64/283. The rationale and goal of the “Pilot First” option have been defined as follows:

“Cheapest and quickest overall solution, with fastest time to benefits. Although not the lowest cost option in the biennium 2010-2011, the investment pays dividends later on. Lowest risk option, with lowest operational impact during the stabilization phase. Fastest path to impact for both administrative areas and peacekeeping — the latter is included in the first implementation phase.”

8. Comments made by the Department of Management (DM) and the Office of Information and Communications Technology (OICT) are shown in *italics*. *DM noted that factual inaccuracies contained in the draft report have been separately communicated by the Director of Umoja and requested that these be taken into account when finalizing the report. OIOS took into account these clarifications where relevant and applicable.*

9. *OICT responded to the draft audit report indicating that it is broadly in agreement with the key findings and recommendations of the report that relate to OICT and that fall under the responsibility of the Chief Information Technology Officer (CITO). In addition, OICT confirmed its agreement with the findings and recommendation on governance and the role of OICT.*

II. AUDIT OBJECTIVES

10. The main objective of the audit was to assess the adequacy and effectiveness of the controls designed and implemented by the United Nations Secretariat to govern and manage the ERP project, including an assessment of the following project components:

¹ The Project Timeline has been revised with the adoption of a “Pilot First Option”, proposed with by the Secretary-General with A/64/380 and approved by the General Assembly with A/RES/64/283.

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- (a) Governance;
 - (b) Project Methodology;
 - (c) Budgeting;
 - (d) Management of external consultants;
 - (e) System investigation, analysis and design;
 - (f) Software selection;
 - (g) Quality assurance;
 - (h) Risk management; and
 - (i) Reporting.

III. AUDIT SCOPE AND METHODOLOGY

11. The scope of this audit did not include the risks and controls related to the ERP staffing and procurement activities, which have been covered in a separate audit report.

12. The audit covered the activities performed by the Departments and Offices of the Secretariat involved in the ERP project, members of the ERP Steering Committee, and consulting firms engaged for supporting the project.

13. The audit methodology included an analysis and review of project documentation and applications (i.e., Clarity, Alfresco, Jira), and interviews with the officers in charge of the relevant functions. Twenty-eight interviews were held with:

- (a) Members of the Steering Committee;
- (b) ERP Director and leaders of the change management, functional and technical teams;
- (c) Representatives of the external firms PricewaterhouseCoopers (PWC) and Deloitte; and
- (d) Representatives of relevant functions in offices of the Secretariat, including one peacekeeping mission (United Nations Mission in Liberia, UNMIL).

IV. AUDIT FINDINGS AND RECOMMENDATIONS

A. Background

Decision to replace the Integrated Management Information System (IMIS)

14. The General Assembly approved the replacement of IMIS in its resolution 60/283 of 17 August 2006 and requested a precise, detailed report on the ERP project including its objectives, costs and estimated return on investment. The Secretary-General's report A/62/510 of 29 October 2007 defined the project's general aims, expected benefits, work already underway for its design, structure of governance, and the principal stages of its implementation, and also addressed the General Assembly's request for information about the project and submitted the funding requirements of the project.

Project funding

15. Since the ERP functionalities had not yet been defined in adequate detail at the time when the report A/62/510 was submitted, the Secretary-General requested that the General Assembly approve a "start-up" budget of \$19.5 million in order to launch the project.

16. In its report A/62/7/Add.31 of 21 December 2007, the Advisory Committee on Administrative and Budgetary Questions (ACABQ) noted that the definition and financial assessment of the project as presented in the Secretary-General's report were incomplete. ACABQ provided guidance for the preparation of a complementary report, to be submitted during the General Assembly's 62nd session.

17. Due to its busy agenda, the General Assembly did not discuss the reports of the Secretary-General and the ACABQ on the ERP until the end of the main part of its 62nd session. Thus, no decisions were taken as of the end of 2008 regarding the preliminary funding for the project.

18. To safeguard the progress already made in the definition of the project's functionalities, and consequently provide the General Assembly with adequate information, the Secretary-General decided to continue the project on the basis of temporary arrangements, using discretionary funds at his disposal. The subsequent report A/62/510/Rev.1 was then submitted to and considered by the General Assembly during its 63rd session in fall 2008.

Acquisition of a commercial software application

19. In parallel to supporting the preparation of the report A/62/510/Rev.1, the ERP team defined further specifications of the project for the procurement of a commercial software application and the re-engineering of operational processes.

20. The procurement phase for the acquisition of a commercial software application was officially launched on 22 February 2008, with the issuance of the request for proposal (RFP).

Governance and role of the Office of Information and Communications Technology (OICT)

21. In its 63rd session, the General Assembly underlined “the importance of information and communications technology”² and recognized “the need for central authority to set common standards, provide an Organization-wide perspective, optimize use of resources and improve information and communications technology services”.

22. The General Assembly approved “the proposed governance framework of the enterprise resource planning project”³ and noted “that the enterprise resource planning governance structure proposed by the Secretary-General is distinct from the information and communications technology governance structure”.

23. In its report A/63/487 of 16 October 2008, the ACABQ emphasized that “the role of ICT should not be minimized. ICT analysts and other staff are key players who must remain deeply involved in all phases of the project, including the business mapping, business process review and specification of customization requirements to ensure that a viable, technically sound solution is put into place. In the Committee’s view, the ERP project should be treated as a joint venture, driven by business process demands and delivered through complex information technology systems requiring a high level of technical expertise”⁴.

Recent requests of the General Assembly with regard to the ERP project

24. The General Assembly requested⁵ the Secretary-General to report to its 64th session on the ERP project with:

- (a) An assessment of the organizational arrangements;
- (b) A revised implementation plan and updated budget, taking stock of the design phase, with a full and detailed justification of the resources needed;
- (c) An updated business case, including details on tangible and measurable efficiency and productivity gains in the areas of operation and administration to be achieved through the implementation of the ERP system, as well as benchmarks for measuring progress and the anticipated return on investment;

² A/RES/63/262 p.2

³ A/RES/63/262 II.7. p.5

⁴ A/63/487 para 53

⁵ A/RES/63/262 para 26

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- (d) An indication of those modules that are essential for the implementation of IPSAS;
 - (e) An update on the implementation of the customer relationship management and enterprise content management systems, including further resources required, as well as the cost-sharing arrangement for their continued implementation;
 - (f) Justification of the need and options for contingency resources, including a possible budgetary alternative; and
 - (g) Options for a reduced ERP package at lower cost.

B. Governance

Programme charter

25. A programme charter is a critical document for outlining expectations and aligning resources and objectives. The charter should define the scope, goals and objectives, responsibilities and roles, timeline, deliverables, potential risks, and monitoring mechanisms. The original programme charter does not change throughout the project life-cycle and should be available for reference throughout the project life-cycle. The development and formal approval of the charter is essential to kick-off the programme and set its direction.

26. OIOS noted that the ERP programme charter was still in draft version at the time of the audit, with relevant parts of the charter, such as the project approach and strategy on deployment and change management, not updated or completed. Lack of a complete and formalized programme charter could prevent relevant stakeholders from monitoring the direction taken, and the progress made, in the implementation of the project.

Recommendation 1

(1) The ERP team should update and complete the programme charter, with particular regard to: (a) project approach; (b) strategy on deployment; (c) change management; and (d) integration approach.

27. *The Department of Management accepted recommendation 1 and stated that since the Programme Charter (synonymous with Umoja's preferred terminology: "Project Charter") is a living document that will evolve and grow over the lifecycle of the project, it is suggested that the sentence: "The original programme charter does not change throughout the project life-cycle and should be available for reference throughout the project life-cycle" be deleted. For some aspects of the charter therefore, it was too early in the project lifecycle to provide details. For example, the deployment strategy cannot be articulated fully until major decisions like service delivery strategy, choice of pilot site(s), harmonization with the Global Field Support Strategy (GFSS), etc. have been made by the Steering Committee. These are not due for consideration, for several*

months. It is worth noting that the current status of the Charter has not prevented the Steering Committee from monitoring project direction and progress adequately. Other mechanisms beyond the Project Charter are used by the Steering Committee and other stakeholders, while the Project Charter itself is a reference point which, as pointed out already, is updated as the project evolves. In light of the above, it suggested that OIOS replaces the last sentence of recommendation 1 with the following “The Project Charter will need to be updated over time, as resources become available and/or key decisions are taken, to include the full range of strategies and approaches required to steer the project forward in a coordinated and transparent manner.”

28. OIOS is unable to accept the justifications provided by DM and the corresponding request for changing the text of the recommendation. OIOS is of the opinion that: (i) given the scope, complexity and amount of financial resources invested in the ERP project, a programme charter should be formally sanctioned; (ii) the lack of a formally approved programme charter is a major risk for the United Nations Secretariat, preventing an effective monitoring of the project’s progress not only by the ERP Steering Committee but also by any other relevant stakeholders; (iii) the formal approval and definition of a programme charter does not prevent periodic updates through the standard practice of “versioning”, by which updates and changes are periodically reviewed and approved by the project steering committee; and (iv) OIOS was not informed and did not receive a copy of the “other mechanisms beyond the Project Charter used by the Steering Committee”, as referenced by DM in its response. Therefore, recommendation 1 remains open pending receipt of a formally approved, updated and completed programme charter.

Definition of roles and responsibilities

29. Effective project governance requires defining roles, responsibilities and accountability structures, ensuring that all relevant stakeholders are adequately represented.

(a) Business and function owners

30. Within the ERP project, the role of the “business owners” was not consistently indicated in the main project documents. The updated governance framework of the ERP project, as published in A/63/487, identified the members of the Steering Committee as “business owners”, except for the CITO, Offices Away from Headquarters (OAHs), and the Chair of the Committee. In line with this definition, the team leaders of the four main functional areas (human resources, finance, supply chain and central support services) reported to their corresponding “business owners” within the Steering Committee (respectively ASG/OHRM, ASG/OPPBA, USG and ASG/DFS, and ASG/OCSS). However, the terms of reference of the ERP project⁶ defined the “business owners” as “senior executives/managers selected by the Steering Committee as representatives of major organizational entities in the Secretariat”. This

⁶ The terms of reference of the ERP project were posted on the web site www.umoja.net

inconsistent definition may lead to confusion as to the roles of the Steering Committee members and those of the “business owners”.

31. The terms of reference of the ERP project indicated that the Steering Committee members designate “function owners” as decision-makers for processes within their area of responsibility. The “function owners” lead validation sessions for which they have identified appropriate “business owners” participation. “Business owners” are selected by the Steering Committee as representatives of major organizational entities in the United Nations Secretariat. However, “function owners” and “business owners” were not represented in the updated governance framework of the ERP project published in A/63/487, even though they actively participated in the decision-making process of the ERP implementation, and ultimately represented the end-users of the ERP system.

(b) Advisory groups and Management Committee

32. Terms of reference should direct the project team with clear and unambiguous reporting lines defining stakeholder’s roles and responsibilities. The updated framework of the ERP project, as published in A/63/487, indicated that the advisory groups report to both the ERP team and the ERP Steering Committee. However, the terms of reference of the ERP project did not include any reference to advisory groups. Therefore, it was not possible to determine the membership, roles, functions and modus operandi of the advisory groups.

33. The terms of reference defined for the ERP project (ToRs of the “Umoja Stakeholders”) did not mention the Management Committee, although this entity appears in the updated governance framework of the ERP project published in A/63/487. In addition, the list of Steering Committee members posted on the official ERP web site⁷ was not up to date, indicating members that were no longer part of the Committee.

(c) Representation of UN Habitat, OCHA, UNODC, UNEP, and OHCHR

34. The project governance structure should ensure adequate representation of the key stakeholders involved in the project, providing for cross functional/programmatic cooperation. OIOS found that the programmatic activities of the Secretariat delivered through offices such as the UN Habitat, Office for the Coordination of Humanitarian Affairs (OCHA), United Nations Office on Drugs and Crime (UNODC), United Nations Environment Programme (UNEP), and Office of the High Commissioner for Human Rights (OHCHR) were not adequately represented within the governance framework, and had limited opportunities to influence the decision-making process even though their business processes may differ to that of the New York Headquarters. Given the global nature of the ERP initiative, as stated in the project mission statement, the project is exposed to risks related to inadequate buy-in and support of all relevant stakeholders.

⁷ <http://www.unmoja.org/display/ERP/Governance>

Recommendations 2 to 4

(2) The ERP Steering Committee should ensure that the governance framework of the ERP project and the terms of reference of the Committee itself are updated to reflect all relevant stakeholders, with their roles, as identified in the updated governance framework of the project published in A/63/487. The revised framework should define for each stakeholder its goal, scope, primary function, rules of procedure, membership and relationship to other bodies.

(3) The ERP Steering Committee should ensure that the interests of all project stakeholders are adequately represented within the project's governance framework.

(4) The ERP team should ensure that all information contained in the governance framework and the terms of reference of the ERP project are up to date.

35. *The Department of Management accepted recommendation 2 and stated that Umoja will submit a revised governance framework to the 65th Session of the General Assembly to replace the earlier version. This information will also be incorporated in the Project Charter. DM also clarified that while it is true that the governance structure approved by the GA referred to some members of the Steering Committee "Business Owners", Umoja's subsequent stakeholder analysis identified 84 "Business Owners" as defined in the OIOS comments. The terms of reference have been amended by the Steering Committee over time to reflect the current working practices, and the changes have been well documented. Umoja currently uses the terminology defined in the Terms of Reference (approved by the Steering Committee on 10 December 2009 in Decision No. 2009/54) specifically and consistently in all its communications, and does not believe this is a source of confusion. While "process owners" had been called "Function Owners" at the time of the audit, this term was changed by Steering Committee decision, and is thus reflected in the Terms of Reference (approved by the Steering Committee on 10 December 2009 in Decision No. 2009/54). The stakeholder analysis has also identified 27 "Process Owners," defined as senior managers entrusted by Steering Committee members with primary decision-making authority for cross-functional and functional processes. Recommendation 2 remains open pending receipt of the revised governance framework that will be submitted to the 65th Session of the General Assembly, and the revised programme charter defining: (i) all relevant stakeholders of the projects; (ii) their roles, as identified in the updated governance framework; and (iii) their goals, scope, primary function, rules of procedure, membership and relationship to other bodies.*

36. *The Department of Management accepted recommendation 3 and stated that given that Umoja's scope encompasses all entities of the United Nations Secretariat (as identified in ST/SGB/1997/5), the project governance structure*

should ensure the balance of representation and productivity. The Steering Committee would lose effectiveness as a decision-making body if it became too large through broad scale representation. DM also noted that the ability of a small and efficient decision-making body at the head of such a project is generally considered a key success factor. Additionally, DM indicated that risks related to inadequate buy-in and support of all relevant stakeholders are recognized, but have been mitigated through extensive involvement of representatives of stakeholder groups from across the Organization via extensive outreach to the organizations in question, and the creation of communities of practice that extend across organizational boundaries. UN Habitat, OCHA, UNODC, United Nations Environment Programme (UNEP), and OHCHR, some of whose processes may differ to those of the New York Headquarters, are not members of the Steering Committee but had ample opportunities to influence the design process through contributing to the requirements-gathering exercise and designating subject matter experts to participate in workshops during initial and detailed design. The Steering Committee has agreed that these stakeholder groups will also participate in an advisory capacity in the review and recommendations on changes in structures, roles, practices and processes to make certain that their interests are duly considered. The three geographic areas where the named organizations are mostly located are Geneva, Nairobi and Vienna. Vienna has Steering Committee representation, and the member is aware of his responsibility to all entities based in Vienna, not only the one for which he works. Geneva has a dedicated Umoja representative (the only OAH with such a resource), and Geneva's specific needs are efficiently channeled through this person. Nairobi has named its own focal point, who is very active on Umoja's behalf, and in fact Nairobi was the first location to volunteer formally to be the Umoja Pilot site – not the reaction of a marginalized community. The above notwithstanding, an appropriate solution in a project as large as this, which needs to have a small and effective decision-making body at the top, would be to introduce a third, mid-layer of governance, at the working level. (ILO did this in 2004 with success, as one example). While the Steering Committee is a high-level group that takes strategic decisions, the next tier of governance would work at an operational level/business requirements level/solution implementation level. It could be that a third tier would be appropriate in the coming phases, particularly during the transition planning that will take place before implementation. Further, DM stated that based on the request of the General Assembly in A/RES/64/243, a representative of the Department of General Assembly and Conference Management (DGACM) was named to the Steering Committee in February 2010. A number of additional representatives from key organizational and geographic entities not currently on the Committee may be identified by the members for inclusion at a separate (third) level. Going forward, the steering committee has agreed that process owners, business owners and subject matter experts should remain engaged through the remaining phases of the project to ensure that user departments, offices, specialized programmes and missions are involved. These stakeholder groups will participate in an advisory capacity in the review and recommendations on changes in structures, roles, practices and processes to make certain that their interests are duly considered.

37. OIOS took note of the detailed information provided by DM. Recommendation 3 remains open pending receipt of the formal evidence documenting: (i) the decision taken by the Steering Committee to include OCHA, UNODC, UNEP and OHCHR in an advisory capacity; and (ii) the inclusion in the Steering Committee of a representative from DGACM.

38. *The Department of Management accepted recommendation 4 and stated that whenever it is necessary to update the governance framework, the revisions will be reflected on the Umoja website, in the Project Charter, and in any other reference materials in a timely manner.* Recommendation 4 remains open pending receipt of the revised governance framework that will be submitted to the 65th Session of the General Assembly, and the revised programme charter.

(d) Role of the CITO and OICT

39. Increased collaboration and coordination between subject matter experts representing business processes and technology support enables: (a) a coherent and integrated development of the system; (b) the development of a comprehensive source of information of the “as-is” situation; and (c) a timely identification of needs. Such a scenario would ensure that all key elements of the processing environment, in terms of knowledge of the legacy systems, technological skills, and business requirements are managed in a harmonious manner.

40. The audit found that relevant expertise and knowledge of the data processed with legacy systems (i.e., IMIS), possessed by OICT, had not been adequately capitalized upon in the ERP project. OICT could add value to the project even in its initial phases, providing critical information about data sources and structures, interfaces, supporting infrastructure, and the overall ICT strategic direction of the Secretariat. In this regard, it is relevant to note that ACABQ, in its report A/63/487 of 16 October 2008, stated that the “ERP project team and budget will be placed within the Office of Information and Communications Technology”. In the same report, the ACABQ emphasized that:

“The role of ICT should not be minimized. ICT analysts and other staff are key players who must remain deeply involved in all phases of the project, including the business mapping, business process review and specification of customization requirements to ensure that a viable, technically sound solution is put into place. In the Committee’s view, the ERP project should be treated as a joint venture, driven by business process demands and delivered through complex information technology systems requiring a high level of technical expertise”. . . “As indicated in the updated governance framework of the ERP project published in A/63/487, the ERP Project Director reports to the Chair of the Steering Committee on business processes (the USG for Management in her capacity as the Chair of the Committee) and to the Chief Information Technology Officer on day-to-day project management and technology issues”.

41. OIOS noted, however, that day-to-day direction on the project was provided by the USG/DM. Although the ERP Project Director and the CITO met on a weekly basis, these meetings were focused on standard ICT issues that did not seem to include technological aspects relevant to the project. The current role played by OICT in the project is limited, even though it will ultimately be responsible for the infrastructure, maintenance and support of the system. Furthermore, a technical team made up of ICT professionals can work together to either implement ideas or reflect back quickly when designed solutions cannot be implemented, or may not be realized due to impact on cost or implementation deadlines.

42. As indicated in the updated governance framework of the ERP project published in A/63/487, the ERP project contains a “Technology Management Team”. The role of this team was to develop standards, norms and the architecture of the new system. This role in itself is not in line with General Assembly resolution 63/262, which specified that a central authority be responsible for defining the Organization’s standards. Given the nature of its function, it would have been logical to expect strong collaboration between this team and OICT. However, in one of the most important phase of this process — related to the definition of the infrastructure requirements (which was made in collaboration with Hewlett Packard, a preferred partner of the consulting firm PricewaterhouseCoopers) - OICT was not initially involved in the process, and received the requirements only post-facto, for comments and feedback.

Recommendation 5

(5) The ERP Steering Committee should ensure that the roles of the CITO and OICT vis-à-vis the ERP project are clearly defined to prevent any confusion in the governance of the project. Furthermore, the relationship between the ERP “Technology Team” and OICT should be defined with clear responsibilities assigned for the definition of technology standards, infrastructure design, data governance models and solutions, and definition of requirements.

43. *The Department of Management accepted recommendation 5 and stated that the roles of the CITO and OICT are well defined and project governance is functioning adequately. The Umoja Project Management Office and Technical teams are working actively with their counterparts in OICT and other IT entities to address the numerous shared concerns and responsibilities in accordance with ACABQ report A/63/487. Umoja relies on OICT’s strategic role in coordinating the implementation of enterprise systems. In the case that some standards have not been formalized, Umoja will contribute to this exercise during its implementation. Furthermore, Umoja will provide input regarding data governance and SAP-leading practices. Recommendation 5 remains open pending receipt of evidence of the relationship between ERP “technology team” and OICT in setting up standards, infrastructure design, data governance models, and definition of requirements.*

C. Project management

Deliverables

44. The ERP team adopted a project management methodology called “Transform Global ASAP”, a PricewaterhouseCoopers’s enhanced version of the standard implementation methodology for the application SAP. As defined in the draft ERP programme charter, this methodology is divided into five phases: (a) prepare and assess; (b) design; (c) construct and realize; (d) implement and deploy; and (e) operate continuous improvement. In this regard, key project management principles require that basic deliverables are defined in terms of:

- (a) Expectations about what the project will produce;
- (b) Tangibles that can be tracked, reviewed, improved and accepted;
- (c) Goals for team members, in terms of work outputs that must be produced; and
- (d) Estimates, actual, reports, performance, risks and quality to enable monitoring and measurement.

45. With regard to the project management methodology, OICT noted that the Prince-2 (Project in Control Environment) methodology, defined as a standard of the United Nations Secretariat, was not being used by the ERP team. In OICT’s opinion, the ERP team should use Organization-wide standard such as the Prince-2 methodology.

46. The ERP programme charter was incomplete in its definition of the project management methodology since it did not contain the list of specific deliverables for each phase.

Recommendation 6

(6) The ERP team should document in the programme charter the list of deliverables for each phase of the ERP project in the programme charter.

47. *The Department of Management partially accepted recommendation 6, stating that it accepts the importance of documenting the deliverables at a detailed level. However, Umoja holds the view that this information should be captured in the appropriate vehicle, namely the Statement of Work (SOW). SOWs are part of the overall project document set and copying large sections of information into the Project charter would be redundant. High-level deliverables for each phase of the project are included in the Project Charter as guidance. However, the detailed deliverables (which can number in the hundreds depending on the phase) are worked out as the project progresses in line with changing factors such as project scope, budget and other resource availability, which are defined in the SOWs. OIOS is of the opinion that the programme charter should be the main vehicle to monitor the progress made in the*

implementation of the ERP project. In this regard, the programme charter should indicate the main deliverables of each phase, and also reference the detailed sub-deliverables documented in the SOWs. Recommendation 6 remains open pending receipt of the updated programme charter and SOWs detailing the complete list of deliverables defined for each phase of the ERP project.

Project dependencies and risks

48. The project timeline indicated that the design phase of the ERP project would have been completed by January 2010. The completion of the design phase was dependent on the ability of the ERP team to validate the designed business process in a testing environment of the new system, using a “sandbox” (a testing environment that isolates untested code and outright experimentations from the production environment, in the context of software development, including revision controls). Given the delays in the formalization of the contract with the software vendor, the ERP team has been unable to obtain a “sandbox” for testing purpose. Consequently, until the designed processes are tested, the RFP for the next phase of the project (build phase) cannot be developed with the necessary level of detail and accuracy. This condition exposes the ERP project to a significant risk of delaying the overall implementation of the new system.

Recommendation 7

(7) The ERP Steering Committee should, as a matter of priority, ensure the finalization of the contractual phase of the software acquisition and the completion of the pending design phase of the project.

49. *The Department of Management accepted recommendation 7 and stated that there is no delay in the design phase. The design phase is composed of three sub-phases: (1) initial design, (2) detailed design and (3) final design. The detailed design phase of the ERP project would be completed in January 2010, and the final design would follow from there. The detailed design phase was completed on 22 January 2010, and the final design was expected to conclude by the end of 2010. This schedule is still in accordance with the timetable presented in A/64/380 and, to date, no delay is envisaged, sandbox availability notwithstanding. Finalization of the contractual phase of the software acquisition is one of the Steering Committee’s and Umoja’s highest priorities. Negotiations are being led by the Procurement Division (PD), with Office of Legal Affairs (OLA) and Umoja’s participation and input. OIOS took note of comments provided by DM and clarifies that the delay in the design phase has been acknowledged by the Secretary-General in A/64/380, where he stated that “This timetable represents a delay of one year as compared to the original plan (see A/62/510/Rev.1, para. 40, fig. II), that is explained by the delayed start and the slower execution of the preparatory and design phases”. In view of the signing of the contract on 30 June 2010 for the acquisition of the core software, recommendation 7 has been closed.*

D. Reporting

Supporting documentation for the Steering Committee

50. The ERP Steering Committee represents one of the well designed control mechanisms of the project. To ensure a consistent, efficient and effective functioning of the Committee, it is important that its members are provided with timely and adequate documentation in support of their meetings, with sufficient time for review and analysis of each item included in the agenda for discussion. Furthermore, the supporting documentation should always include a project status report with detailed information indicating the progress made in achieving the planned milestones. In order to have a clear vision of the project progress, the stakeholders should be able to reference the complete timeline of the project, and monitor critical paths, dependencies and delays.

51. OIOS found that the Steering Committee met on a regular basis, at least once a month. The members usually received the supporting documentation one day prior to their meetings, giving them limited time to prepare and analyze data and information. The structure of a typical list of agenda items contained general updates on the status of the project, specific topics for discussion and a validation session on the minutes of the previous meeting. The project summary showed key accomplishments, high level risks and issues, as well as an overall status of the different functional streams (finance, HR, supply, and central support services) with key milestones. However, the project summary did not make reference to any detailed timeline to enable the Committee to perform an effective monitoring of the progress made during the implementation of the project and identify the causes of potential delays.

Recommendation 8

(8) The ERP team should develop detailed reports to monitor the progress made during the implementation of each project activity. These reports should provide a time line with key milestones to be presented to the Steering Committee, and to be updated during the life of the entire project. Detailed data about progress status (start date, days allocated, days spent, estimated time to complete, initial due date, etc.) should be provided for each key deliverable to assess the proper implementation of the project plan.

52. *The Department of Management did not accept recommendation 8, stating that one page summary status reports/executive dashboards are produced by the Project Management Office of PricewaterhouseCoopers on a weekly basis during the regular work phases under their obligations outlined in the SOW. The most recent status report is provided to the Steering Committee at each of its meetings. The status reports to which OIOS refers are meant to provide a high-level overview at the Executive level. They intentionally provide the most salient information (including any areas of delay) to enable the Steering Committee to monitor project progress, and discuss or resolve issues (if necessary to be escalated to its level). When entering a new phase, the Steering Committee is*

briefed on the associated timeline. It should however be noted that due to the small size of the Umoja team relative to the workload, it is impracticable to provide detailed written updates with the level of detail suggested here on a regular basis. However, it is recognized that the Steering Committee should have access to this kind of information and, therefore, tools have been put in place to track progress online, which generate automatic reports. Steering Committee Members will have access to the detailed and consolidated information at all times, as soon as the final design phase begins. These tools are being implemented using the Atlassian Jira issue and project management application, and will complement the traditional Clarity reporting. OIOS took note of the additional information provided by DM, and clarifies that: (i) although requested during the audit, OIOS did not receive the one page summary status reports/executive dashboards stated to be produced on a weekly basis by the Project Management Office of PricewaterhouseCoopers; and ii) as indicated in paragraph 78 of this report, the ERP team indicated that the tool Atlassian Jira contained unreliable data, and consequently OIOS was not given access to its content. Therefore, OIOS reiterates recommendation 8 and requests a copy of the one page summary status reports/executive dashboards produced on a weekly basis by the Project Management Office of PricewaterhouseCoopers, and the other reports generated through the use of software tools dedicated to this function.

E. Change management strategy

53. A change management strategy should outline the approach of the Organization for dealing with the changes, expected and unexpected, as a consequence of project implementation. The objective of the strategy is to devise mechanisms for maximizing the benefits of the project and lowering the potential risks associated with the changes.

54. OIOS noted that the ERP team did not develop a change management strategy early in the life of the project to provide the necessary information to all stakeholders on change and impact, and to ensure user acceptance and support. Only in December 2009 was a change management strategy finalized and staffing resources assigned specifically to this function.

F. Communication strategy

55. A communication strategy should define tactical methods to ensure the buy-in of all relevant stakeholders in the success of the project. Information about the ERP initiative should be disseminated across all duty stations following both top-down and bottom-up communication channels.

56. OIOS noted that the ERP team took a positive step in documenting a training plan and communication strategy, complete with anticipated challenges of the project and how to respond to them. To further improve on this established process, the strategy should mention the approach that will be adopted by the ERP team to further clarify the scope of the project. In this regard, the ERP team should convey a strong message emphasizing that the project is not a solution “forced on everyone else”, but a shared initiative involving all duty stations

where all participants' inputs are taken into consideration and used to improve processes.

Recommendation 9

(9) The ERP team should continue to develop and implement initiatives to communicate with all relevant stakeholders, using appropriate information and communication techniques and tools. Key elements of the ERP project such as mission, vision, goals, timeline, in-scope and out-of-scope elements, etc., should be explained in terms that are meaningful to the different recipients.

57. *The Department of Management accepted recommendation 9, stating that this is an ongoing action and that some initiatives to develop and implement communications with stakeholders were completed in 2009 as follows: (i) launch of www.unumoj.org as the broadest based outreach; (ii) series of i-Seek articles targeting staff-at-large; (iii) launch of www.unumoj.net to communicate with specific groups including Steering Committee members, subject matter experts, workshop participants, technical and functional communities of practice; (iv) active participation, including presentations and discussion forums, in regular UN global meetings, e.g., CFO, CAO, CPO, OICT/global IT community; (v) similar presentations to external groups such as UNITAR, the UN Foundation, and Member States sub-groups (e.g., Africa group, EU, Geneva Group, etc.); (vi) since 2008, approximately quarterly publication of Umoja newsletters and online updates; and (vii) extensive global workshops to engage a broad variety of staff: "as-is" situation and requirements collecting, business case development and metrics collection, design ("to-be" processes) workshops, process validation activities, policy consideration workshops, etc. Recommendation 9 remains open pending receipt of an updated communication strategy complete with the initiatives that will be implemented in 2010-2011.*

G. Budgeting

Project funding and budget overruns

58. The General Assembly at its 63rd session limited funding (\$20 million) for the ERP project. Funding limitations prevented the ERP team from using the support of consultants during the development of the infrastructure landscape strategy and change control procedures. OIOS was informed that depending on the availability of funds, these tasks will restart in 2010. Lack of certainty in the funding of the project exposes the project to the risks of delays, and the inability to take key decisions about its future development.

59. Professional best practices require that the key elements of a project are monitored at each stage and that costs are tracked against budget. Where costs appear to be out-of-line with the budget, adequate reporting mechanisms should ensure that prompt information is submitted to the Steering Committee and the Office of the Controller for further analysis and decision.

60. The ERP team developed a well defined preliminary estimation of the project costs, until its planned end in 2012. In addition, the team also prepared reports related to the status of funds using “burn rate” tables and dashboards. A review of some of these reports highlighted that early in 2009 the expenditures were within the budgetary allocation. However, at the time of the audit (November-December 2009) there was an over expenditure of \$1.8 million. The ERP team indicated that it had sought the approval of the Controller to defer payments to consultants in 2010, thereby showing an under expenditure in 2009. However, no documentary evidence was provided to OIOS indicating the approval of the Controller to defer these payments.

Recommendation 10

(10) The ERP team should implement detailed and timely budgetary controls to ensure that all project expenditures are within budgetary allocations and that deviations are identified and reported timely to the Steering Committee and the Office of the Controller for decision.

61. *The Department of Management accepted recommendation 10 and stated that Umoja already has detailed and timely budgetary controls and is able to ensure that project expenditures are within budgetary allocations. The only possible improvement to this situation would be to ensure more formal documentation.* Recommendation 10 remains open pending receipt of documentation of the budgetary controls put in place by the ERP Team to prevent further instances of over expenditures.

H. Business requirements

Reference to best practices embedded in commercial software solutions

62. The procurement phase of the software solution for the ERP project was officially launched on 22 February 2008 with the publication of the request for proposal. A first list of requirements was made for the selection of the software based on functional needs and not on process requirements. In December 2008, the Secretariat identified the company SAP as the preferred software supplier for the ERP system.

63. Following the identification of the software solution, the ERP team conducted a world tour around different UN locations to document an exhaustive list of the “as-is” processes. A complete list was finalized between the end of April and May 2009. OIOS noted the positive practice adopted by the team in this phase, where business processes analysis were completed on the basis of modeling standards, and using a common language.

64. The subsequent project phases dedicated to the high and detailed level designs⁸ of the “to-be” processes was planned to be completed by the end of January 2010. In this regard, the ERP team indicated that business processes were designed in a “software agnostic manner” (i.e., without referencing any particular software application) and through a series of workshops. However, this appeared to be in contradiction with the programme charter which indicated that the project is being developed using an SAP-related methodology (i.e., Global ASAP). Furthermore, the General Assembly required that the new ERP system should be developed with minimum customization to benefit from the best practices embedded in the commercial software solutions. Therefore, there is a risk that developing processes in a “software agnostic manner” will not allow the team to fully address the requirement of the General Assembly.

Recommendation 11

(11) The ERP Steering Committee should ensure that the results of the design phases are validated to confirm that they comply with the General Assembly’s requirement for minimum customization of the new system.

65. *The Department of Management accepted recommendation 11 and stated that this will be part of the agenda for a future meeting of the Steering Committee. Nevertheless, it should be noted that the initial and detailed design activities were carried out based on an analysis of existing business processes, pain points and opportunities for improvement. While the systems integration partner did bring SAP-specific knowledge to the design process (following the ASAP methodology), the designs were completed to represent optimal re-engineered UN process. The systems integrator advised as to whether these new UN processes would be supported by SAP. In this respect, an informal fit-gap was conducted on an on going basis and yet the effort was indeed “software agnostic”. This approach significantly reduces the possibility of finding later that a process is not supported by SAP. An in-depth fit-gap analysis between the detailed design and the SAP software will be conducted in the final design phase in order to verify that no customization is required. DM further indicated that the Steering Committee has already been informed that no customizations have been identified to date and that as the detailed design completes, none are expected. Where deviations between UN requirements and the software exist, these will be handled through the creation of extensions, which, unlike customizations, are immune to costly and time-consuming activities when software upgrades are performed. Indeed to date, only one major extension as been identified to accommodate the Member States’ requirement to maintain two asynchronous budgetary cycles (for peacekeeping and regular budget). Recommendation 11 remains open pending receipt of documentation confirming that the results of the validation phases comply with the General Assembly’s requirement for minimum customization of the new system.*

⁸ The term “design” is generally used to indicate an activity or process for specifying “how” the solution is to be built. It differs from analysis, which focuses on “what” the organization requires the solution to do or achieve.

I. Interfaces

Integration requirements with existing or new enterprise systems

66. To avoid the risk of building systems in isolation from the specific context in which they will be operating, it is good practice to develop ERP solutions in alignment with the information systems enterprise architecture of the organization.

67. The ERP team did not document or define integration requirements with existing or new enterprise systems. For example, the Talent Management System - another enterprise system being developed in the Office of Human Resources Management (OHRM) - is at an advanced stage of development. However, OIOS did not find evidence that the integration between the Talent Management and ERP systems had been adequately addressed and presented to the ERP Steering Committee. Integration with other planned enterprise systems such as the Enterprise Content Management (ECM) and the Customer Relationship Management (CRM) had also not been defined. Without an interface model that addresses all data exchanges between systems, the project is exposed to the risks of being developed within subsets of semi-integrated applications with multiple interface solutions.

68. With regard to the legacy systems (i.e., IMIS), OIOS noted that while members of the team involved in IMIS maintenance were invited by the ERP team to be part of the technical design phase, they were unable to attend because of limited resources available. The ERP team indicated that the non-availability of IMIS staff was temporary and IMIS staff has since been consulted. In addition, two members of the IMIS technical support group were recently recruited by and joined the ERP team on a full-time basis.

Recommendation 12

(12) The ERP team should develop and implement a coordinated model that is aligned with the information systems enterprise architecture of the Secretariat, documenting how the new system will interface with both existing and newly planned applications.

69. *The Department of Management indicated that it would accept a revised version of recommendation 12, and that the recommended actions have been already started and therefore should be continued. In this regard, DM stated that currently the Secretariat as a whole does not enjoy a single, well-defined enterprise architecture, per se. Indeed the information systems across the Secretariat number in their thousands and it is one of the primary objectives of the newly formed OICT to consolidate these applications and to set standards and guidelines for the creation of a future harmonized architecture. Clearly, Umoja plays into this effort and by its own existence will define the central and largest piece of that architecture by replacing, in the first deployment wave, an estimated 500 – 600 existing administrative systems. Thus, Umoja is in the unique position not of having to conform to an existing architecture, but to play a*

major part in its creation. Umoja has worked closely with OICT and DFS/CITS to ensure that the systems inventory includes not just systems impacted by Umoja but all existing applications. Approximately 1,800 systems were documented through this exhaustive exercise. In addition, the Umoja team met with both functional and technical resources supporting/developing Inspira, ECM, EIDMS, Galileo, Sun, Progen, Profi, Mercury and DGACM systems (to name a few) to discuss integration/interfaces with Umoja. In this respect, and in light of the ongoing nature of the recommendation, it is proposed that the recommendation includes the phrase "...continue to...". OIOS took note of DM's comments but is unable to accept the proposed change to recommendation 12 since the audit did not receive any documented evidence of the interfaces between the ERP system and all other applications. OIOS reiterates this recommendation, which will remain open pending receipt of a documented model of the interfaces between the ERP system and both existing and newly planned applications.

J. Quality assurance

Quality assurance reviews

70. A quality assurance review process should provide regular confirmation that the project is being managed in accordance with the criteria defined in its programme charter, measured against specific pre-defined indicators, and that is also aligned with professional best practices.

71. The ERP programme charter did not contain any details on quality criteria, quality assurance reviews, and who would be responsible for ensuring that recommended quality improvements were implemented, monitored and followed up.

72. The ERP team generated a quality assurance review schedule that included a plan for four internal quality reviews, to be conducted in collaboration with the external firm PricewaterhouseCoopers. In addition, the consulting firm Deloitte completed in September 2009 a quality management review of the initial design phase.

73. OIOS was also informed that additional internal quality review sessions were held regularly by each of the functional teams. These meetings, however, were not documented, and there was no record of the analysis of quality indicators and decisions made.

74. Inadequate definition of quality criteria and a limited quality assurance review process prevent the ERP Steering Committee from obtaining an independent validation about the existence and effectiveness of controls and procedures to ensure that the project is being managed in accordance with the pre-defined criteria for quality requirements.

Recommendations 13 and 14

(13) The ERP team should revise its programme charter to define criteria and responsibilities for quality reviews, and

ensure that the results of these reviews are periodically reported to the Steering Committee.

(14) The ERP team should formally track the quality reviews for future use and to improve the management of the project. Furthermore, the results of the quality reviews should be shared among team members so that they understand the current situation and actively participate in the review process.

75. *The Department of Management accepted recommendation 13 and stated that four quality reviews were scheduled by PricewaterhouseCoopers as part of their methodology. The Deloitte review was scheduled in correspondence with the completion of the initial design phase. DM also indicated that subsequent to the first quality review conducted by Deloitte, their services were scaled back due to budgetary constraints in 2009, as well as the limited value derived from this review. It was preferred to rely on PricewaterhouseCoopers's quality assurance as well as Umoja's self-monitoring, as this was deemed more valuable and economical (better value for money). As reflected above, the quality review process is on track. For example, Umoja has adhered to the Systems Integrator's procedure for internal quality review, based on their Transform Methodology, and has used other methods as described. Quality review results have been reported to the Steering Committee by the Project Director. Nevertheless, it is recognized that the entire quality review process could be better documented in the Charter and this will be rectified. Recommendation 13 remains open pending receipt of the revised programme charter, defining the criteria, responsibilities and reporting mechanisms for quality reviews.*

76. *The Department of Management accepted recommendation 14 and stated that Umoja operates in a mode that promotes continuous improvement whereby course corrections are made as soon as issues are identified and solutions agreed. The reason for and nature of any required change is then communicated promptly to team members so they can adjust their work accordingly. In addition, results are systematically shared among team leaders who then disseminate among their teams at their own discretion. Recommendation 14 remains open pending receipt of documentation showing the mechanisms implemented to ensure tracking and sharing of the results of quality reviews.*

K. Risk management

77. Best practices require that a risk management process should be an integral part of the project during its entire life cycle, allowing for the identification of both risks and opportunities. This process should be supported by the development of a risk register to document and monitor progress, and inform stakeholders on the types and nature of threats, their likelihood and impact, remediation actions, and ownership.

78. The ERP team utilized a database system, called Jira, for managing project risks and maintaining a risk register. The team indicated that the risk-related data processed with this system was still unreliable because it was based

on unverified and unorganized information. For this reason, OIOS was not granted access to the risk register held in the database (Jira), and obtained only an extract of the data contained in the system in the form of a table presenting the following information: (a) risk identifier; (b) summary; (c) description; (d) impact; (e) status; (f) mitigation strategy; and (g) assignee. From this table, however, OIOS determined that it was not possible to assess how risks were managed by the ERP team, and whether reliable risk-related information could have been provided by the team to the ERP Steering Committee. There was no creation date, due date, risk category, priority, probability, severity or any other relevant indicator of progress with regard to the actions taken by the ERP team to mitigate the risks identified.

79. OIOS noted that project risks were not an agenda item of the weekly meetings of the Project Management Office (PMO), even though the weekly status reports contained a risk section, and a high-level presentation of risks had been made during the periodic Steering Committee meetings. OIOS was unable to obtain any evidence demonstrating that the ERP team had a systematic and reliable system to identify, manage, monitor and report on the risks of the project.

80. Furthermore, OIOS reviewed the well documented report generated by Deloitte as a result of their independent quality assurance review. This report detailed 36 key risks, recommendations and comments from the ERP team for the following areas:

- (a) Project leadership;
- (b) Solution and deliverables;
- (c) Estimate, planning and timeline;
- (d) Project staffing;
- (e) Monitor and control; and
- (f) Approach.

81. Deloitte determined that the ERP project was exposed to:

- (a) Two critical risks pertaining to the lack of a “total cost of ownership”⁹ and “service delivery model”. Deloitte explained that these topics are usually included in the preparation of business cases of the same size and complexity; and
- (b) Thirty-four risks rated at the medium level and two at high level. The latter pertained to the need for the ERP team “to obtain the next level of SAP application knowledge to be able to support the upcoming phases effectively; and to ensure an adequate ratio between UN staff and consultants working as team members”.

⁹ The total cost (direct and indirect) of deploying a product over the products lifecycle.

82. The response of the ERP team indicated that in several cases some actions were already in progress to address the risks identified by Deloitte. However, OIOS noted that in two cases the response provided by the ERP team to the risks identified were limited to the comment “resolved” with no other information explaining what actions had been taken to resolve those issues.

Recommendation 15

(15) The ERP team should take account of the risks identified by Deloitte and implement a comprehensive risk management process for identifying, monitoring, reporting, mitigating and escalating threats to appropriate stakeholders. All inherent and residual risks should be identified, referenced and monitored in a risk register.

83. *The Department of Management indicated that it would accept a revised version of recommendation 15, indicating that the recommended actions have been already started and therefore should be “continued”. DM further indicated that at the outset, it should be clarified that the Umoja risk register is called “Rapport” not “Jira”. Rapport is a systematic and reliable risk management tool that allows the identification, management, monitoring and reporting of all project risks, and is available to all team members online. As it is reflected in the meeting minutes provided to OIOS, risks and issues are systematically addressed at each project status and planning meeting based on the issues and risks logs, which are updated weekly by the PMO, reflecting latest developments. Some risks/issues are also discussed at internal Umoja PMO meetings if they cannot be adequately addressed at the project status meeting. Those risks (and/or issues) that require escalation to the Steering Committee and/or sponsor are communicated promptly by the Umoja Director, as appropriate. The most urgent issues/risks are communicated directly to the USG/DM as the Project Sponsor or the Project Director’s First Reporting Officer (ASG OICT) in his regular weekly meetings with each party, or in impromptu meetings depending on the severity of the risk. OIOS took note of DM’s comments but is unable to accept the proposed change to recommendation 15 since the audit did not identify any adequate documentation showing that a comprehensive and systematic risk management process has been implemented to identify, monitor, report, mitigate and escalate threats. In addition, OIOS clarifies that the system “Rapport” was never brought to the attention of the audit team and that no access was granted to the auditors to such online system. Therefore, recommendation 15 remains open pending receipt of documentation demonstrating that a comprehensive and systematic risk management process has been implemented for identifying, monitoring, reporting, mitigating and escalating threats to appropriate stakeholders.*

V. ACKNOWLEDGEMENT

84. We wish to express our appreciation to the Management and staff of DM and OICT for the assistance and cooperation extended to the auditors during this assignment.

STATUS OF AUDIT RECOMMENDATIONS

Recom. no.	Recommendation	Risk category	Risk rating	C/O ¹	Actions needed to close recommendation	Implementation date ²
1	The ERP team should update and complete the programme charter, with particular regard to: (a) project approach; (b) strategy on deployment; (c) change management; and (d) integration approach.	Governance	High	O	Submit copy of a formally approved, updated, and completed programme charter of the ERP project.	31 December 2010
2	The ERP Steering Committee should ensure that the governance framework of the ERP project and the terms of reference of the Committee itself are updated to reflect all relevant stakeholders, with their roles, as identified in the updated governance framework of the project published in A/63/487. The revised framework should define for each stakeholder its goal, scope, primary function, rules of procedure, membership and relationship to other bodies.	Governance	Medium	O	Submit copy of the revised governance framework that will be submitted to the 65th Session of the General Assembly, and the revised programme charter defining: i) All relevant stakeholders of the projects; ii) Their roles, as identified in the updated governance framework; and iii) Their goals, scope, primary function, rules of procedure, membership, and relationship to other bodies.	31 December 2010
3	The ERP Steering Committee should ensure that the interests of all project stakeholders are adequately represented within the project's governance framework.	Governance	High	O	Submit formal evidence documenting: i) The decision taken by the Steering Committee to include OCHA, UNODC, UNEP and OHCHR in an advisory capacity; and ii) The inclusion to the Steering Committee of a representative from DGACM. Recommendation 4 remains open pending receipt of the revised governance framework that will be submitted to the 65th Session of the General Assembly, and the revised programme charter.	Not provided

Recom. no.	Recommendation	Risk category	Risk rating	C/O ¹	Actions needed to close recommendation	Implementation date ²
4	The ERP team should ensure that all information contained in the governance framework and the terms of reference of the ERP project are up to date.	Information Resources	Medium	O	Submit copy of the revised governance framework that will be submitted to the 65th Session of the General Assembly, and the revised programme charter.	Not provided
5	The ERP Steering Committee should ensure that the roles of the CITO and OICT vis-à-vis the ERP project are clearly defined to prevent any confusion in the governance of the project. Furthermore, the relationship between the ERP “Technology Team” and OICT should be defined with clear responsibilities assigned for the definition of technology standards, infrastructure design, data governance models and solutions, and definition of requirements.	Governance	High	O	Submit evidence of the activities undertaken by the ERP “technology team” in collaboration with OICT in setting-up standards, infrastructure design, data governance models, and definition of requirements.	31 December 2010
6	The ERP team should document in the programme charter the list of deliverables for each phase of the ERP project in the programme charter.	Information Resources	High	O	Submit copy of the programme charter updated with the main deliverables of each phase, and the statements of works detailing the list of sub-deliverables.	Not provided
7	The ERP Steering Committee should, as a matter of priority, ensure the finalization of the contractual phase of the software acquisition and the completion of the pending design phase of the project.	Governance	High	C	Based on the contract signed on 30 June 2010, for the acquisition of the software, recommendation 7 has been closed.	Implemented
8	The ERP team should develop detailed reports to monitor the progress made during the implementation of each project activity. These reports should provide a time line with key milestones to be presented to the Steering Committee, and	Information Resources	Medium	O	Submit copy of the copy of the one page summary status reports/executive dashboards produced on a weekly basis by the by Project Management Office of PricewaterhouseCoopers, and any other report generated through the use of	Not provided

Recom. no.	Recommendation	Risk category	Risk rating	C/O ¹	Actions needed to close recommendation	Implementation date ²
	to be updated during the life of the entire project. Detailed data about progress status (start date, days allocated, days spent, estimated time to complete, initial due date, etc.) should be provided for each key deliverable to assess the proper implementation of the project plan.				software tools dedicated to this function	
9	The ERP team should continue to develop and implement initiatives to communicate with all relevant stakeholders, using appropriate information and communication techniques and tools. Key elements of the ERP project such as mission, vision, goals, timeline, in-scope and out-of- scope elements, etc., should be explained in terms that are meaningful to the different recipients.	Information Resources	Medium	O	Update and submit copy of the communication strategy with the initiatives that will be implemented in 2010-2011.	Not provided
10	The ERP team should implement detailed and timely budgetary controls to ensure that all project expenditures are within budgetary allocations and that deviations are identified and reported timely to the Steering Committee and the Office of the Controller for decision.	Financial Management	High	O	Submit documented evidence of the budgetary controls put in place by the ERP Team to prevent further instances of over expenditures.	Not provided
11	The ERP Steering Committee should ensure that the results of the design phases are validated to confirm that they comply with the General Assembly's requirement for minimum customization of the new system.	Information Resources	High	O	Submit documented evidence confirming that the results of the validation phases comply with the General Assembly's requirement for minimum customization in the new system.	30 March 2011
12	The ERP team should develop and implement a coordinated model that is aligned with the information systems	Information Resources	Medium	O	Submit a documented model of the interfaces between the ERP system and both existing and newly planned	Not provided

Recom. no.	Recommendation	Risk category	Risk rating	C/O ¹	Actions needed to close recommendation	Implementation date ²
	enterprise architecture of the Secretariat, documenting how the new system will interface with both existing and newly planned applications.				applications	
13	The ERP team should revise its programme charter to define criteria and responsibilities for quality reviews, and ensure that the results of these reviews are periodically reported to the Steering Committee.	Governance	Medium	O	Submit copy of the revised programme charter defining criteria, responsibilities and reporting mechanisms for quality reviews.	Not provided
14	The ERP team should formally track the quality reviews for future use and to improve the management of the project. Furthermore, the results of the quality reviews should be shared among team members so that they understand the current situation and actively participate in the review process.	Information Resources	Medium	O	Submit copy of the documentation showing the mechanisms implemented to ensure tracking and sharing of the results of quality reviews	Not provided
15	The ERP team should take account of the risks identified by Deloitte and implement a comprehensive risk management process for identifying, monitoring, reporting, mitigating and escalating threats to appropriate stakeholders. All inherent and residual risks should be identified, referenced and monitored in a risk register.	Governance	High	O	Submit documented evidence demonstrating that a comprehensive and systematic risk management process has been implemented for identifying, monitoring, reporting, mitigating and escalating threats to appropriate stakeholders	Not provided

1. C = closed, O = open

2. Date provided by DM in response to recommendations.