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Enterprise resource planning project

Report of the Advisory Committee on Administrative and Budgetary Questions

I. Introduction

1. The Advisory Committee on Administrative and Budgetary Questions has considered the fourth progress report of the Secretary-General on the enterprise resource planning project (A/67/360) submitted pursuant to General Assembly resolution 64/243, in which the Assembly requested the Secretary-General to continue to ensure that the Assembly is kept informed, on an annual basis, of the progress regarding the enterprise resource planning project (Umoja). The Committee also had before it the first annual progress report of the Board of Auditors on the implementation of the United Nations enterprise resource planning system (A/67/164).

2. During its consideration of the reports, the Advisory Committee met with the Under-Secretary-General for Management, the Umoja Project Director and other representatives of the Secretary-General, as well as with members of the Audit Operations Committee, who provided additional information and clarification.

3. A summary of the timeline, scope and cost estimates of Umoja is provided in annex IV to the report of the Secretary-General.

4. The Advisory Committee recalls that the project faced severe internal difficulties in 2011, when the concurrent departure of the Project Director and the resignation of the Chair of the Steering Committee in June 2011 left the project without leadership and with a weakened management at a time when the project was experiencing significant delays. To mitigate the effects of the delay and loss of leadership, the Secretary-General indicated in his third progress report (A/66/381), that the Umoja Steering Committee was being chaired by the Deputy Secretary-General on an ad interim basis, and that completion of the project was anticipated at



the end of 2015 instead of 2013, or two years later than originally planned. The Secretary-General also proposed a phased implementation approach, involving deployment of a first phase (Umoja Foundation) by December 2014 to cover the functionality required to support adoption of the International Public Sector Accounting Standards (IPSAS), and a second phase (Umoja Extension), which would be deployed by December 2015 and deliver the remaining functions, including human resources management and budget formulation.

5. In its resolution 66/246 the General Assembly expressed its serious concern about the governance crisis in the Umoja project and took action on the governance structure of the project. Specifically, the Assembly reaffirmed its decision to designate the Under-Secretary-General for Management as the Chair of the Steering Committee for the project and decided that the Umoja Project Director would report solely and directly to the Under-Secretary-General for Management and that the Umoja project team and administration of the project budget would be placed within the Department of Management. The Assembly also requested the Advisory Committee to request the Board of Auditors to conduct a comprehensive audit of the implementation of the Umoja project and to report annually to the General Assembly, starting at the main part of its sixty-seventh session. The Committee conveyed the Assembly's request to the Board in a letter dated 17 January 2012.

6. The fourth progress report of the Secretary-General provides information on the actions taken in response to General Assembly resolution 66/246 and the recommendations made by the Board of Auditors, the activities undertaken during the reporting period and proposals for the future direction of the project. The Advisory Committee notes that the key actions taken include: introduction of measures to strengthen governance and management arrangements; elaboration of proposals for a revised deployment strategy and schedule, which will entail additional resource requirements over and above the approved budget of \$315.8 million and extend the implementation period to 2018; strengthening of the risk management practices for the project; adjustment of the structure of the project team to better support the build and deploy phases of the project; and intensification of collaboration with the IPSAS and change implementation teams.

7. The Secretary-General states that, as a result of the measures introduced, the governance and management arrangements of the project are now fully in compliance with the decisions taken by the General Assembly in its resolution 66/246. The Advisory Committee notes that the changes are also intended to respond to the comments and recommendations of the Board of Auditors (A/67/164), in particular with regard to the designation of a project owner¹ and clarification of the roles and responsibilities of the members of the Steering Committee and the process owners. The Committee further notes that the present Under-Secretary-General for Management took up his duties in May 2012 and assumed his role as Chair of the Steering Committee and project owner. The Advisory Committee recalls that, in its resolution 66/263, the General Assembly

¹ The project owner (or senior responsible owner) is responsible for ensuring that a project meets its objectives and delivers the projected benefits. The project owner is responsible for the overall business change and should be recognized throughout the Organization as the key leadership figure in driving it forward. This individual must be able to lead the Steering Committee and have the necessary authority to make key decisions. The designation of a project owner is a recommended best practice in project management (see A/67/164, para. 97).

decided that the position of Umoja Project Director would be at the level of Assistant Secretary-General, with effect from 1 July 2012. The Committee notes that after remaining vacant for a 9-month period, the position of Project Director was filled on a temporary basis in February 2012, and subsequently on a permanent basis in August 2012. **The Advisory Committee welcomes the actions taken to establish strong project leadership and to strengthen the governance structure of the project.**

8. The report of the Board of Auditors on the implementation of the enterprise resource planning system provides an independent and critical assessment of the governance and management of the project, its implementation plan and its schedule and makes a series of recommendations for improvement. The Secretary-General has accepted all the recommendations of the Board and indicates that the recommendations have been taken into account as part of the measures introduced to strengthen governance and in developing the revised deployment strategy and schedule. As indicated in paragraph 22 below, the situation has evolved considerably since the issuance of the Board's report. The Board intends to provide an assessment of the project in the context of its next annual audit. The Advisory Committee's comments and observations on the Board's report are contained in section II below.

9. The Advisory Committee notes that, after a period of severe internal difficulties, the project now has new leadership, governance and management arrangements, and that a revised deployment strategy and plan are being presented to the General Assembly for decision. The Committee had extensive exchanges with the Under-Secretary-General for Management, the Project Director and the members of the Audit Operations Committee. It sought to determine the robustness of the modified governance and project management arrangements and revised implementation plan, whether the requisite controls for effective monitoring of project activities and costs were in place, and whether the persistent weaknesses that plagued the project could be overcome to allow the project to be set on a sustainable path towards successful completion.

10. **While noting the progress achieved to date, in particular in addressing project governance and leadership issues, the Advisory Committee stresses that strong leadership will be essential to restore confidence in the ability of the Secretariat to successfully manage and deliver such a complex, organization-wide business transformation. In addition, much remains to be done to ensure stricter management of the implementation timetable and costs of the project, as well as to instil across the Secretariat a sense of ownership and proper accountability for the success of the project. The Committee therefore encourages the Secretary-General to pursue maximum efforts in this regard and to report thereon in his next progress report.**

II. First annual progress report of the Board of Auditors on the implementation of the United Nations enterprise resource planning system

11. The report of the Board of Auditors on the implementation of the United Nations enterprise resource planning system (A/67/164), which contains the Board's findings and recommendations following its first annual review, is the result of an assessment of the project undertaken between April 2011 and April 2012. As

indicated in paragraphs 20 to 22 below, a number of actions are being taken to implement the recommendations made by the Board. The Board indicates that it assessed the Secretariat's approach to designing, initiating and managing the project against the five key elements and criteria set out in table 1 of its report. The salient findings and recommendations for each of those elements are summarized in the paragraphs below, for ease of reference.

A. Findings and recommendations of the Board

1. Desired outcomes

12. The Board emphasized that in any major business transformation, senior management needed to be clear about its priorities and desired outcomes and communicate coherently and effectively what was expected of staff. It noted that, while the third annual progress report of the Secretary-General (A/66/381) stated that the project would deliver annual recurring benefits between \$139 million and \$220 million, at the time of the audit there were no agreed plans on the changes the Organization needed to make in order to realize such benefits, nor clear responsibility or accountability for developing those plans and realizing benefits. The Board also identified gaps in the business transformation objectives, in particular the absence of a redesign of the service delivery model, which, in its view should have been one of the project's priorities. The Board made a series of recommendations related to the identification of benefits, the development of plans for the realization of those benefits, and the attribution of responsibilities for the development of plans, as well as the realization of benefits.

2. Business transformation

13. The Board acknowledged that the Umoja project was a very challenging and complex business transformation, not only because it spanned most of the Organization's administrative and support functions (finance, supply chain and procurement, human resources, central support services), but also because it encompassed many offices/departments/entities with different business models and a great deal of variability in their respective working practices. The Board pointed out that, to realize the intended benefits of the enterprise resource planning system, which involved adoption of 321 re-engineered and standardized business processes, the Organization needed to introduce new ways of working and make changes to staff roles and responsibilities.

14. The Board was of the view that the implementation strategy was formulated without undertaking a proper assessment of the existing business structure, or taking into account the interdependencies with other business transformation projects, such as the implementation of IPSAS. It highlighted the need for an integrated strategy and a holistic approach to managing and sequencing the delivery of concurrent business transformations. Furthermore, the Board considered that the Secretariat was not approaching the implementation of the enterprise resource planning system as a business transformation project. It noted in particular, a lack of plans for managing change and introducing more efficient working practices across the Organization, as well as the lack of estimates of the scale and cost of the retraining programme that would be required to redirect staff time into more value-added activities. The Board also found little clarity as regards ownership and

accountability for business transformation. It made a recommendation that the Secretariat clearly set out how it would manage business transformation and embed more efficient and standardized working practices across the Organization.

3. Project management

15. The Board considered that the Secretariat was not managing project implementation or costs effectively. With regard to project implementation, it noted that since the project began in 2008, the project team had been using a high-level timetable only, and did not have a detailed implementation plan with clear information on project milestones, deliverables, tasks, activities and responsibilities. As a result, delays had accumulated unnoticed or unchallenged by the Steering Committee, or had been accepted in the belief that they could be absorbed within the overall project timetable (see A/67/164, para. 48).

16. With regard to costs, the Board found that the Secretariat was unable to manage project resources effectively because of a lack of sufficiently detailed monitoring and analysis of project costs against clear budgets and deliverables, owing in part to the lack of management information and reporting functionality available in the Integrated Management Information System (IMIS). For example, the Secretariat was unable to demonstrate whether the project was under or over budget because it could not determine what should have been achieved in return for the \$123.2 million spent as at 30 April 2012. The Board was of the view that the project timetable and costs were insufficiently robust and transparent to enable effective and timely decision-making for mitigation of risks by the General Assembly, the Management Committee and the Steering Committee.

17. The Board indicated that, even as the project timetable for completion slipped by three years and the implementation strategy evolved from “pilot first” to a phased approach (Umoja Foundation and Extension), the project budget was maintained at \$315.8 million by the Steering Committee, despite the fact that the estimated project cost was higher. The Board considered that the reduction of forecast resource requirements for key project activities to absorb cost overruns, without an underlying change to the scope or planned activities, was unlikely to result in actual cost reduction and might put the achievement of the aims of the project at risk. The Board also noted that the Secretariat did not identify significant associated costs related to the implementation of the enterprise resource planning system, such as the costs of data cleansing, user testing and data archiving, which were expected to be absorbed by the various offices, departments and other entities implementing Umoja (budget owners). The Board emphasized that, until there was clarity concerning the allocation of associated costs and when they were expected to be incurred, budget owners could not begin to make preparations.

4. Project assurance

18. The Board indicated that assurance consisted of an independent assessment to determine whether the elements required to deliver a project successfully were in place and operating effectively, and whether the cost projections and project timetable took into account identified risks and were sufficiently robust. It noted that such assurance could be provided by internal or external sources, and could be planned for at the outset of a project or triggered by an event during the execution of a project. The Board noted that Umoja had not been subject to systematic

independent assurance and considered that some of the significant issues faced by the project could have been avoided through assurance concerning the project timetable, costs, expenditures and risks. The Board was concerned that the plans covering the scope, budget and timetable for the project set out in the third annual progress report were highly optimistic and lacked rigour. It stated that it was unable to provide any assurance that the project could be delivered on time, within cost and to specification. The Board recommended that senior management put appropriate controls in place to clearly demonstrate to the General Assembly that assurance can be placed on the reported timetable and on the actual and anticipated costs for the project.

5. Governance

19. In its report, the Board noted that the governance arrangements for the project lacked clear lines of accountability; that there was a lack of transparency in decision-making; that the roles and responsibilities of the members of the Steering Committee had not been clearly defined, in particular as regards responsibility for business transformation; and that the project did not have a senior responsible owner with the requisite authority to drive the project forward across the departments and entities in which Umoja is to be implemented. It concluded that the governance arrangements for the project were not conducive to transparent and effective decision-making. The Board recommended that the Secretariat: (a) appoint a single senior responsible owner with the requisite authority across the departments and entities in which the enterprise resource planning system is to be implemented to drive the project forward; (b) clearly communicate the identity and authority of the senior responsible owner to all staff; and (c) finalize the planned revisions to the project's governance structure at the earliest opportunity, including assigning clear accountabilities for the completion of all major tasks.

B. Status of implementation of the recommendations of the Board

20. As indicated in the summary to the Board's report, all the recommendations issued by the Board were accepted. The actions taken in response to the Board's recommendations are noted in the main body and in annex II of its report, and reflect the project status as at March 2012. Annex V to the fourth progress report of the Secretary-General on the implementation of Umoja (A/67/360) provides an update as at 30 June 2012 on the actions taken in response to the recommendations of the Board. Details on specific actions undertaken are also provided under the relevant sections of the report of the Secretary-General. Upon request, the Advisory Committee was provided with a further update on the implementation status of the recommendations and actions taken as at September 2012, along with target dates for their implementation (see annex I below). The Committee notes that of the 13 recommendations listed in the annex, 1 has been implemented, 8 are expected to be implemented before the end of 2012, 2 by July 2013 and 1 by August 2013, and 1 recommendation concerning reporting requirements will be implemented on an annual basis in the 2013, 2014 and 2015 progress reports for the project.

21. From the summary of the Board's report, the Advisory Committee notes that the Board is reassured by management's open acknowledgment of the problems and deficiencies identified, and its commitment to a range of actions, many of which are already implemented or under way. The Board further indicates that, in principle,

such actions, if implemented quickly and effectively, should help to resolve many of the issues raised. During its exchange with the Audit Operations Committee, the Advisory Committee was informed that the Board had commenced its second annual audit and was following up closely on progress made and the impact of the actions taken to implement its recommendations. On the basis of its initial observations, the Board considered that tangible steps had been taken in the right direction, but it could not yet take a position as to the effectiveness of the actions taken thus far.

22. The Advisory Committee notes from the information provided in the fourth progress report of the Secretary-General and its own exchange with the Under-Secretary-General for Management and the Project Director, that a number of remedial actions are being taken and that the situation has evolved considerably since the issuance of the Board's report (see also paras. 8 and 11 above).

C. Comments and observations on the findings and recommendations of the Board

23. The Advisory Committee is satisfied with the scope and depth of the Board's audit and commends the Board for the quality of its report. The report provides the General Assembly with an independent assessment of the implementation of the Umoja project and clarifies the difficulties encountered by the project, including the weaknesses in the governance and management of the project and the key issues of concern in managing major business transformation projects. Given the chronic difficulties experienced by the project, the Committee considers that it is critical for the Secretary-General to provide the General Assembly with assurance concerning the implementation of the project and the robustness of the project timetable and costs. The Committee is of the view that the Board's report will facilitate the General Assembly's consideration of progress in the implementation of the project and contribute to better informed decision-making on the future direction of the project.

24. Notwithstanding the initial positive observations of the Board as it follows up on the implementation of its earlier recommendations, the Advisory Committee is deeply disturbed by the findings of the Board, which reveal the extent of the failings in the governance and management of the project since its inception. The Committee is very concerned that it has only now been revealed that a project of such scale, complexity, scope and budget has been managed for a period of over four years without a detailed implementation plan or adequate project management controls. The Board's report points not only to serious deficiencies in project management capability and methodology, but also to a need for zero tolerance for lack of managerial accountability and responsibility. The Committee addresses some specific issues raised in the Board's report in the context of its comments on the fourth progress report of the Secretary-General in section III of the present report.

25. The Advisory Committee urges the Secretary-General to ensure rapid implementation of all the recommendations of the Board. It expects the Secretary-General to continue to cooperate and to work collaboratively with the Board in a fully transparent manner to address the serious issues identified by the Board, in order to set this critical project on track for successful

completion. The Committee looks forward to receiving the Board's next annual progress report, which should also provide its assessment of the status of implementation of the recommendations contained in its first annual progress report.

III. Fourth progress report of the Secretary-General on the enterprise resource planning project

A. Governance

26. As indicated in paragraph 5 above, the General Assembly took a number of decisions on the Umoja governance structure in its resolution 66/246. The Board of Auditors also comments extensively on the governance arrangements of the Umoja project and has made recommendations in this regard (see A/67/164, paras. 93-100; see also para. 19 above).

27. The key changes made to the Umoja governance structure during the reporting period are outlined in paragraphs 4 to 14 of the fourth progress report (A/67/360). The Secretary-General indicates that in April 2012 the Umoja Steering Committee took a number of decisions to further strengthen Umoja governance, including: (a) designation of the Under-Secretary-General for Management as Chair of the Steering Committee and project owner, with ultimate accountability for the project, as specified in paragraph 84 of General Assembly resolution 66/246; (b) clarification of the reporting lines of the Umoja Project Director, who is to report solely and directly to the Under-Secretary-General for Management; (c) refinement of the concept of process owners in order to better define accountabilities and accelerate decision-making, in particular as regards change management and the realization of benefits; (d) revision of the terms of reference for the Change Advisory Board, with a view to enhancing its flexibility and responsiveness; and (e) inclusion of three performance measures to specifically support Umoja in the 2012 senior managers' compacts. In addition, the project budget continues to be administered within the Department of Management.

28. The Secretary-General states that as a result of these measures, the Umoja governance structure is now in full compliance with the stipulations set out in General Assembly resolution 66/246. It is indicated that the measures also respond to the recommendation made by the Board of Auditors on the governance of the project (see annex I below).

29. Annex I to the fourth progress report consists of a chart of the revised Umoja governance model. The Advisory Committee was informed that the key elements of Umoja's revised governance structure included: (a) the Management Committee, which is responsible for considering internal reform and management-related issues requiring strategic direction from the Secretary-General; it receives quarterly updates on Umoja and has a particular focus on monitoring the interdependencies of the Umoja and IPSAS implementation strategies; (b) the Umoja Steering Committee, chaired by the Under-Secretary-General for Management, which is responsible for providing leadership and strategic guidance to the Umoja initiative, and meets on a monthly basis; (c) the Change Advisory Board, which assists in addressing and monitoring any proposed changes impacting the project's scope, schedule, deliverables and costs, and provides advice and recommendations on

actions to be taken to the Umoja Steering Committee for approval; and (d) the five process owners, who function as the principal change agents for the cross-functional processes they lead and have ultimate authority across the different United Nations Secretariat entities for those processes.

30. The Advisory Committee notes that the process owners include five selected members of the Umoja Steering Committee: the Assistant Secretaries-General for Human Resources Management; Programme Planning, Budget and Accounts; Central Support Services; and General Assembly and Conference Management; and the Director of the Logistics Support Division of the Department of Field Support. Upon enquiry, the Committee was provided with a summary of the number of business processes, by process owner (see table 1).

Table 1
Number of Umoja processes, by process owner

<i>Process owner</i>	<i>Number of processes</i>
Assistant Secretary-General for Human Resources Management	42
Assistant Secretary-General for Programme Planning, Budget and Accounts	148
Assistant Secretary-General for Central Support Services	80
Assistant Secretary-General for General Assembly and Conference Management	15
Director of the Logistics Support Division, Department of Field Support	36
Total	321

31. Upon enquiry, the Advisory Committee was provided with an extract of the senior managers' compacts for 2012 relating to Umoja implementation, and that of the Under-Secretary-General for Management, which are attached as annex II to the present report. The Committee notes that the senior managers' compacts include one objective, two specific expected accomplishments and three performance measures concerning Umoja, including specific performance measures in relation to data cleansing activities required for the deployment of the enterprise resource planning system. The Committee was informed that further performance measures could be included in the 2013 compacts, as required.

32. The Advisory Committee was also informed about the efforts made to promote commitment to the project throughout the Secretariat, which included: (a) issuance in July 2012 of a memorandum from the Chef de Cabinet to all heads of departments and offices advising them that the Secretary-General had made the implementation of the enterprise resource planning system a high priority and was requesting their strong collaboration for the successful implementation of Umoja; (b) discussion on Umoja at the September 2012 retreat of the Secretary-General with his senior management team, during which the Secretary-General stressed that successful implementation of Umoja was a collective effort and required the proactive support and engagement of senior management; and (c) conduct of ongoing sessions with heads of departments to clarify their respective roles further, as well as the responsibilities of the process owners.

33. The Advisory Committee also sought additional information on the steps being taken to empower the project owner, the process owners and the Project Director, their terms of reference and the actions taken to promote commitment to the project

throughout the Secretariat. With regard to process owners, the Committee was informed that bilateral meetings with each process owner were held on a continuing basis to ensure that they had a complete understanding of their responsibilities and were given the necessary support and tools to effectively perform their roles. The Secretary-General also signalled his intention to take the necessary steps to strengthen process owners' authority to enforce the new business model, and to ensure acceptance of the common Umoja future "to be" model in their respective areas.

34. With regard to the empowerment of the Umoja Project Director, the Advisory Committee was informed that he attended Management Committee meetings and was expected to become a full member of that Committee, and furthermore, that he participated in the Chef de Cabinet's weekly change coordination meetings. In addition, the Special Adviser to the Secretary-General on Change Implementation had been appointed a member of the Umoja Steering Committee with a view to strengthening the strategic relationship between the change implementation team and the Umoja project.

35. The Advisory Committee welcomes the measures taken thus far to attribute responsibility and accountability for the project and to clarify the roles of the project owner, the Project Director and the process owners. The Committee considers that these key actors must be granted the requisite authority to accomplish their mandate and to enforce organizational decisions across the offices, departments and other entities in which the enterprise resource planning system is to be implemented. It notes that primary responsibility for the execution of the project has been delegated by the Secretary-General to the project owner (the Under-Secretary-General for Management) (see para. 10 above).

36. The Advisory Committee reiterates that close cooperation and coordination at all levels of the Secretariat will be required in order to meet organizational goals and ensure a successful outcome, as will the commitment of senior managers to implement at the operational level any central decisions emanating from the project. The Committee recommends that the Secretary-General be requested to closely monitor the adequacy and effectiveness of the project's governance, decision-making and risk management structures, as well as of the level of cooperation and coordination throughout the Secretariat, and to take corrective action promptly, as required.

B. Project management

37. The Board of Auditors is critical of the management of the timetable, costs and implementation of the project. It considers that the Secretariat was unable to manage project resources effectively owing to the lack of sufficiently detailed monitoring and analysis of project costs against clear budgets and deliverables (see A/67/164, paras. 50-52; see also paras. 15-17 above). It recommends that the administration: (a) establish a detailed project plan linking the budget to milestones and deliverables; (b) clearly set out who owns each part of the budget and what they are responsible for delivering; and (c) establish arrangements for capturing information on expenditure and progress to enable it to more effectively monitor progress, maintain closer control over costs and improve decision-making about future expenditure.

38. In its response (see A/67/360, annex V), the Secretariat indicates that a project management solution called NOVA is to be introduced by 31 December 2012. With regard to the expenditure of \$123.2 million as at 30 April 2012, the Secretariat responded that it did not have systems in place that could link the budget to milestones and deliverables, but that it could attest as to the activities that had been implemented with the funds and the corresponding achievements. The Secretariat also pointed out that linking the budget to milestones and deliverables was not a requirement under the United Nations system accounting standards. Nevertheless, recognizing the need for an effective tool for managing a project of the size of Umoja, it had decided to introduce NOVA by the end of 2012.

39. The Advisory Committee urges the Secretary-General to ensure the expeditious introduction of robust project management tools and methods with the necessary mechanisms for maintaining strict control over costs, for transparent and accurate reporting on costs incurred against project deliverables, and for measuring progress achieved against the project plan and actual use of resources against budgeted requirements. The Secretary-General should also systematically monitor progress in terms of cost and time and report thereon and on the measures taken to strengthen assurance mechanisms.

40. In its previous reports, the Advisory Committee has repeatedly stressed the importance of establishing a detailed project plan, including project milestones, deliverables and costs, recording baseline information on key parameters at the time of project approval and documenting changes as the project evolves (see A/64/7/Add.9, para. 72). Among the key parameters to be documented are: goals and objectives of the project, its geographical and functional scope, key milestones and deliverables, expected benefits, risks, assumptions, constraints, out-of-scope functions, staffing, cost estimates and funding, as well as the project governance and management structure. The Committee continues to believe that the General Assembly should be provided with detailed information on the project plan, along with baseline information that can be used to assess progress as the project evolves. It reiterates its earlier request and recommends that such a plan and baseline information be provided in the next progress report. The Committee further requests that every effort be made to provide the information in clear language that is easily understood by those who are not specialists in the field of information technology (see para. 24 above).

C. Project design

41. In paragraphs 26 and 27 of his report, the Secretary-General indicates that after coming on board in April 2012, the systems integrator for the build phase immediately undertook, at the request of the Umoja project team, a thorough assessment of the work of the previous three years against established enterprise resource planning implementation methodologies, with a view to determining whether the Umoja design phase deliverables were complete. In parallel, a team of consultants from the enterprise resource planning software vendor performed another assessment of the design deliverables. The Advisory Committee notes that, during this validation process, it was determined that a significant number of issues required closure in order to complete all design activities. The Secretary-General indicates that at the beginning of June 2012, a plan called “get to green”, developed

with the support of the software vendor and the systems integrator, was established for completing the design of the incomplete components. The Committee further notes from paragraph 29 of the report that, in order to minimize delays, the Umoja Foundation build phase is progressing in parallel with the completion of the design phase.

42. The Advisory Committee requested additional information on the costs of the “get to green” plan and the risks of starting the build phase while the design was incomplete. It was informed that the plan would be completed by 31 October 2012 and that the total costs of the plan amounted to \$5.6 million, comprising \$4.5 million for contractual services, \$1.1 million for staff costs and \$13,750 for individual consultants. The Secretariat affirmed that the start of the build phase before completion of the design did not present any risks, but that any delays in completing the “get to green” recovery plan could have an impact on the project timetable. The Committee was informed that every effort was being made to mitigate all potential risks to prevent that eventuality. As it was completing its consideration of the fourth progress report in November 2012, the Advisory Committee was informed that the “get to green” plan had been completed at the end of October 2012, with 206 functional specification documents and 21 key decisions having being finalized and approved. The majority of design issues had been closed, and any residual design activities were being incorporated into the Umoja project, thereby allowing Umoja build activities to continue according to schedule.

43. Upon request, the Advisory Committee was provided with a summary of the conclusions of the assessments (see para. 41 above). In brief, both studies concluded that by April 2012 only 40 per cent of the design phase had been completed according to expectations. The “get to green” recovery plan, which was expected to be completed in October 2012, would complete the remaining 60 per cent of the Umoja Foundation and Umoja Extension 1 design. The Committee was also informed that the delay in completing the design phase was one of the factors leading up to the formulation of the revised deployment strategy and timetable (see para. 49 below). As indicated above, the “get to green” plan was completed by the end of October 2012.

44. The Advisory Committee requests the Board of Auditors to review the execution of the design phase, to follow up on the outcome of the independent reviews and the “get to green” recovery plan, and to report on this matter in its next report. The Committee further requests the Board to provide assurances that the services acquired for the Umoja project were procured in the most economical manner possible.

D. Revised deployment strategy and timetable

45. An overview of the revised deployment strategy and timetable is provided in paragraphs 18 to 24 of the fourth progress report. Details on each phase are provided in the subsequent paragraphs (26-41).

46. The Secretary-General is proposing that the implementation schedule set out in the third progress report be revised as follows:

(a) The functional scope of Umoja Foundation would remain unchanged, with 122 processes in the areas of finance, assets, procurement, property, equipment

and inventory management to support the automation required for the adoption of IPSAS; it would be designed and built by mid-2013, piloted at the United Nations Interim Force in Lebanon and the Office of the United Nations Special Coordinator for Lebanon, and then be deployed in four clusters by the end of 2015, instead of in five clusters by December 2014, as envisaged in the previous implementation plan;

(b) Umoja Extension would be divided into two stages, with Extension 1 comprising 66 processes for human resources and travel management and Extension 2 the remaining 133 processes, including those for budget formulation, supply chain management, grant management and programme management;

(c) Umoja Extension 1 would be designed, built and deployed in three clusters by December 2015;

(d) The design of Umoja Extension 2 would be completed by December 2015;

(e) From 1 January 2016, after the deployment of Umoja Foundation and Umoja Extension 1 and the design of Extension 2, the support and maintenance of the Umoja solution would become part of the day-to-day operations of the United Nations. A compact "Umoja centre of excellence" would be established to replace the project team and would be responsible for managing, supporting and maintaining the enterprise resource planning software and implementing ongoing business improvements;

(f) The centre of excellence would be responsible for building and deploying Umoja Extension 2, to be released in 2017 and 2018.

47. Upon enquiry, the Advisory Committee was provided with a list of the offices, departments and other entities included in each cluster and the functions encompassed under the Umoja Foundation, Extension 1 and Extension 2 phases (see annexes III and IV). The Committee was also provided with information on the major risks at each phase of project implementation (see annex V). Upon enquiry, the Committee was further informed that the revised Umoja implementation timeline incorporated a risk contingency buffer of approximately six weeks for the roll-out of the peacekeeping pilot for Umoja Foundation and eight weeks for the roll-out of the human resources and travel functionality pilot for Extension 1. It was indicated to the Committee that the time buffer was intended to provide some flexibility to address problems that might arise during the data conversion and testing phases, without jeopardizing the planned implementation date.

48. During its consideration of the Secretary-General's proposals, the Advisory Committee was informed that a comprehensive review of the project had been conducted in 2012, which included representatives of the Umoja project team, a consulting firm and oversight bodies, and that the revised deployment strategy and timetable had been elaborated after an open, transparent and fundamental reassessment of the project scope and status, cost estimates, timetable and intended benefits. The Committee was further informed that the reassessment process had been guided by three main considerations, namely: (a) that the success of Umoja was indispensable in establishing a new way of doing business; (b) that the financial constraints of Member States should be kept in mind; and (c) that the revised strategy should seek to ensure maximum benefit from the investment made by Member States.

49. The Advisory Committee was also informed that the key factors leading up to the formulation of the revised deployment strategy included: (a) the delay in the completion of the design (see paras. 41-43 above); (b) the need to prioritize the functions required to support IPSAS; and (c) the need to ensure optimum organizational readiness of each office, department and other entity. It was indicated to the Committee that, in view of the fact that the full design (321 processes) had not been completed by April 2012, the options considered were either to introduce a significant delay in the entire project until the design was completed or to stagger the implementation in phases, focusing on completing the design for those processes with the highest priority. The capacity of the Organization to absorb change was also taken into account. It was considered that the phased implementation would facilitate organizational readiness and mitigate risks arising from the simultaneous implementation and harmonization of large numbers of business processes across all the offices, departments and other entities. It was determined that the functions to be included in each phase would be as follows: (a) Umoja Foundation and Umoja Extension 1 would include the “transactional” and IPSAS-related processes; and (b) Umoja Extension 2 would include the planning and programming processes that require more complex business definitions and re-engineering, greater harmonization and integration and a higher level of user preparedness.

50. The Advisory Committee had an extensive exchange with the Umoja project leadership on the revised deployment strategy and timetable with a view to better understanding the underlying assumptions of this revised approach and its possible ramifications, in particular the proposal to divide Umoja Extension into two phases and to replace the project team with the Umoja centre of excellence in 2016, before the system has been fully deployed. The Committee also sought to better understand the Secretariat’s intention in presenting the revised deployment strategy and to clarify whether, under the revised approach, the deployment of Umoja Extension 2 would, de facto, be considered an optional rather than an integral part of the project approved by the General Assembly in its resolution 63/262.

51. In this connection, the Advisory Committee recalls that, on the basis of the proposals put forward by the Secretary-General in his report on enterprise systems for the United Nations Secretariat worldwide (A/62/510/Rev.1), the General Assembly decided, by its resolution 63/262, to implement a global enterprise resource planning solution. The main functions to be covered by the enterprise resource planning system, as outlined in the report of the Secretary-General, had included: (a) programme planning, budgeting, contributions and performance; (b) human resources management and administration; (c) payroll, including management of benefits and contribution to pension, medical and insurance schemes; (d) supply chain management, including procurement; (e) assets and facilities management; (f) general accounting, travel and other administrative flows; (g) reporting to management and stakeholders; and (h) functions specific to peacekeeping operations in the areas of logistics, transportation, fuel and rations systems and other requirements that are not common in other organizations of the United Nations system.

52. In presenting his arguments in support of the acquisition of an enterprise resource planning system (see A/62/510/Rev.1 and A/60/846/Add.1), the Secretary-General stated that the existing fragmented, outdated and duplicative systems could not accommodate the functional and technical capabilities required for the implementation of the management reforms launched in response to the World

Summit Outcome (General Assembly resolutions 60/1 and 60/283), such as the adoption of IPSAS, results-based budgeting and management, supply chain management, enhanced internal controls, improved reporting and mechanisms to manage staff mobility. The absence of an integrated information system diminished the level of transparency and control of administrative processes and hampered the ability of the United Nations to make informed policy decisions and to deliver results effectively and efficiently. For example, the existing supply chain management capability was provided by a number of stand-alone systems that did not communicate with each other, including, ProcurePlus, Mercury and Galileo. An integrated supply chain management solution across the Organization, including peacekeeping, was very much needed for the effective and efficient management of assets, as well as to provide robust internal controls.

53. The Advisory Committee strongly believes that it is in the best interest of the Organization that the full scope of the Umoja project be delivered, as approved by the General Assembly in its resolution 63/262 (see also A/62/510/Rev.1 and para. 51 above). As indicated in paragraph 49 above, Umoja Foundation and Extension 1 involve mainly transactional and IPSAS-related functions, which are currently largely covered by IMIS, Galileo and some other stand-alone systems. The Committee points out that Umoja Extension 2 comprises some of the more strategic functions, including planning and programming, supply chain management and budget formulation functions, and that the poor coverage of such functions under existing systems was one of the main factors leading to the decision to shift to an enterprise resource planning system. The Committee cautions against any approach that would essentially achieve only a costly replacement of IMIS and perpetuate the weaknesses of the current outmoded and stand-alone information and communications technology systems. The Committee therefore stresses that the full implementation of the project is paramount so as to avoid such a risk and to protect the investment already made by Member States in this initiative, as well as to realize all of the benefits of the project.

54. Upon enquiry as to the intention in presenting the revised deployment strategy, it was confirmed to the Advisory Committee that: (a) the Secretary-General was committed to completing the design of the 133 processes included in Umoja Extension 2 by the end of 2015 and to building and deploying such functionalities into the annual releases to be delivered in early 2017 and early 2018; (b) the processes in Umoja Foundation, Extension 1 and Extension 2 were integral parts of enterprise resource planning business transformation and essential for the realization of the full scope of benefits; and (c) it was in the best interest of the Organization to fully implement the project as approved by the General Assembly and that it would not be possible to achieve full benefits unless Umoja Extension 2 were fully implemented.

55. The Advisory Committee questions the rationale for the proposed timing of the replacement of the project team with a “centre of excellence”, as part of the day-to-day operations of the United Nations, before the project has been fully implemented. As indicated above, the Umoja Extension 2 phase encompasses the more complex processes and those that are more challenging to implement in terms of change management, harmonization and business transformation. The Committee believes that the authority and leadership of the project’s governance and management structures is necessary to deliver

such a complex business transformation and is concerned that the dismantling of the project team prematurely presents risks that Umoja Extension 2 may not be implemented effectively. The Committee is therefore of the view that the project team should be maintained until the completion of Extension 2, without precluding, however, the need to make adjustments to the size and composition of the team and to provide most of the required expertise in-house.

56. In view of the concerns expressed, the Advisory Committee recommends that the Secretary-General be requested to further analyse and present options for the optimum size and composition of the project team required to implement Umoja Extension 2 and to support the enterprise resource planning system after deployment of Umoja Foundation and Extension 1 and to report thereon in his next progress report. The Committee further recommends that the Board of Auditors be requested to follow up on this matter and to provide its assessment of the options considered by the Secretariat.

57. Given the difficulties experienced in hiring staff with the requisite knowledge of the selected enterprise resource planning software and the high consultancy rates that prevail in the private sector (see A/67/360, paras. 56 (a), 108 (b)), the Advisory Committee has consistently stressed the need to strengthen internal capacity and skills in enterprise resource planning systems. In view of the fact that the average life cycle of enterprise resource planning systems ranges from 15 to 20 years, the Committee considers that the Organization should invest in developing the capacity of its own staff to implement, support and maintain Umoja autonomously to the extent possible. It notes that the project director is taking action to increase the number of staff on the project team with knowledge in the selected software and the associated implementation methodology (A/67/360, para. 87). **The Committee reiterates its earlier recommendations that the Secretary-General continue to develop in-house expertise on the enterprise resource planning system and ensure the transfer of knowledge from consultants to programme and project staff** (see A/62/7/Add.31, A/64/7/Add.9, A/65/576, A/66/7/Add.1 and para. 82 below).

58. The Advisory Committee notes that this is the third time in four years that the Secretary-General is proposing a revised implementation strategy and timetable for the enterprise resource planning project, entailing delays and cost escalation. It recalls that the timetable for the delivery of the full system slipped from December 2012 (A/62/510/Rev.1) to December 2013 (A/64/380) to December 2015 (A/66/381) and to 2018 in the current proposal. Similarly, the estimated cost of the project escalated from the \$285.6 million initially proposed to \$315.8 million and now to some \$348.2 million for the first two phases of the system only. **In view of the frequent revisions made to the project implementation strategy, timetable and costs, the Committee urges the Secretary-General to ensure that a realistic and workable plan is in place that can be followed through to successful completion. The Committee expects the Secretary-General and the staff entrusted with the implementation of the project to take all steps necessary to ensure that the project does not suffer further delays and that project resources are utilized efficiently and effectively. The Committee further recommends that the Secretary-General be requested to seek all options for accelerating the delivery of the project, including Umoja Extension 2, at a lower cost.**

59. In this connection, the Advisory Committee recalls that, in paragraph 83 of its resolution 66/246, the General Assembly requested the Secretary-General to ensure full accountability for the delays, the lack of responsiveness of management to the needs of the Umoja project and other factors that had contributed to delays in its implementation and the projected budget overrun, and to include that information in his fourth annual progress report. **The Committee notes that the Secretary-General has not responded to that request, and urges him to provide the information requested by the Assembly in his next progress report.**

E. Realization of benefits

60. Information on the realization of benefits is provided in paragraphs 48 to 50 of the report of the Secretary-General. The Secretary-General indicates that the qualitative benefits expected from Umoja include increased operational effectiveness and timeliness, a common single data source for reporting, improved accountability, the adoption of IPSAS, enhanced transparency, greater client satisfaction and better internal control across the broad range of financial, procurement and staffing processes. The original potential quantitative benefits for the full scope of Umoja had been projected at \$130 million to \$220 million per annum as a result of refined business processes, improved quality and availability of information, reduced manual effort, reduced reworking as a result of manual errors and streamlined process flows. The Secretary-General reiterates that the case for benefits is based on assumptions that will have to be validated over time because they are based on incomplete baseline data and owing to the significant difference in the existing (“as-is”) operating models across Secretariat entities.

61. The revised deployment strategy and timetable implies that the realization of benefits will also be postponed. The Secretary-General currently estimates quantitative benefits in the range of \$80 million to \$150 million in 2017, after the deployment and stabilization of Umoja Foundation and Extension 1. He further indicates that \$60 million to \$80 million in additional quantitative benefits could be realized after the deployment and stabilization of Extension 2. Upon enquiry, the Advisory Committee was provided with additional information on the specific benefits expected from each phase, including an update on the quantitative and qualitative benefits presented in the first progress report (see annexes VI and VII below). The Committee was informed that the benefit analysis was established in accordance with the methodology described in paragraph 18 of the first progress report on the implementation of Umoja (A/64/380).

62. The Board of Auditors noted, however, that at the time of its audit there were no agreed plans on what changes the Organization needed to make in order to realize such benefits and that simply building and rolling out a new information technology would not deliver the intended benefits. It emphasized that without clear and transparent plans for the changes needed to deliver the expected benefits, there was a risk that stakeholders would not support the proposed changes. The Board has made three recommendations relating to desired outcomes and the realization of benefits (see A/67/164, paras. 10-24). To address the Board’s recommendations, the actions taken thus far by the Secretary-General include: (a) assigning responsibility and accountability to process owners for the development and implementation of a benefit realization plan (see para. 27 above); and (b) including a benefit development plan as part of the “entity realization phase” (see para. 70 below).

63. The Advisory Committee concurs with the Board on the need to elaborate clear plans for the realization of benefits at the start of the implementation process and considers the actions taken thus far by the Secretary-General to assign responsibility for the development of such plans to be a step in the right direction. The Committee recommends that the Secretary-General be requested to provide details on the benefit realization plans of the cluster 1 entities in his next progress report in a reader-friendly and easily understandable format. The Secretary-General should also provide information on any benefits already realized.

64. The Advisory Committee points out that delays in the Umoja timetable do not only postpone the realization of benefits but also have an impact on the delivery of other initiatives, with financial and operational implications for the Organization. For example, to produce the first set of IPSAS-compliant financial statements by the target dates, it will be necessary to use a number of workaround solutions and to temporarily retain and adapt legacy systems (see A/67/564, paras. 14-16). The Committee was informed that the transition to IPSAS in 2014 would require the adaptation and enhancement and the maintenance of legacy systems such as IMIS, Nucleus and Mercury. The overall costs relating to the modification of those legacy systems for IPSAS would be met largely from within existing resources. However, a one-time cost of some \$400,000 will be required to adapt Galileo for IPSAS purposes. Similarly, the integration of Inspira and Umoja is expected to provide a comprehensive system for the management of the Organization's human resources, including functions to facilitate and support workforce planning, mobility, forecasting requirements, the monitoring of staff-related costs and the clean-up of human resources-related data. The delay in the implementation of Umoja will have an impact on the operational effectiveness of the Office of Human Resources Management at a time when it is actively engaged in implementing a number of major reforms, such as the harmonization of conditions of service and the streamlining of contractual services (see A/67/545).

F. Risk management

65. The Advisory Committee notes that the Secretary-General has grouped the most critical risks into three categories:

(a) A lack of a comprehensive and realistic planning, unclear expectations, a lack of readiness to move to the build phase, insufficient enterprise resource planning skills in the Umoja team and weak change controls;

(b) A lack of coordination with other Secretariat change initiatives, including the IPSAS transition plan, or with the change management plan initiatives;

(c) A lack of readiness on the part of the Organization to adopt the new solution, including insufficient management sponsorship, an unrealistic roll-out strategy and a poor understanding of the "to-be" model.

66. The Secretary-General indicates that an assessment was conducted and that risk mitigation strategies and a risk management support structure have been developed. In particular, the Umoja project management office reviews, monitors and reports on project risks and issues and escalates them, as required. A list of major risks identified for the Umoja Foundation, Extension 1 and Extension 2

phases is provided in annex V. The specific measures taken to address these risks are discussed in the relevant sections of the present report, including governance, project management and organizational readiness.

67. The Advisory Committee notes the progress made in the area of risk management and requests that the Board of Auditors provide, in the context of its next audit, an update on the effectiveness of the risk mitigation strategies and the risk management support structure of the Umoja project.

G. Organizational readiness

68. The Secretary-General discusses organizational readiness in paragraphs 59 to 75 of his report. He indicates that organizational readiness is the single biggest factor affecting the ability of the United Nations to implement Umoja on schedule and within the budget. In contrast to similar enterprise resource planning projects in other United Nations system organizations, and even in other Government and private sector organizations, the United Nations will be migrating not from a single model of operations, but rather from disparate entities with unique conditions and a different level of readiness to support and adopt Umoja. The Advisory Committee recalls that the Board of Auditors expressed similar concerns about the complexity and challenges of the United Nations environment (see A/67/164, paras. 25-42, and para. 13 above).

69. To address these complexities, the Secretary-General states that the Umoja team is working with stakeholders across all entities of the Secretariat to address their unique needs. Process owners have a critical role as the principal change agents in their respective functional areas and are responsible for championing acceptance and ensuring readiness for change. Furthermore, these efforts are being carried out in the context of broader administrative reform and must be harmonized with other major initiatives, such as IPSAS and the global field support strategy. Harmonization efforts include, for example, rationalizing the sequence of change activities; clarifying roles, responsibilities and accountability; identifying and mitigating the impact of potential conflicts among deployment plans; and identifying opportunities for closer collaboration and synergies among the various initiatives.

70. The Secretary-General further indicates that each entity preparing to implement the enterprise resource planning system will undertake an in-depth analysis of its specific business transformation. This process, entitled the “entity realization phase”, encompasses the following: identifying local migration requirements; testing the configuration of the system; carrying out end-user training; cleansing and migrating data; and estimating benefits and quantifying the savings that the entity is committed to achieving. The Advisory Committee notes that the Umoja project owner (the Under-Secretary-General for Management) will manage the overall process to establish, commit and realize the benefits of the project and that benefit realization plans are envisaged to be in place as the entity realization phase for the roll-out of every cluster is completed. The Committee also notes the Secretary-General’s intention to provide details on the entity realization phase to the General Assembly in subsequent progress reports.

71. The Advisory Committee was informed that the Umoja change management team and functional realization teams had developed approaches, strategies and plans to address the change impact associated with Umoja in the areas of harmonization of

business processes, training, and engagement and communications. The change management team had refined and was now executing a stakeholder engagement and communications plan for the build and deploy phases of the project. Key events conducted with stakeholders in 2012 included informational sessions on the project's status, goals, impact and deployment strategy, as well as workshops and meetings with managers from Headquarters, offices away from Headquarters and peacekeeping missions to consult on the deployment strategy, timing and sequencing of the roll-out of the system. As at 31 October 2012, 503 staff had attended information sessions in 2012, 54 per cent of whom are based at duty stations outside of New York. Further details on the roles and responsibilities of the Umoja teams are provided in annex VIII to the present report.

72. The Advisory Committee was informed about the approach envisaged to prepare end users to operate effectively in the enterprise resource planning environment, which includes the following steps: (a) preparation of the training content and material by the Umoja change management team; (b) training of the local process experts to serve as Umoja trainers at one of the deployment hubs (Brindisi, Italy; Entebbe, Uganda; Naquora, Lebanon; and New York); and (c) provision of training on the use of Umoja by the local process experts to end users. The Committee was provided with preliminary estimates of the personnel to be trained (see table 2).

Table 2
Training estimates^a

	Cluster					Total (Foundation and Extension 1)
	1 (Foundation)	2 (Foundation)	3 (Foundation and Extension 1)	4 (Foundation and Extension 1)	5 (Extension 1)	
Population	23 812	4 894	17 910	7 508	18 050	72 174
Users to be trained	5 001	1 028	2 442	2 039	910	11 420
Local process expert trainers	104	35	75	39	56	309

^a To be confirmed after the entity realization phase.

73. The Advisory Committee recognizes the challenges and risks posed by the scale and scope of the enterprise resource planning/Umoja project, as well by the disparity in the business models and status of preparedness of the entities participating in the project. This has led to and will continue to require the development of a common methodology and systematic approach for identifying and planning preparatory activities through the entity realization phase. The Committee considers that the successful implementation of the project will depend largely on the quality and thoroughness of the preparatory work and readiness of the various entities prior to deployment. It encourages the Secretary-General to pursue these efforts vigorously and to report on progress achieved in the context of the next progress report (see also paras. 88-91 below). The Committee further requests the Secretary-General to provide details on the entity realization plans of the cluster 1 entities in the next progress report.

74. The Advisory Committee notes the statement in paragraph 54 of the fourth progress report that Umoja would enable the Secretariat to implement a coherent, Secretariat-wide approach to common service delivery. The Board of Auditors also considers that the implementation of an enterprise resource planning system presents

a good opportunity to redesign service delivery models (A/67/164, para. 15). Upon enquiry as to the efforts towards harmonization with the global field support strategy and shared administrative services referred to in paragraph 62 of the report of the Secretary-General, the Committee was informed that the Under-Secretary-General for Management, the Umoja process owners and the change implementation team were all working closely with the Umoja team to explore options to consolidate some administrative, transactional and back-office tasks throughout the Secretariat. Consultations with stakeholders in the Department of Field Support, at offices away from Headquarters and at the regional commissions were planned for November 2012, as well as discussions on the interdependencies and synergies between the global field support strategy and other initiatives of the Secretary-General, including mobility.

75. Given the aforementioned challenges, the Advisory Committee concurs with the Board of Auditors that a Secretariat-wide approach to common service delivery could facilitate the transition to a new system and also generate considerable efficiencies in the long term. The Committee therefore encourages the Secretary-General to pursue those efforts and to further explore the feasibility of a Secretariat-wide approach to common service delivery. The Committee emphasizes that any changes to the current service delivery model must be approved by the General Assembly. Accordingly, it recommends that the Secretary-General be requested to submit for consideration by the Assembly any proposals that he may develop for a Secretariat-wide approach to common service delivery.

76. Upon enquiry as to the status of the development of the data centre infrastructure in Brindisi and in Valencia, Spain, the Advisory Committee was informed that hardware had been delivered, installed and tested at the two locations by 31 October 2012 and that the installation of the SAP production environment had been completed by 23 October. The data centres were therefore operational, as planned, by 1 November 2012.

H. Decommissioning of existing systems

77. The Secretary-General indicates that approximately 700 systems will be replaced by Umoja, and up to 300 of the remaining systems may require a technical interface with Umoja. The Advisory Committee requested additional information on the Secretary-General's plans to decommission the systems to be replaced by the enterprise resource planning, along with an estimate of the post and non-post resources currently required to maintain those systems and the resources that could be released once the systems are decommissioned. It was informed that the owners of the systems would be responsible for decommissioning the systems, in coordination with the Umoja team. He further indicated that the entity realization phase would allow for the identification of resources that would have to be repurposed to support Umoja, and that it would be possible to identify the resources that could be released only after the systems have been decommissioned. **The Committee underlines the need for the timely decommissioning of the systems that are to be replaced by the enterprise resource planning in order to avoid unnecessary costs. It recommends that details of the systems to be decommissioned, including information on the related post and non-post resources, be provided in the next progress report.**

I. Project staffing

78. Details on project staffing are provided in paragraphs 85 to 92 of the report of the Secretary-General. The Advisory Committee notes that the Umoja team comprises a total of 90 temporary staff members and continues to benefit from the temporary assignment of 6 posts of the Management Support Service of the Office of the Under-Secretary-General for Management for the duration of the project. The project also has available general temporary assistance funds for recruiting up to 66 subject-matter experts as required during the different phases of the project.

79. As indicated in the report, the timely recruitment of the Umoja team as well as of subject-matter experts has historically been a challenge. The Secretary-General indicates that the expedited procedures described under footnote 13 of the third progress report (A/66/381), in place since December 2010, have had the desired results. The Advisory Committee was provided with additional information on the current staffing levels (see annex IX below).

80. The Secretary-General indicates that at the end of the “get to green” plan (see para. 42 above) and the completion of the design phase for Umoja Foundation and Extension 1, the Umoja team will be reorganized into seven teams designed to best support the build and deploy phases for Umoja Foundation and Extension 1. Upon enquiry, the Advisory Committee was provided with additional information on the new structure of the project team, including information on the roles and responsibilities and functional titles for each team, which is attached as annex VIII to the present report.

81. Concerning the downsizing of the Umoja project team at the end of the project, the Secretary-General indicates that: (a) by June 2014, Umoja will be in a position to identify the personnel required to support the project to the end of 2015 and the staff who can be released from the project because their expertise will no longer be needed for subsequent phases; and (b) upon completion of the Foundation and Umoja Extension 1 implementation activities, the project team is envisaged to be dismantled, with staff being relocated to the corresponding areas of the Secretariat, including to the Umoja centre of excellence that would support Umoja and complete the build and deploy phases of Extension 2. The Advisory Committee comments on this matter in paragraphs 55 and 56 above.

82. Upon enquiry, the Advisory Committee was informed that the estimated \$1.5 million projected for enterprise resource planning software training (see A/67/360, para. 111 (e) (vii)) was intended to train Umoja staff and subject-matter experts in 30 technical, change management and functional areas of the software. The training effort was directed towards developing the capacity of United Nations staff with sufficient SAP knowledge, experience and skills that would allow them to maintain and implement the enterprise resource planning systems independently of the systems integrator in the post-2015 period. In its previous reports, the Committee stressed the need to put into place mechanisms for strengthening in-house capacity and for transferring knowledge from consultants to programme and project staff in order to prepare for the institutionalization of Umoja technical support. **The Committee encourages the Secretary-General to pursue his efforts to develop in-house expertise to implement and support the enterprise resource planning system (see also para. 57 above).**

J. Resource requirements

1. Financial implications of the revised approach

83. Details on expenditures incurred since 2008, the resources required for the implementation of the revised deployment strategy and the timetable for the current and next bienniums are provided in section IV of the fourth progress report (A/67/360, paras. 93-123). The Advisory Committee notes that project requirements for the period to 31 December 2015 are estimated to be \$348,138,500. It is indicated that the requirements for 2016 and beyond are estimated, on a very preliminary basis, at approximately \$30 million, based on historic expenditure rates. Tables 2 and 3 of the fourth progress report provide, respectively, a summary of the projected resource requirements and funds availability and the approved and projected resources for Umoja by biennium and source of funds. The Committee was also provided with a modified version of table 2 that includes a breakdown of approved resource requirements by General Assembly resolution and source of funds (see annex X).

84. With regard to the biennium 2012-2013, the Advisory Committee notes that the revised requirements for 2012 amount to \$65.2 million, representing a decrease of \$2.6 million, or 3.9 per cent compared with previous estimates. The reasons for the variance are provided in paragraph 110 of the fourth progress report. The estimated requirements for 2013 amount to \$69.6 million, reflecting an increase of \$20.2 million, or 40.7 per cent, compared with the estimates presented in the third progress report. The increase is due mainly to increased requirements for contractual services for the building of the Umoja Foundation and Extension 1 phases. The Secretary-General does not envisage any additional requirements for 2012-2013.

85. As regards the biennium 2014-2015, the Secretary-General indicates that an additional \$32.3 million will be required in 2015 over and above the \$315.8 million approved for the project. A summary of the original and revised estimates for the biennium is provided in table 8 of the fourth progress report; details on the variances are provided in paragraphs 114 to 121. The Advisory Committee notes that the increase is due largely to higher requirements under posts and other staff costs attributable to the extension of the project beyond 2014, which was the formerly scheduled completion date, and under contractual services for the build systems integrator and advisory services.

86. The Advisory Committee requested additional information on the assurances that could be provided as to the reasonableness of the cost estimates for the delivery of the project. It was informed that as part of due diligence, an advisory services partner had been engaged to provide independent analysis and estimates of the requirements. In addition, the costs of the project continued to be measured against industry benchmarks. **The Committee recommends that the Secretary-General be requested to provide further information on the industry benchmarks as they compare to the cost of the enterprise resource planning project.**

87. **The Advisory Committee expects that full details on the proposed project budget for 2014-2015, as well as on the actual expenditures for 2012-2013, will be provided in the next report. With regard to the project expenditures of \$123.2 million incurred as at 30 April 2012, the Committee further recommends that the Secretary-General be requested to provide in his next progress report a detailed account of the activities implemented and the outputs produced, along with the corresponding achievements. The Secretary-General should also**

provide comprehensive estimates of the requirements for the implementation of the full scope of the project and estimates of future costs for operating, maintaining and upgrading the system. The estimates should be made available in time for validation by the Board of Auditors.

2. Preparatory activities and indirect costs

88. In its previous report (A/66/7/Add.1, para. 55), the Advisory Committee had requested the Secretary-General to identify precisely and comprehensively all the tasks required for the implementation of the enterprise resource planning system, determine the resources required for the accomplishment of those tasks, establish clearly the costs to be covered under the Umoja budget and those to be absorbed by the concerned departments, and assign responsibility for the completion of the tasks in accordance with the schedule for the implementation of Umoja. In its first annual report on the implementation of Umoja, the Board recommended that the project team and budget owners work together to develop a robust estimate of all indirect costs of the project, to clarify the allocation of associated costs as a matter of urgency to give budget owners as much time as possible to make preparations to meet those costs and to develop proposals as to how the indirect costs would be met.

89. In his response to the Board's recommendation, the Secretary-General indicated that a working group, under the guidance of the Under-Secretary-General for Management, chaired by the Assistant Secretary-General/Controller and with representatives from the Secretariat, including the Department of Field Support, offices away from Headquarters, United Nations Headquarters and field missions, was to be convened in July 2012 to establish guidance on the application of indirect costs associated with the enterprise resource planning project. In particular, the working group would: (a) review and validate all costs that are not included in the project budget but that are associated with the implementation of the enterprise resource planning system (for example, data cleansing and conversion); (b) provide guidance on the preparation of the proposed programme budget for 2014-2015; and (c) identify opportunities to redesign the Organization's service delivery model in order to redirect existing resources to perform the tasks associated with indirect costs. The Secretary-General stated that the working group would formulate new estimates for indirect costs and that its view was that efforts should be made by every concerned department to absorb those costs within their existing resources (A/67/164, para. 77).

90. Upon enquiry, the Advisory Committee was informed that the working group was established in July 2012 as planned and that it was currently in the process of identifying all preparatory activities and indirect costs related to Umoja implementation. The list of preparatory activities and indirect cost activities identified thus far include: (a) deployment activities; (b) travel for site-specific change management and deployment tasks; (c) training activities; (d) local travel to regional sites for training; (e) data-related activities (cleansing, analysis and enrichment); (f) site-specific technical activities (conversions and interfaces); (g) archiving and decommissioning systems; (h) potential new development activity; (i) one-time infrastructure upgrade; (j) local infrastructure update; (k) connectivity cost increase per annum; (l) licences (SAP, Oracle, Hewlett-Packard, iServer, etc.); and (m) operational resiliency and data security.

91. In his current report, the Secretary-General indicates that he will present a proposal to address the situation in the fifth progress report on Umoja. He states that in the implementation of the enterprise resource planning, direct costs, such as those for system design and development, are borne by the project budget. However, costs for end-user activities that need to be performed throughout the Secretariat prior to deployment (indirect costs), such as cleansing and enriching the data to be migrated to the enterprise resource planning system and end-user training, are, in principle, part of the operational responsibilities of the user departments that perform the functions and own the corresponding data. The Secretary-General further indicates that instructions on the preparation of the proposed programme budget for the biennium 2014-2015 with respect to Umoja are to be provided with the expectation that all concerned departments shall make every effort to absorb those costs within their existing budgets (A/67/360, para. 123). The Committee was also informed that, because of their nature, some indirect costs cannot necessarily be attributed in their totality to Umoja, such as connectivity, as the upgrade and expansion of the network will serve other purposes besides the needs of Umoja.

92. The Advisory Committee agrees with the approach taken by the Secretary-General to identify clearly, in consultation with the concerned parties, all project-related activities and to determine whether the costs of those activities are to be borne by the implementing offices, departments and other entities or attributed to the Umoja project budget. With regard to the Secretary-General's expectation that all concerned departments will make every effort to absorb Umoja-related costs within their existing budgets (see para. 91 above), the Committee is not in a position to pronounce itself as to the feasibility of this approach, given that the budgets for the biennium 2014-2015 have yet to be developed.

93. The Advisory Committee recommends that the Secretary-General be requested to maintain a detailed accounting of the indirect costs of preparatory activities to be borne by the implementing offices, departments and other entities and those to be covered under the Umoja project budget and to provide fully transparent information on those costs to the General Assembly in the Secretary-General's progress reports on Umoja.

K. Cooperation with other United Nations system organizations

94. In its previous report, the Advisory Committee encouraged the Secretary-General to continue to collaborate and to draw lessons from the experience of the World Food Programme (WFP) and other United Nations system entities (A/66/7/Add.1). Upon enquiry as to the results of the cooperation between Umoja and WFP, the Committee was informed that the WFP enterprise resource planning system, known as WINGS II,² had been identified as the closest fit with Umoja among all other United Nations system organizations having implemented an SAP enterprise resource planning solution. A fit/gap study had been conducted to compare the Umoja design to that of WINGS II, with the objective of identifying which elements, if any, of the WFP solution could be adapted to accelerate Umoja building and deployment activities. The outcome of the study was a high-level analysis of the similarities and differences between Umoja and WINGS II at the

² WFP Information Network and Global System II.

business process level. In addition, the Umoja team was given access to the WINGS II test system, training materials, contractual terms and conditions with vendors, and subject-matter expertise. Ongoing collaboration between the teams was also strengthened, and both parties benefited from mutual exchange on United Nations common system requirements for entitlements and payroll in an SAP system. This exercise ultimately led to the revised implementation approach that prioritized logical groups of functions in releases (Umoja Foundation, Extension 1 and Extension 2), based on a joint WFP-United Nations assessment of the functionalities required to support compliance with IPSAS. **The Committee reiterates its earlier recommendation that the Secretary-General continue to seek opportunities for increased cooperation with other United Nations system organizations as well as for sharing common solutions.**

IV. Conclusions and recommendations

95. The actions requested of the General Assembly are set out in paragraph 127 of the fourth progress report. Taking into account its comments and recommendations in the present report concerning the Umoja deployment strategy and timetable (para. 53), future support arrangements (paras. 55 and 56) and resource requirements (para. 87), the Advisory Committee recommends that the General Assembly:

(a) Take note of the progress in the implementation of the Umoja project presented in the fourth progress report of the Secretary-General;

(b) Amend the proposed revised Umoja deployment strategy and timetable and approve the complete implementation of the full scope of the project by December 2018 at the latest, and, taking into account its comments and recommendations in paragraph 53 above, request the Secretary-General to complete:

(i) The design, build and deploy phases of Umoja Foundation and Umoja Extension 1 and the design phase of Umoja Extension 2 by December 2015;

(ii) The building and deployment of Umoja Extension 2 by the end of 2018 at the latest;

(c) Take note of the revised requirements of the Umoja project for 2012 in the amount of \$65,244,100 and approve the proposed requirements for 2013 of \$69,645,000;

(d) Request the Secretary-General to provide in his next progress report:

(i) Details on the actual project expenditures for 2012-2013;

(ii) Details on the project expenditures incurred as at 30 April 2012, with information on the activities implemented, the outputs produced and the corresponding achievements;

(iii) Detailed estimates of the requirements for the implementation of Umoja Foundation and Umoja Extension 1 for the period from 1 January 2014 to 31 December 2015;

(iv) Comprehensive estimates of the requirements for the implementation of the full scope of the project;

(v) Estimates of the future costs for operating, maintaining and upgrading the enterprise resource planning system;

(e) Invite the Secretary-General to further analyse and present options for the optimum size and composition of the project team required to implement Umoja Extension 2 and to support the enterprise resource planning system after the deployment of Umoja Foundation and Extension 1.

96. With regard to the action requested of the General Assembly in paragraphs 127 (f), (g) and (h), the Advisory Committee will make its recommendations in the context of its consideration of future relevant budgetary proposals.

Annex I

Implementation status of the recommendations of the Board of Auditors and cross reference to the fourth progress report of the Secretary-General on the implementation of the enterprise resource planning project (Umoja)

<i>Board of Auditors' recommendations (A/67/164)</i>	<i>Administration comments (A/67/164, annex II, and A/67/360, annex V)</i>	<i>Reference(s) in fourth progress report on Umoja (A/67/360)</i>
<p>The Board recommends that the project director: (a) consider the gaps identified by the Board and, on that basis, reassess the benefits model for the ERP system in consultation with process owners; (b) agree a baseline with headline benefit figures to be realized by each process owner; (c) determine what the actual cashable savings will be; (d) assign accountability to process owners for realizing the agreed savings and benefits, and for developing plans to achieve them; and (e) communicate to the General Assembly what changes to the organization it proposes to implement to realize the intended annual benefits from the project. (para. 19)</p>	<p>The gaps identified by the Board will require considerable consultation with (a) the Steering Committee to determine accountability, (b) the Change Implementation Team to develop the vision/framework for "shared services" and (c) the process owners.</p> <p>This process will not be completed prior to the submission of the fourth annual report, in which the approach and progress will be summarized. Actual discussions with the Advisory Committee on Administrative and Budgetary Questions and the Fifth Committee will provide a further opportunity to provide updates. Target completion date of July 2013 coincides with the planned go-live of Umoja at a pilot site.</p> <p>Target date for implementation: July 2013</p>	<p>Paragraphs 9, 48, 51-53</p>
<p>The Board recommends that, in order to enable transparent planning and reporting of the achievement of the projected benefits of implementing the ERP system and clarity over whether their achievement will require staff to be released or redeployed, the Administration consult the General Assembly on its benefits realization plans. (para. 21)</p>	<p>The future reports of the Secretary-General will include information on how posts may be redeployed or how roles may change as a direct result of the deployment and stabilization of the ERP system. This information will be further enriched following identification and quantification of benefits at each entity in the six months preceding implementation.</p> <p>Target date for implementation: 2013, 2014, 2015 reports of the Secretary-General on Umoja</p>	<p>Paragraphs 53, 69-71</p>

<i>Board of Auditors' recommendations (A/67/164)</i>	<i>Administration comments (A/67/164, annex II, and A/67/360, annex V)</i>	<i>Reference(s) in fourth progress report on Umoja (A/67/360)</i>
The Board also recommends that the Administration: (a) assign clear responsibility for all tasks related to developing proposals for realizing further benefits through changes in the approach to service delivery; and (b) publish a timetable against which these proposals will be developed. (para. 23)	There is an ongoing discussion between the Change Implementation Team, the project owner and Umoja on this observation to determine the various roles and responsibilities. Target date for implementation: October 2012	Paragraph 54
The Board recommends that the Administration: (a) clearly set out how it will manage change and embed more efficient and standardized working practices across the organization; and (b) develop plans for how staff will be supported to develop the skills, capacity and capability to adopt different working practices. (para. 31)	The Umoja organizational change management team and the realization teams have developed approaches, strategies and plans to assess the change impact associated with the deployment of Umoja; the role-mapping (Umoja roles to individuals) approach and a learning/training approach. All these activities are aimed at ensuring that the Organization identifies the major changes between the “as is” and “to be” processes, determines the staff that will be impacted and ensures that appropriate communications, training and support is provided to them to ensure that the behavioural change is realized and that the impacted staff have only the user access and authority that is appropriate for them to execute their functions, with the proper segregation of duties. Target date for implementation: July 2013	Paragraph 75
The Board also recommends that the Administration establish a formal approach to managing and improving business processes to enable continuous reform and improvement following implementation of the ERP system. (para. 32)	A formal approach for a centre of excellence to manage and improve business processes post Umoja implementation will be considered during the development of the United Nations ERP support and sustainment strategy. This strategy will include requirements for change management, training and business analysis to enable continuous improvement to the system after the implementation of Umoja. Target date for implementation: August 2013	Paragraphs 43, 45

<i>Board of Auditors' recommendations (A/67/164)</i>	<i>Administration comments (A/67/164, annex II, and A/67/360, annex V)</i>	<i>Reference(s) in fourth progress report on Umoja (A/67/360)</i>
<p>The Board recommends that the project director: (a) establish the level of engagement with the ERP project across the Organization; (b) develop plans for addressing any shortfalls in communications or engagement; and (c) develop a communications and engagement strategy for the implementation phase. (para. 41)</p>	<p>A comprehensive engagement strategy was proposed, discussed and agreed with the Steering Committee and the process owners, including the roll-out support structure, the mobilization, awareness and training of all management and staff involved.</p> <p>Target date for implementation: September 2012</p>	<p>Paragraphs 64-67</p>
<p>The Board recommends that the Administration: (a) establish a detailed project plan linking the budget to milestones and deliverables; (b) set out clearly who owns each part of the budget and what they are responsible for delivering; and (c) establish arrangements for capturing information on expenditure and progress to enable it to more effectively monitor progress, maintain closer control over costs, and improve decision-making about future expenditure. (para. 52)</p>	<p>With regard to the \$118 million spent so far in the project, the Administration did not have systems in place that could link the budget to milestones and deliverables. The Administration can attest as to which activities have been implemented with these funds and what achievements have been obtained. Notwithstanding that this is not a requirement under the United Nations system accounting standards, the Administration recognizes the need to have such a tool in a project of this nature and it is introducing NOVA, one of the most efficient project management solutions available in the market, for that purpose.</p> <p>Target date for implementation: December 2012</p>	
<p>The Board recommends that the Steering Committee assess whether the Administration has an adequate number of staff with the appropriate commercial and contract management skills necessary to manage contracts with the multiple parties responsible for delivering different interdependent parts of the project. (para. 57)</p>	<p>A detailed assessment of the adequacy of the contracts management function within Umoja will be undertaken. However, since June 2011, Umoja augmented its contract management capacity with the assignment of experienced procurement professionals with significant experience in United Nations procurement and contracting. The assignment of a subject-matter expert together with the consolidation of all procurement activities under the Project Management Office has strengthened Umoja's ability to manage multiple third-party contractors. After the assessment mentioned above is completed, the Administration will be able to determine if the measures implemented to date are sufficient.</p> <p>Target date for implementation: December 2012</p>	<p>Paragraphs 86-92</p>

*Board of Auditors' recommendations
(A/67/164)*

*Administration comments
(A/67/164, annex II, and A/67/360, annex V)*

*Reference(s) in fourth progress
report on Umoja (A/67/360)*

The Board recommends that the project director and Steering Committee:
(a) reassess the feasibility of the project timetable and budget, including consideration of optimism bias and the probable impact of identified risks, and prepare a robust forecast of cost and time to complete the project under the current scope; and (b) report the findings and proposals to address any cost and time increases identified, to the General Assembly at the earliest opportunity. (para. 72)

An analysis of the project timetable, project budget and deployment strategy and other critical elements is currently nearing completion. This effort in the context of the preparation for the fourth annual report is being informed/validated by engagement with the project owner, the Steering Committee, process owners, Secretariat entities and external consultant groups. This engagement is necessary to gain acceptance and accountability of the Umoja timetable, scope and budget going forward. The fourth progress report will be cleared by the project owner, endorsed by the Umoja Steering Committee and the Management Committee and be processed as normal through the Programme Planning and Budget Division, the Office of the Under-Secretary-General for Management and the Executive Office of the Secretary-General.

Paragraph 44

**Target date for implementation:
September 2012**

The Board recommends that senior management in the Administration put appropriate controls in place so that they can clearly demonstrate to the General Assembly that assurance can be placed in the reported timetable, including actual and anticipated costs for the ERP project. (para. 75)

The Umoja Director, together with the project owner (senior responsible owner) and the Steering Committee, will ensure that appropriate controls are in place to clearly demonstrate to the General Assembly that assurance can be placed in the reported timetable, and actual and anticipated costs for the ERP project.

**Target date for implementation:
December 2012**

The Board further recommends that the project team and budget owners work together to: (a) develop a robust estimate of all associated costs of the project; (b) clarify the allocation of associated costs as a matter of urgency to give budget owners as much time as possible to make preparations to meet these costs; and (c) develop proposals for how these associated costs will be met. (para. 76)

A working group, under the guidance of the project owner, chaired by the Assistant Secretary-General/Controller and with representatives from the Secretariat, including the Department of Field Support, offices away from Headquarters, Headquarters and the field missions is to be convened in July 2012 to establish clear guidance on the application of indirect costs associated with the Umoja project, bearing in mind the challenges to the Umoja deployment timeline and the need for timely budget planning and preparation across departments. In particular the

Paragraphs 122-123

working group will: (a) review and validate all costs not included in the Umoja budget but which are associated with its implementation (e.g. data cleansing and conversion); (b) provide guidance in this regard for the preparation of the programme budget for 2014-2015; and (c) identify opportunities to redesign the Organization's service delivery model in order to redirect existing resources to perform the tasks associated with indirect costs. The Working Group will formulate the new estimates for indirect costs bearing in mind the following two principles: to keep costs at a minimum; and to ensure that efforts are made by every concerned department to absorb these costs from within existing resources.

**Target date for implementation:
October 2012**

The Board recommends that the Chair of the Steering Committee and the project director (a) assign clear ownership of project risks to those with appropriate authority to address each risk, (b) for each risk, assess and document the likelihood of the risk arising and its quantified impact, and (c) establish regularly risk monitoring as part of the ongoing budgeting and resourcing arrangements. (para. 80)

As identified in the draft fourth progress report on Umoja, significant progress has been made in the identification and management of project issues and risks. Concerns noted by the Board will be incorporated into the Umoja risk register and/or monitoring mechanism as applicable.

Paragraphs 55-58

**Target date for implementation:
September 2012**

The Board recommends that the Administration: (a) appoint a single senior responsible owner with the requisite authority, across the departments and entities in which the ERP system is to be implemented, to drive the project forward; (b) clearly communicate the identity and authority of the senior responsible owner to all staff; and (c) finalize the planned revisions to the project's governance structure at the earliest opportunity, including assigning clear accountabilities for the completion of all major tasks. (para. 99)

This recommendation has been implemented by designating the Under-Secretary-General for Management as the project owner of Umoja. The Department of Management, in accordance with the Secretary-General's bulletin ST/SGB/2010/9, "formulates policies and procedures and provides strategic guidance, direction and support to all entities of the Secretariat, including the offices away from Headquarters and the regional commissions, in three broad management areas, namely, finance and budget, human resources, and physical resources (support operations and services)". As the Board states in paragraph 3 of the report "Umoja, spans

Paragraph 8

*Board of Auditors' recommendations
(A/67/164)*

*Administration comments
(A/67/164, annex II, and A/67/360, annex V)*

*Reference(s) in fourth progress
report on Umoja (A/67/360)*

most of the Organization's administrative and support functions across five areas: finance; supply chain; human resources; central support services; and programme and project management", and all key areas fall within the purview of the Department of Management. In line with the Secretary-General's bulletin, the Department is headed by an Under-Secretary-General who "is responsible for the formulation of the Secretariat's management policies and has overall responsibility for the management of the financial, human and physical resources of the Secretariat, in accordance with the Secretary-General's delegation of authority". It is also the Under-Secretary-General who "represents or ensures the representation of the Secretary-General on management matters in relation to governing bodies, funds, programmes and agencies of the United Nations common system and administrative advisory bodies. He or she also monitors emerging management issues throughout the Secretariat by interacting with executive committees". Having Umoja defined as "a continuous organizational transformation, enabling high-quality, cost-effective service delivery for evolving United Nations mandates aimed at maximizing the productivity of the United Nations human, financial and material resources", there is no better project owner than the Under-Secretary-General for Management. Finally, it should be added that the project owner has received the full support of Member States to assume these responsibilities (please refer to General Assembly resolution 66/246 that transferred the Umoja project to the Department of Management) and also the full support of the Secretary-General and of the Umoja Steering Committee.

Implemented

Annex II

Extracts from senior managers' compacts for 2012 relating to support for Umoja implementation

Extract from senior manager's compact on Umoja

<i>Objective</i>	<i>Expected accomplishment</i>	<i>Performance measure</i>
To support Umoja, the cornerstone of the Organization's management reform agenda.	Departments/Offices will carry out "data cleansing" activities required for a successful Umoja deployment.	Departments/Offices will complete a data cleansing plan by 31 December 2012, and describe progress made against plan.
	Managers are knowledgeable of Umoja's status and deployment plan.	100 per cent of staff at the D-1 level and above will have attended an Umoja workshop/information session in 2012.
		100 per cent of Executive Office staff will have attended an Umoja workshop/information session in 2012.

Extract from the senior manager's compact of the Under-Secretary-General for Management

<i>Objective</i>	<i>Expected accomplishment</i>	<i>Performance measure</i>
As project owner and Chair of the Umoja Steering Committee, ensure steady progress towards implementation of Umoja and the realization of promised benefits.	Timely implementation of project deliverables scheduled for 2012.	Development and monitoring of a deployment plan with timelines and budgets (to ensure delivery on schedule, within budget and within scope).
	Improved financial transparency of total cost of Umoja implementation (Umoja and indirect costs).	Indirect costs are reviewed and validated, and a plan is in place by year-end to meet these costs across departmental budgets.

Annex III

Entities implementing Umoja Foundation and Umoja Extension 1

Cluster 1 Umoja Foundation October 2013	<p>Peacekeeping missions</p> <p>United Nations Interim Force in Lebanon (UNIFIL); United Nations Disengagement Observer Force (UNDOF); United Nations Peacekeeping Force in Cyprus (UNFICYP); United Nations Supervision Mission in the Syrian Arab Republic (UNSMIS); United Nations Interim Security Force for Abyei (UNISFA); United Nations Mission in South Sudan (UNMISS); African Union-United Nations Hybrid Operation in Darfur (UNAMID); United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO); United Nations Mission in Liberia (UNMIL); United Nations Operation in Côte d'Ivoire (UNOCI); United Nations Interim Administration Mission in Kosovo (UNMIK); United Nations Mission for the Referendum in Western Sahara (MINURSO); United Nations Integrated Mission in Timor-Leste (UNMIT); United Nations Stabilization Mission in Haiti (MINUSTAH)</p> <p>Peacekeeping missions (regular budget)</p> <p>Special Adviser to the Secretary-General on Cyprus; Committee on Missing Persons, Cyprus</p> <p>Special political missions</p> <p>Office of the United Nations Special Coordinator for Lebanon; United Nations Political Office for Somalia</p> <p>Headquarters support offices</p> <p>Procurement Division; Office of Programme Planning, Budget and Accounts; Department of Field Support; Regional Procurement Office at Entebbe, Uganda</p> <p>Service centres</p> <p>Global Service Centre at Brindisi, Italy; Regional Service Centre at Entebbe, Uganda</p>
Cluster 2 Umoja Foundation January 2014	<p>Peacekeeping missions (regular budget)</p> <p>United Nations Truce Supervision Organization (UNTSO); United Nations Military Observer Group in India and Pakistan (UNMOGIP); Office of the Special Envoy of the Secretary-General for Assistance to Pakistan</p> <p>Special political missions</p> <p>United Nations Regional Centre for Preventive Diplomacy for Central Asia; United Nations Assistance Mission in Afghanistan (UNAMA); United Nations Assistance Mission for Iraq (UNAMI); United Nations Special Coordinator for the Middle East Peace Process; United Nations Support Mission in Libya (UNSMIL); United Nations Integrated Peacebuilding Office in the Central African Republic (BINUCA); United Nations Office in Burundi (BNUB); United Nations Integrated Peacebuilding Office in Guinea-Bissau (UNIOGBIS); United Nations Integrated Peacebuilding Office in Sierra Leone (UNIPSIL); United Nations Office for West Africa/Cameroon-Nigeria Mixed Commission; United Nations Office to the African Union; United Nations Regional Office for Central Africa</p>

Cluster 3 Umoja Foundation July 2014	<p>Offices/departments/entities included in United Nations Headquarters deployment</p> <p>Executive Office of the Secretary-General; Department of Economic and Social Affairs; Department of Field Support; Department for General Assembly and Conference Management; Department of Management; Department of Political Affairs; Department of Public Information; Department of Peacekeeping Operations; Department of Safety and Security; Office for the Coordination of Humanitarian Affairs; Office of Internal Oversight Services; Office of Legal Affairs; United Nations Commission on International Trade Law; Office of the Special Adviser on Africa; Office of the Special Representative of the Secretary-General on Children and Armed Conflict; Office for Disarmament Affairs; Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States; Office of Information and Communications Technology; Rule of Law Unit; Peacebuilding Support Office; Counter-Terrorism Committee Executive Directorate; Office of the United Nations Ombudsman and Mediation Services; Secretariats of the Advisory Committee on Administrative and Budgetary Questions, Chief Executives Board and International Civil Service Commission; International Court of Justice; Joint Inspection Unit; Office of Administration of Justice; United Nations Joint Staff Pension Fund</p> <p>Offices/departments/entities included in United Nations Office at Nairobi deployment</p> <p>United Nations Office at Nairobi; Economic Commission for Africa; United Nations Environment Programme (UNEP); United Nations Human Settlements Programme (UN-Habitat)</p>
Cluster 3 Umoja Extension 1 July 2014	<p>Offices/departments/entities included in United Nations Headquarters deployment</p> <p>All peacekeeping missions (international staff only); all special political missions (international staff only); offices/departments/entities included in United Nations Office at Nairobi deployment (international and national staff)</p>
Cluster 4 Umoja Foundation and Extension 1 July 2015	<p>Offices/departments/entities included in United Nations Office at Geneva deployment</p> <p>United Nations Office at Geneva; Office for the Coordination of Humanitarian Affairs; Office of the United Nations High Commissioner for Human Rights; United Nations Joint Staff Pension Fund; Economic Commission for Europe; Economic and Social Commission for Western Asia; International Trade Centre; United Nations Compensation Commission; United Nations Convention to Combat Desertification; United Nations Conference on Trade and Development; United Nations Framework Convention on Climate Change; United Nations Institute for Disarmament Research; United Nations International Strategy for Disaster Reduction Secretariat; United Nations Institute for Training and Research; Office on Sport for Development and Peace — Special Adviser to the Secretary-General; United Nations Research Institute for Social Development; United Nations System Staff College</p> <p>Offices/departments/entities included in United Nations Office at Vienna deployment</p> <p>United Nations Office at Vienna; United Nations Office on Drugs and Crime; United Nations Postal Administration; United Nations Scientific Committee on the Effects of Atomic Radiation; Economic and Social Commission for Asia and the Pacific; United Nations Interregional Crime and Justice Research Institute; United Nations Register of Damage; United Nations Office for Outer Space Affairs</p>

Cluster 5	All peacekeeping missions (national staff only)
Umoja Extension 1	All special political missions (national staff only)
January 2016	

Annex IV

Umoja functionality by phase

Functional area/functional scenario	Functional group	Number of processes				Currently provided in system
		Total	UF	UE 1	UE 2	
Finance						
Cash management and treasury	Bank management	3	3	–	–	IMIS and Sun Systems interfacing with various local disbursement systems such as SwiftNet, CitiDirect, Chase Insight, etc.
Cash management and treasury	Cash and liquidity management	8	8	–	–	IMIS and Eastnets (Swift), OPICS and local systems across the Secretariat
Cash management and treasury	Treasury and risk management — investments	5	5	–	–	OPICS and Bloomberg
Cash management and treasury	Investment accounting	2	2	–	–	OPICS interfacing to IMIS
Cost and management accounting	Accounting for specific events and activities — internal orders	6	6	–	–	IMIS and Sun Systems and local systems across the Secretariat
Cost and management accounting	Overhead accounting — cost centre accounting	2	2	–	–	IMIS and Sun Systems and local systems across the Secretariat
Financial accounting	Accounts payable	8	6	–	2	IMIS and Sun Systems and local systems across the Secretariat used for tracking purposes
Financial accounting	Accounts receivable	7	5	–	2	IMIS and Sun Systems
Financial accounting	Asset accounting	9	8	–	1	IMIS and miscellaneous local tracking and asset management systems such as Galileo
Financial accounting	General ledger	7	5	–	2	IMIS and Sun Systems and local systems across the Secretariat
Financial accounting	Taxes and insurance	4	3	–	1	IMIS and Sun Systems and local systems across the Secretariat
Financial management	Budget implementation	11	10	–	1	IMIS and Sun Systems and local systems across the Secretariat
Financial management	Budget formulation and approval	9	1	–	8	IMDIS and BIS and local systems across the Secretariat
Financial management	Grants management	40	12	–	28	IMIS and Sun Systems plus UNODC-ProFI, UN-Habitat GMIS and other local systems across the Secretariat
Strategic enterprise planning	Strategic enterprise management	3	–	–	3	BIS and various local systems across the Secretariat
Subtotal		124	76	–	48	

Functional area/functional scenario	Functional group	Number of processes				Currently provided in system
		Total	UF	UE 1	UE 2	
Human resources						
Organization management	Organization and position management	3	–	3	–	IMIS, Nucleus
Payroll	Monthly yearly biennium activities	1	–	1	–	IMIS, ProGen, Sun Systems
Payroll	Payroll tax data collection	1	–	1	–	IMIS
Payroll	Staff payroll	8	–	8	–	IMIS, ProGen
Organization management	Organization and position management	4	–	4	–	IMIS, Nucleus
Time	Leave management	4	–	4	–	IMIS, IRFA, eLeave/Matrix
Time	Work schedule management	1	–	1	–	IMIS
Time	Time collection	2	–	2	–	IMIS, eLeave/Matrix
Time	Time data processing	1	–	1	–	IMIS
Workforce management	After-service insurance	1	–	1	–	IMIS
Workforce management	Personnel administration	30	–	30	–	IMIS, Nucleus
Workforce management	Medical and life insurance	2	–	2	–	IMIS
Workforce management	Reference table maintenance	1	–	1	–	IMIS
Subtotal		59	–	59	–	
Central support services						
Conference and event management	Event planning	7	–	–	7	gMeets and a number of local systems across the Secretariat
Conference and event management	Event implementation	3	–	–	3	gMeets and a number of local systems across the Secretariat
Conference and event management	Document production and distribution	6	–	–	6	gDoc
Facilities management	Real estate planning	2	1	–	1	Auto-CAD, CAFM System
Facilities management	Real estate administration	3	2	–	1	Auto-CAD, CAFM System and a number of local systems across the Secretariat
Facilities management	Office space management	2	–	–	2	Auto-CAD, CAFM System, Aperture, iNeed, UNTEL
Facilities management	Building maintenance	3	–	–	3	iNeed, Galileo, and a number of local systems across the Secretariat
Service management	ICT licences management	1	–	–	1	iNeed
Service management	Work order requests and fulfilment	2	–	–	2	iNeed, Galileo, IMIS
Service management	Request for services	1	–	–	1	iNeed, Galileo
Service management	Service management	1	–	–	1	IMIS, iNeed, Galileo

Functional area/functional scenario	Functional group	Number of processes				Currently provided in system
		Total	UF	UE 1	UE 2	
Service to public and staff	Planning and design	1	–	–	1	Offline systems
Service to public and staff	Product management	1	–	–	1	MegaStamp, gDoc, IMIS
Service to public and staff	Sales	8	5	–	3	MegaStamp, Dogs, CatsPajamas, IMIS, Wordstock, NBN
Travel management	Travel initiation	8	–	5	3	IMIS, Lotus Notes, Excel/Word
Travel management	Travel planning	2	–	1	1	IMIS, Lotus Notes, Excel
Travel management	Travel expenses	1	–	1	–	IMIS, TCP, Sun Systems, paper forms
Subtotal		52	8	7	37	
Supply chain procurement logistics						
Planning and management	Demand planning and forecasting	5	–	–	5	Manual (spreadsheets, documents, etc.)
Planning and management	Supply network planning	3	–	–	3	Manual (spreadsheets, documents, etc.)
Planning and management	Long-term capabilities planning	8	–	–	8	Manual (spreadsheets, documents, etc.)
Sourcing to acquisition	Supplier collaboration	4	4	–	–	UNGM, Mercury, ProcurePlus, IMIS, Sun Systems
Sourcing to acquisition	Requisition to purchase order	10	10	–	–	IMIS, ProcurePlus, Mercury
Sourcing to acquisition	Low-value acquisition	2	1	–	1	IMIS, Sun Systems
Sourcing to acquisition	Contract management	4	4	–	–	Mercury, Contract Administration Tracking System, ProcurePlus
Receiving to distribution	Inbound processing	4	1	–	3	Galileo, CPMS, ProcurePlus and a few local systems across the Secretariat
Receiving to distribution	Outbound processing	4	2	–	2	Galileo
Receiving to distribution	Planning and dispatching	3	–	–	3	Not known
Receiving to distribution	Warehouse and storage	6	4	–	2	Galileo, CPMS and other inventory and warehousing systems across the Secretariat
Employment to disposal	Set assembly and execution	3	–	–	3	gDoc, MegaStamp and other local systems across the Secretariat
Employment to disposal	Equipment assignment and management	3	3	–	–	ProcurePlus, Galileo, Hardcat, CATS, and a number of local systems across the Secretariat
Employment to disposal	Equipment maintenance and operations	3	3	–	–	iNeed, Galileo and a few local systems across the Secretariat
Employment to disposal	Decommissioning and disposal	3	3	–	–	Galileo, ESCAP Inventory Database and a few local systems across the Secretariat
Force management	Force planning	3	–	–	3	Manual (spreadsheets, documents, etc.)

Functional area/functional scenario	Functional group	Number of processes				Currently provided in system
		Total	UF	UE 1	UE 2	
Force management	Deployment	1	–	–	1	Manual (spreadsheets, documents, etc.)
Force management	Sustainment	1	–	–	1	Galileo, Mercury, eCOE, Manual (spreadsheets, documents, etc.)
Subtotal		70	35	–	35	
Programme and project management						
Programme management	Programme goals and objectives	2	–	–	2	IMDIS and other local systems throughout the Secretariat
Programme management	Programme planning and approvals	2	–	–	2	IMDIS and other local systems throughout the Secretariat
Programme management	Programme execution and performance	2	–	–	2	IMDIS and other local systems throughout the Secretariat
Programme management	Programme evaluation and closure	1	–	–	1	IMDIS and other local systems throughout the Secretariat
Project management	Project initiation	3	1	–	2	Multiple applications, developed internally and including Excel spreadsheets
Project management	Project planning	2	1	–	1	Multiple applications, developed internally and including Excel spreadsheets
Project management	Project execution and performance	3	1	–	2	IMIS, Sun Systems to charge expenditure to projects Multiple applications, developed internally and including Excel spreadsheets, for reporting
Project management	Project evaluation and closure	1	–	–	1	Multiple applications, developed internally and including Excel spreadsheets, for reporting
Subtotal		16	3	–	13	
Total		321	122	66	133	

Abbreviations: BIS, Budget Information System; CAD, computer-aided design; CAFM, Computer-Aided Facility Management; CATS, Contract Administration Tracking System; COE, contingent-owned equipment; CPMS, Contracts and Procurement Management System; ESCAP, Economic and Social Commission for Asia and the Pacific; GMIS, Grant Management Information System; IMDIS, Integrated Monitoring and Documentation Information System; IMIS, Integrated Management Information System; IRFA, IMIS Reporting Facility Application; NBN, National Book Network; OPICS, Operations Processing Integrated Control System; TCP, travel claim portal; UE 1, Umoja Extension 1; UE 2, Umoja Extension 2; UF, Umoja Foundation; UNGM, United Nations Global Marketplace; UNODC, United Nations Office on Drugs and Crime; UNTEL, United Nations telephone directory.

Annex V

Umoja: summary of the major risks by phase

Umoja Foundation

- On-time completion of Umoja Foundation design through “get to green” plan
- Ability to mobilize user resources to perform testing according to the project plan
- Achieving organizational readiness, mainly the acceptance, willingness and ability to migrate to a common operating model
- Acceptance by Secretariat entities of absorbing indirect costs of Umoja implementation
- Insufficient ERP software expertise among Umoja staff and subject-matter experts required for build phase of Foundation and Extension 1

Umoja Extension 1

- Completion of Umoja Extension 1 design by 31 December 2012
- Delivery on time and within specifications of the “Innovative Business Solution”, aimed to address the United Nations human resources entitlements, by the ERP software provider by 31 March 2013
- Willingness of Secretariat entities to absorb indirect costs of Umoja implementation
- Insufficient ERP software expertise among Umoja staff and subject-matter experts required for build phase

Umoja Extension 2

- Maturity of the Secretariat to define a common set of requirements to design the complex planning and programming processes contained in Extension 2 functionality in such a way as to harmonize operational modalities across its multiple entities
- Competition between new, emerging business requirements against the committed functionality of Extension 2 for implementation in 2017 and 2018

Annex VI

Potential quantitative benefits by Umoja release

The table below illustrates the potential, unconstrained quantitative benefits sorted by the release in which the majority of the associated functionality is implemented. The low- and high-range estimates for each benefit, once fully realized, are also included. This table does not show the realization or accrual of the benefits over time.

It is important to point out that these potential, unconstrained benefits will be further refined and committed by all management involved, once the guidelines and constraints are defined and the entity realization phases are completed for each of the implementing entities.

<i>Release</i>	<i>Workstream</i>	<i>Functional scenario</i>	<i>Benefit description</i>	<i>Low-range estimate (millions of United States dollars)</i>	<i>High-range estimate (millions of United States dollars)</i>
Foundation	Finance	Accounts payable	Reduced work effort in processing accounts payable (commercial)	1	3
Foundation	Finance	Cash management and treasury investments	Reduced average percentage variance, positive or negative, between projected and actual cash flow	—	—
Foundation	Finance	General ledger	Reduced work effort in completing the year-end closing	1	1
Foundation	Finance	Inter-Agency	Reduced work effort in processing internal inter-office vouchers and billing	1	2
Foundation	Programme and project management	Programme and project management	Reduction in project management costs for capital construction projects	1	1
Foundation	Supply chain	Procurement	Paperless record creation over the acquisition cycle	1	2
Foundation	Supply chain	Procurement	Raising requisitions	1	1
Foundation	Supply chain	Procurement	Processing requisitions to contract (1) — transformation of requisitions into solicitation documents	2	5
Foundation	Supply chain	Procurement	Processing requisitions to contract (2) — transformation of solicitation responses into contracts and contract management through to closure	2	4
Foundation	Supply chain	Procurement	Processing requisitions to contract (3) — improved communication with the supplier, using electronic means as far as practicable	2	6
Subtotal				11	24

<i>Release</i>	<i>Workstream</i>	<i>Functional scenario</i>	<i>Benefit description</i>	<i>Low-range estimate (millions of United States dollars)</i>	<i>High-range estimate (millions of United States dollars)</i>
UE 1	Central support services	Travel management	Reduction of time spent by travellers in travel-related activities (hours)	17	28
UE 1	Central support services	Travel management	Reduction of administrator time dedicated to travel claims	1	4
UE 1	Finance	Accounts payable	Reduced work effort in accounts processing travel claims	2	3
UE 1	Finance	Inter-agency	Reduced work effort in processing and reconciling external inter-office vouchers (mainly UNDP)	–	1
UE 1	Human resources	Compensation	Reduced effort required to process entitlements by human resources and payroll	16	24
UE 1	Human resources	Organizational management	Reduction of time spent by human resources administrators to manually and individually perform contract and post-incumbency extension processes	–	–
UE 1	Human resources	Payroll	Payroll efficiency gain in the field by having an integrated human resources, payroll and finance system	4	6
UE 1	Human resources	Personnel administration	Reduced effort required for initiating and approving personnel action form for initial appointment (and improvement opportunities from using self-service)	–	1
UE 1	Human resources	Personnel administration	Reduced effort required to print and process personnel action forms (printing, signing, mailing, storing)	2	3
UE 1	Human resources	Personnel administration	Reduced effort required to process transfer scripts	1	1
UE 1	Human resources	Personnel administration	Reduction of costs from printing and processing personnel action forms (printing, signing, mailing, storing)	–	–
UE 1	Human resources	Personnel administration	Reduction of work effort for filing/storage needs per office (by moving online/self-service)	4	8
UE 1	Human resources	Workforce analytics	Reduction of work effort due to reduction in the administration and production of organization reports (composition report, staffing report, etc.)	1	2
Subtotal				49	80
UE 2	Central support services	Income-generating activities	Increase in gross income/cost recovery from services to the public and staff	4	7
UE 2	Central support services	Service management	Reduction of time spent by service providers in request processing (hours)	1	1

<i>Release</i>	<i>Workstream</i>	<i>Functional scenario</i>	<i>Benefit description</i>	<i>Low-range estimate (millions of United States dollars)</i>	<i>High-range estimate (millions of United States dollars)</i>
UE 2	Finance	Budgeting	Budget review process	–	1
UE 2	Supply chain	Plan	More transparent, consistent, and efficient process regarding letters of assist with Member States	–	–
UE 2	Supply chain	Plan	More transparent, consistent, and efficient process regarding memorandums of understanding with Member States	–	–
UE 2	Supply chain	Plan	Reduction of expendable surplus inventory	5	6
UE 2	Supply chain	Plan	Improved forecast accuracy on expendable assets	29	34
UE 2	Supply chain	Plan	Fewer non-expendable assets reach expiration while in stock	3	3
UE 2	Supply chain	Plan	Reduction of non-expendable carrying costs	1	1
UE 2	Technical	Data management and business intelligence	Improved aggregation of data	6	13
UE 2	Technical	Data management and business intelligence	Reduced budget associated with continual data cleansing	–	–
UE 2	Technical	Data management and business intelligence	Reduced spending associated with report filter changes to avoid bad data	–	1
UE 2	Technical	Data management and business intelligence	Reduction of time associated with fixing errors and aligning data	1	1
UE 2	Technical	Data management and business intelligence	Reduction in number of reporting databases, programmes and service requests	1	2
UE 2	Technical	Potential application decommissioning	Decommissioning systems	30	49
Subtotal				80	119
Grand total				140	223

Abbreviations: UE 1, Umoja Extension 1; UE 2, Umoja Extension 2; UNDP, United Nations Development Programme.

Annex VII

Potential qualitative benefits by Umoja release

<i>Release</i>	<i>Workstream</i>	<i>Level 1 scenario</i>	<i>Benefit description</i>
Foundation	Central support services	Real estate	Improved control over lease deadlines and more timely negotiations
Foundation	Finance	Accounts payable	Reduction in the percentage of commercial invoices exceeding 30 days from receipt to payment
Foundation	Finance	Cash management and treasury investments	Reduction in the number of bank accounts per currency
Foundation	Finance	General ledger	Reduction in the duration of year-end closing, in business days
Foundation	Finance	General ledger, reporting, budgeting, inter-agency, troop-contributing country reimbursement	Alignment of bookkeeping rules with IPSAS compliance
Foundation	Finance	General ledger, reporting, budgeting, inter-agency, troop-contributing country reimbursement	Alignment of general ledger compliance with IPSAS compliance
Foundation	Finance	General ledger, reporting, budgeting, inter-agency, troop-contributing country reimbursement	Increased transparency in reimbursement of Member States
Foundation	Finance	Trust, project and grant management	Increase in total funds received as percentage of total funds pledged through enhanced abilities in donor reporting
Foundation	Supply chain	Contract management	More effective contract management through integrated contract management system
Foundation	Supply chain	Contract management	Greater information availability about contract through increased transparency in contract management
Foundation	Supply chain	Contract management	More efficient contract management (ex post facto procurement and bridging contracts)
Foundation	Supply chain	Contract management	More effective contract management through extended use of key performance indicators

<i>Release</i>	<i>Workstream</i>	<i>Level 1 scenario</i>	<i>Benefit description</i>
Foundation	Supply chain	Facilities management	Increased transparency and efficiency of facility and equipment maintenance
Foundation	Supply chain	Logistics execution	Improved, accurate and timely mechanism for reimbursement to Member States
UE 1	Central support services	Travel management	Greater compliance with requests for security clearance through automated request creation
UE 1	Central support services	Travel management	Reduction in transaction costs per ticket through online booking
UE 1	Central support services	Travel management	Better data which may lead to better airline agreements
UE 1	Finance	Accounts payable	Reduction in average time to process travel claims
UE 1	Finance	Accounts payable — official travel of staff	Reduction in accounts payable cycle time
UE 1	Human resources	Organizational management	Reduction in fees and costs paid to UNDP and UNOPS to administer staff in remote field offices (satellite) if the Organization chooses to do so
UE 1	Human resources	Organizational management	Ease of reporting on operational staffing structure when there are differences from the budgeted staffing table
UE 1	Human resources	Payroll	More complete integration of payroll and human resources transactions globally; today, the local field staff payroll systems are separate from human resources, leading to significant manual work to update human resources actions and time and attendance
UE 1	Human resources	Personnel administration	Reduction in average time for a separated staff member to receive final payment due to a more efficient and transparent clearance process within the integrated system
UE 1	Human resources	Personnel administration	More consistent data between different human resource systems due to a single, globally integrated system

<i>Release</i>	<i>Workstream</i>	<i>Level 1 scenario</i>	<i>Benefit description</i>
UE 1	Human resources	Personnel administration	Reduction in manual processing of offline forms with redundant information due to automation/integration of data
UE 1	Human resources	Personnel administration	Reduction in elapsed time (in workforce full-time equivalent) to complete onboarding (pre-arrival, arrival — first day at duty station) due to integration with Inspira and self-service access pre-and post-appointment
UE 1	Human resources	Personnel administration	Reduction in number of forms to be completed with same personal data during onboarding due to the integrated system
UE 1	Human resources	Personnel administration	Reduction in number of payroll advances due to faster onboarding actions and seamless transfers between duty stations
UE 1	Human resources	Personnel administration	Elimination of script transfers for changing duty stations, resulting in elimination of breaks or delays in payroll, benefit enrolment, or any other administrative actions as a result of transfers between duty stations
UE 1	Human resources	Personnel administration	Reduction in time taken from entry on duty date to personnel action form processed and staff member in payroll due to integration with Inspira and self-service access pre- and post-appointment
UE 1	Human resources	Personnel administration	Ease of tracking the status of an onboarding staff member with the combination of Inspira and Umoja
UE 1	Human resources	Time management	Increased standardization of recording and approving time and attendance with a user-friendly self-service interface for staff, timekeepers and supervisors
UE 1	Human resources	Workforce analytics	Improved ability to access real-time information at the programme and manager level
UE 1	Human resources	Workforce analytics	Improved ability to produce real-time and accurate reporting across the Organization due to the globally and functionally integrated system

<i>Release</i>	<i>Workstream</i>	<i>Level 1 scenario</i>	<i>Benefit description</i>
UE 2	Central support services	Conference management	Improved conference and event management through automation of the processes related to meeting/conference/event coordination
UE 2	Central support services	Facilities management	Improved application of health, safety and environmental and sustainability policies at United Nations facilities
UE 2	Central support services	Facilities management	Greater space optimization; facilities management will be improved through an enterprise resource planning system that will be able to provide the capability to optimize real estate space utilization
UE 2	Finance	Budgeting	Reduction in budget formulation cycle time (assessed)
UE 2	Finance	General ledger, reporting, budgeting, inter-agency, troop-contributing country reimbursement	More efficient financial analysis and reporting through automated business process dashboards which are fully integrated with budgeting and operations
UE 2	Finance	General ledger, reporting, budgeting, inter-agency, troop-contributing country reimbursement	More effective financial budgeting through enablement of continuous budgeting at the tactical, operational and strategic levels
UE 2	Finance	General ledger, reporting, budgeting, inter-agency, troop-contributing country reimbursement	More efficient inter-agency operations through a reduction in manual interventions in inter-agency data exchange
UE 2	Programme and project management	Programme and project management	More transparent and efficient project management
UE 2	Programme and project management	Programme and project management	Reduction in time taken to compile or generate a performance report
UE 2	Programme and project management	Programme and project management	Reduction of time spent in project formulation
UE 2	Supply chain	Contract management	Speedier and more accurate budget estimates for troop and country contributions including troops, equipment, material and services
UE 2	Supply chain	Logistics execution	Optimization of logistical arrangements, transportation, etc. (service delivery model/global field support strategy)

<i>Release</i>	<i>Workstream</i>	<i>Level 1 scenario</i>	<i>Benefit description</i>
UE 2	Supply chain	Logistics execution and procurement	Improved capability to forecast and plan transportation needs
UE 2	Supply chain	Logistics execution and procurement	Reduction in expendable inventory
UE 2	Technical	Potential application decommissioning	Increased integration of United Nations Organization, allowing for a more effective and accurate enterprise resource planning system
UE 2	Technical	Potential application decommissioning	Simplification of application architecture, reducing the number of systems used to accomplish one task
UE 2	Technical	Potential application decommissioning	More complete information flow through system decommissioning

Abbreviations: IPSAS, International Public Sector Accounting Standards; UE 1, Umoja Extension 1; UE 2, Umoja Extension 2; UNDP; United Nations Development Programme; UNOPS, United Nations Office for Project Services.

Annex VIII

Umoja: summary of roles and responsibilities

Assistant Secretary-General-Umoja Project Director	<ul style="list-style-type: none"> • Accountable for ensuring that the project meets its goals in a manner that is aligned with the requirements of the Steering Committee. • Reports to the Steering Committee. • Manages day-to-day project activities. • Identifies and assigns resources to key project positions. • All resources on the project report hierarchically to the Project Director (including part-time resources who are at least 50 per cent engaged in project activities). • All other part-time resources who are engaged less than 50 per cent of their time on the project report functionally to the Project Director. • Manages the project budget. • Monitors progress against key milestones. • Liaises with other United Nations initiatives to synchronize activities. • Communicates with United Nations stakeholders to build and maintain Organization-wide acceptance of the project.
Project management office	<ul style="list-style-type: none"> • Provides the project with coordination and support services required to ensure effective operations, and relations with governance structures. • Ensures that all activities on the project are properly monitored against timelines and budgets. • Supports the Project Director in his relations with the project's governance and oversight bodies.
Quality management	<p>Quality management focuses on the development and implementation of standard processes and practices to ensure quality across the project. In particular quality management:</p> <ul style="list-style-type: none"> • Ensures that all activities, and related procedures, on the project are performed in a manner that ensures appropriate levels of quality. • Reviews procedures and documentation standards to ensure that quality objectives are achieved, and provides advice on how to achieve them where necessary.
Workplan management	<p>Workplan management shall focus on the management of integrated timelines and internal and external dependencies. Detailed plans will be prepared and monitored by project teams. Critical dependencies will be identified, annotated and monitored in the project plan. In particular workplan management:</p> <ul style="list-style-type: none"> • Ensures that planning is conducted in a uniform, accurate and timely fashion.

	<ul style="list-style-type: none"> • Provides the leads with the methodology, processes and tools for defining and maintaining plans. • Consolidates workplans and analyses them to assess feasibility and define critical paths and potential areas of risk. Provides feedback, and advice on how to reduce workplan-related risks. • Rolls up the detailed plan to a level of detail appropriate for different target audiences. • Defines and coordinates status reporting through processes and meetings at various levels within the project. Ensures that status and issues captured at the lowest level are assessed and documented to the highest appropriate level. • Supports the Steering Committee and other project governance bodies by acting as their secretary.
Contract and financial management	<p>Contract and financial management focuses on the management and administration of the contract in accordance with the various provisions therein. In particular contract and financial management:</p> <ul style="list-style-type: none"> • Ensures that project budget forecasts are regularly reviewed. • Reviews the accuracy/feasibility of the forecasts and provides advice to management on how to improve effectiveness/efficiency. • Tracks actuals and provides regular reports to managers on actuals versus forecasts. • Ensures that contracts are managed in accordance with stipulated conditions. • Takes the lead in producing requests for proposals and statements of work on behalf of the project's management. • Monitors contractual agreements to ensure they are met, and proposes corrective actions.
Resource management	<p>Resource management focuses on securing and allocating resources to satisfy demand in a timely manner. In particular resource management:</p> <ul style="list-style-type: none"> • Provides all personnel resource services required for the project's effective operations including the coordination of core staff, subject-matter experts, staff profile planning and succession planning.
Document management	<p>Document management focuses on the management of Umoja documents, ensuring that key project documents and vital team information is safeguarded. This involves the development of a file structure and document depository procedures that identify the types of data to be maintained, the project tools to be used to store data, and the manner in which documents are stored throughout the project life cycle. In particular document management:</p> <ul style="list-style-type: none"> • Ensures that common documentation standards are defined and adhered to.

	<ul style="list-style-type: none"> • Manages documents including those relating to the operations of the project (agendas, minutes, reports, presentations, etc.), as well as those relating to its deliverables (business blueprints, etc.). • Defines document management procedures and ensures that these are followed. • Selects and acts as content administrator of the document management system/s.
Deliverables management	<p>Deliverables management focuses on the identification, ownership, responsibility, quality, status, reporting, tracking, on-time completion and sign-off of project deliverables. Deliverables are maintained within the United Nations deliverables tracking tool. The metrics will include all deliverables by phase, team, category, priority and owner, and indicate current, past due and future deliverables.</p>
Reporting and metrics management	<p>Reporting and metrics management focuses on the identification of a status reporting framework. In particular the methodology (1) rolls up detailed performance data from the project; (2) is focused on forward-looking predictive measures; (3) avoids looking only at point-in-time metrics; (4) is measurable; (5) analyses potential risks and issues; and (6) develops opportunities for more efficient and effective working methods (the project metrics plan). The project will utilize existing United Nations tools like Alfresco, Rapport, UmojaNet and HP Quality Center to capture the inputs to the status reports.</p>
Scope management	<p>Scope management focuses on the management, sizing and prioritization of new or amended requirements of the existing Umoja design, build, test and deploy scope. Change requests will be processed through the Umoja Change Control Board and, as required, Change Advisory Board. In particular scope management:</p> <ul style="list-style-type: none"> • Defines and administers the project's change control process to ensure that decisions regarding potential changes to scope, costs and timelines resulting from design changes are taken at the right levels of authority.
Issues and risk management	<p>Issues and risk management focuses on the process of identification, evaluation, mitigation, and monitoring and reporting of project risks and issues. This process involves the implementation of a standard methodology for reporting, prioritizing and escalating of issues to enable timely resolution. Metrics include a view of aged issues by team, category, priority, owner, planned date, and revised date. In particular issues and risk management:</p> <ul style="list-style-type: none"> • Defines the risks and issues management process and documentation (logs). • Supports the process by ensuring that documentation is completed, and that issues are addressed according to the processes that have been defined, and at the right levels of authority. • Supports the Project Director when presenting and discussing issues and risks at the Steering Committee and at other governance bodies.
Solution architecture management	<ul style="list-style-type: none"> • Ensures the completeness and integrity of the overall solution defined by the project. • Ensures that an effective deployment strategy has been defined.

	<ul style="list-style-type: none"> • Defines the overall testing strategy with the support of other project managers (delivery manager, functional team leads, realization managers, organizational change manager). • Supports the definition of effective testing scenarios (process and data), and ensures that the testing strategy/plans appropriately cover all processes and related systems.
Application integration	Ensures that integration needs across all impacted systems are identified and acted upon.
Process integration	Ensures integration and consistency across all designed processes.
Deployment strategy	<ul style="list-style-type: none"> • Uses knowledge of the solution to define an effective deployment strategy which also ensures that all transitional requirements are met (e.g. that temporary interfaces and procedures have been identified and resolved). • Works with the Project Management Office to identify best means for controlling the deployment. • Works with the organizational change manager to ensure appropriate stakeholder engagement in defining the deployment plan, and in identifying business readiness criteria that can be evaluated. • Works with the delivery manager to identify technical cut-over requirements that need to be included in the deployment strategy. • Supports the realization managers in the implementation of the deployment strategy.
Technology solutions management	<ul style="list-style-type: none"> • Is responsible for building the new technical solution landscape in a way that ensures its best possible operational performance. • Ensures all systems are ready for go-live (fully tested and provisioned). • Ensures that the project has all technical solutions required to operate effectively.
Infrastructure management	<ul style="list-style-type: none"> • Ensures that the technical infrastructure is capable of supporting the requirements of the new solution. • Manages the relationship with entities responsible for implementing and managing the required infrastructure (e.g. ICT units and the International Computing Centre).
Legacy application	<ul style="list-style-type: none"> • Ensures that legacy application changes and development activities are performed effectively to support the required data migration and application integration. • Develops the interfaces with the legacy systems.
Solutions support	<ul style="list-style-type: none"> • Provides tools to support the realization managers during integration and user acceptance testing. • Provides tools to support the organizational change manager during integration and acceptance testing of learning systems.

	<ul style="list-style-type: none"> • Tools include all system environments for testing as well as for the delivery of training and end-user support (necessary related tools/support include data refreshing capacities for training, etc.). • Provides guidance and certifies technical readiness of sites to go live.
Organizational change management	<ul style="list-style-type: none"> • Defines and implements the strategy for minimizing negative impacts to the Organization from the changes being introduced. • The strategy must also identify opportunities for meeting process-productivity goals as rapidly as possible.
Stakeholder relations	<ul style="list-style-type: none"> • Identifies key stakeholder groups and defines a means for effectively engaging them throughout the lifespan of the project. • Defines and implements a communication strategy, and related plan, in support of stakeholder engagement. • Guides and supports all project managers who require to engage with stakeholders in order to be effective.
Organizational alignment	<ul style="list-style-type: none"> • Ensures that the impact of the changes being defined by the project are understood and effectively communicated to the business. • Provides methodological support to business process modelling activities to ensure that these are conducted in a systematic and detailed fashion, and that required organizational information is captured (e.g. responsibility mapping, key performance indicators and metrics). • Provides guidance to the functional teams that map roles and responsibilities in matters of human resources policy and segregation of duties. • Conducts quality assurance and performs analysis on the business process modelling material produced by the teams. • Key deliverables include change impact matrix, workload assessment, and responsibility matrix.
Learning and support	<ul style="list-style-type: none"> • Defines and implements the learning and end-user/employee support strategy. • Defines learning curricula. • Ensures that all learning content is produced on time and to quality standards appropriate for the learning needs of the employees/organization. • Manages all systems selection and implementation (configuration, development, testing, deployment) activities regarding learning and end-user support needs. • Provides requirements for learning technological infrastructure to the delivery manager and ensures that these requirements are met. • Ensures that realization managers produce learning content and deliver training on time, to budget and to standards.

	<ul style="list-style-type: none"> • Defines and delivers training-the-trainer and end-user support process/systems training. • Monitors the effectiveness of training and takes corrective action where necessary.
Delivery management	<ul style="list-style-type: none"> • Ensures that all configuration and development meets business requirements while respecting technological constraints. • Acts as principal interface with external system integrator. • Sets up technical support and access management, process and structure. • Manages system change control management mechanisms. • Business analysts report to the delivery manager during build activities. • Provides methodological support to realization managers, the organizational change manager and others in the performance of testing activities.
Application management	<ul style="list-style-type: none"> • Ensures that configuration and development activities are conducted effectively, and meet the project's quality and cost objectives in a timely manner. • Ensures that an authorization profile strategy (role and access management) is defined and implemented, and that related configuration and testing activities are conducted. • Monitors the performance of the external system integrator regarding all of the above activities.
Foundation and extension realization management	<ul style="list-style-type: none"> • Is accountable for the deployment of the Umoja solution according to the overall deployment strategy. • During the build phase the process experts and their team leaders report to him/her. • Ensures that business requirements (from process to roles and responsibilities) are clearly understood by the configuration and development teams, usually working through the business analysts.
Data management	<ul style="list-style-type: none"> • Ensures that the business is aware of what activities it needs to perform regarding data cleansing and migration. • Monitors the status of that work, reporting it through the Project Management Office.
Testing	<ul style="list-style-type: none"> • Performs all activities required by the testing strategy as concerns the preparation of data, scenario definition and validation, conduction of integration testing, supporting user acceptance testing. • Ensures that team leaders sign off integration test results on behalf of the business.
Deployment	<ul style="list-style-type: none"> • Supports/performs workload, and detailed training needs analysis activities in support of the organizational change management team. • Produces process and roles training material. • Produces system training material.

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- Contributes to the production of any other required training material.
 - Delivers train-the-trainer training.
 - Provides tier 3 process support after go-live (during the stabilization period).

Functional team
leadership

- Is accountable for the design of the solutions within the process area of his/her responsibility.
 - Ensures that the business process owners and other stakeholders involved in approving/validating the processes are appropriately engaged (can call on the organizational change management team for assistance in doing this).
 - During the design phase the functional teams (process experts and business analyst type figures) report to him/her. During build phase the team leader provides expertise and works closely with stakeholders to ensure effective engagement with the project.
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Annex IX

Current staffing levels of the Umoja project team (at 27 September 2012)

<i>Status</i>	<i>ASG</i>	<i>D-1</i>	<i>P-5</i>	<i>P-4</i>	<i>P-3</i>	<i>P-2</i>	<i>GS (PL)</i>	<i>GS (OL)</i>	<i>Total</i>	<i>Percentage</i>
Filled										
Regular	1	7	14	31	9	–	1	8	71	79
Temporary	–	–	2	1	–	–	–	2	5	6
Subtotal, filled	1	7	16	32	9	–	1	10	76	84
Selected	–	–	2	2	–	–	–	–	4	4
With central review body	–	–	–	–	–	–	–	1	1	–
Under evaluation	–	1	1	–	–	–	–	–	2	–
Advertised	–	–	–	2	–	–	–	1	3	3
To be advertised	–	–	2	1	–	1	–	–	4	4
Subtotal, unfilled	–	1	5	5	–	1	–	2	14	16
Authorized	1	8	21	37	9	1	1	12	90	100

Status of subject-matter experts (at 27 September 2012)

<i>Status</i>	<i>D-2</i>	<i>D-1</i>	<i>P-5</i>	<i>P-4</i>	<i>P-3</i>	<i>P-2</i>	<i>GS (PL)</i>	<i>Total</i>
Umoja Foundation realization	–	–	–	2	2	–	2	6
Umoja Foundation build programme	–	–	–	4	1	–	–	5
Organizational change management	–	–	–	1	–	–	–	1
Extension realization	–	–	2	2	2	–	–	6
Project Management Office	–	–	2	–	–	–	–	2
Technical solutions	–	–	1	2	–	–	–	3
Solution architect	–	–	–	1	–	–	–	1
Total	–	–	5	12	5	–	2	24

Abbreviations: ASG, Assistant Secretary-General; GS, General Service; PL, Principal level; OL, Other level.

Annex X

Umoja: approved resource requirements by General Assembly resolution and source of funds

(Thousands of United States dollars)

Resolution	Regular budget (a)	Support account (b)	Extrabudgetary resources (c)	Subtotal (d)=(a)+(b)+(c)	Actual and projected expenditure ^a		
					Total expenditure per biennium (e)	Difference (d)-(e)	Cumulative balance
Share (percentage)	15	62	23				
2008-2009							
63/262	5 110.0	July 2008-June 2009	7 050.0	7 840.0	20 000.0	17 699.7	2 300.3
2010-2011							
64/243	11 182.9	July 2009-June 2010	28 516.5	37 090.1	76 789.5		
64/271		July 2010-June 2011	57 033.0		57 033.0		
65/290		July-December 2011	28 516.4		28 516.4		
Subtotal, 2010-2011	11 182.9		114 065.9	37 090.1	162 338.9	100 709.1	61 629.8
2012-2013							
65/290		January-June 2012	18 668.8	27 702.1	46 370.9		
66/265		July-December 2012	18 668.8		18 668.8		
66/265		January-June 2013	18 668.8		18 668.8		
		July 2013-June 2014	18 668.9		18 668.9		
Subtotal, 2012-2013	—		74 675.3	27 702.1	102 377.4	134 889.1	(32 511.7)
Details of regular budget funds outstanding							
Requested in 2012-2013, not approved by the General Assembly at its sixty-sixth session	12 214.8						
Commitment authority approved by resolution 66/246 for which no appropriation will be required during the biennium 2012-2013	5 591.5						

Resolution	Regular budget (a)	Support account (b)	Extrabudgetary resources (c)	Subtotal (d)=(a)+(b)+(c)	Actual and projected expenditure ^a			
					Total expenditure per biennium (e)	Difference (d)-(e)	Cumulative balance	
Unutilized commitment authority in respect of the biennium 2010-2011 (as detailed in para. 85 (c) of the third progress report (A/66/381))	13 269.7							
Total outstanding, 2014-2015	31 076.0		–	–	31 076.0	51 421.1	(20 345.1)	11 073.3
Original estimate	47 368.9		195 791.2	72 632.2	315 792.3			
Fourth progress report (A/67/360) additional, 2014-2015	4 851.9	July 2014-June 2015	20 054.7	7 439.6	32 346.2	43 419.5	(11 073.3)	(0.0)
Total revised overall requirements (A/67/360)	52 220.8		215 845.9	80 071.8	348 138.5	348 138.5	(0.0)	(0.0)

^a A/67/360, table 2.