



INTERNAL AUDIT DIVISION

AUDIT REPORT

Planned construction of additional office facilities at the Economic Commission for Africa

**Inadequate coordination has led to lengthy
delays in the procurement process**

25 November 2009

Assignment No. AC2009/514/01

INTERNAL AUDIT DIVISION

FUNCTION

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

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INTEROFFICE MEMORANDUM

MEMORANDUM INTERIEUR

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

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

DATE: 25 November 2009

Mr. Abdoulie Janneh, Executive Secretary,
Economic Commission for Africa

REFERENCE: IAD: 09- 03152

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



SUBJECT: **Assignment No. AC2009/514/01 - Audit of the planned construction of additional office facilities
OBJET: at the Economic Commission for Africa**

1. I am pleased to present the report on the above-mentioned audit.
2. Based on your comments, we are pleased to inform you that we will close recommendations 3, 5, 6, 7, 9 and 10 in the OIOS recommendations database as indicated in Annex 1. In order for us to close the remaining recommendations, we request that you provide us with the additional information as discussed in the text of the report and also summarized in Annex 1.
3. Your response indicated that you did not accept recommendation 12 in its original form. It has been redrafted and in OIOS' opinion this recommendation seeks to address a significant risk area. We are therefore requesting that you reconsider your initial response based on the additional information provided in the report. (A memorandum dated 16 October 2009 and sent to the Director, Office of the Under-Secretary-General for Management also refers to it).
4. Please note that OIOS will report on the progress made to implement its recommendations, particularly those designated as high risk (i.e., recommendations 1, 4, 5, 6, 7, 10, 12, 13, 14, 15 and 16) in its annual report to the General Assembly and semi-annual report to the Secretary-General.

cc: Mr. Warren Sach, ASG, Office of Central Support Services
Mr. Jun Yamazaki, ASG and Controller, Office of Programme Planning, Budget and Accounts
Mr. Michael Adlerstein, ASG and Executive Director, Capital Master Plan
Mr. Swatantra Goolsarran, Executive Secretary, UN Board of Auditors
Ms. Susanne Frueh, Executive Secretary, Joint Inspection Unit Secretariat
Mr. Moses Bamuwamye, Chief, Oversight Support Unit, Department of Management
Mr. Byung-Kun Min, Special Assistant to the USG, OIOS
Mr. William Petersen, Chief, New York Audit Service, OIOS

EXECUTIVE SUMMARY

Audit of the planned construction of additional office facilities at the Economic Commission for Africa

OIOS conducted an audit of the planned construction of additional office facilities at the Economic Commission for Africa (ECA) in response to a request made as part of the resolution 63/263 by the General Assembly entrusting the Office of Internal Oversight Services to ensure continuing effective audit coverage and regular, thorough management reviews of this construction project. The overall objective of the audit was to assess the adequacy of controls related to the project. The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.

The construction project was subject to several delays. This report therefore identifies the primary causes of these delays and contains recommendations that aim to promote better control and minimize delays in the future.

The most significant findings were:

- (a) The project has been centrally managed with responsibility assigned to the Office of Central Support Services (OCSS) at headquarters. Headquarters conducted the procurement exercise, but ECA will be responsible for supervising the construction project, with technical support from headquarters' Facilities Management Service (FMS). There have been occasions in the past when poor coordination between Headquarters and ECA has been evident, but more recently concerted efforts have been made to improve this.
- (b) The organization proposed by ECA for project management and endorsed by the Assistant Secretary-General, Executive Director, Capital Master Plan and the FMS, Office of Central Support Services should afford adequate control. However, the roles, responsibilities, contacts and reporting lines of the various members of the project team need to be firmed up and recorded. There is also a need to ensure that the project team at ECA is fully staffed before construction commences.
- (c) Some key management positions at ECA have remained unfilled for extended periods. OIOS is concerned that overall governance of the ECA departments could impact on project control and oversight and consequently affect the project's success.
- (d) The quality of the international architect's product has fallen short of expectations and the option to extend its services through construction has not been taken up. Much of the delay to the project is attributable to the difficulties experienced in the procurement and contract management of architectural services and the protracted production of the construction documents. Further delays have occurred because of the unforeseen difficulties in appointing a contractor to undertake the works within the available budget.

(e) The existing contract documentation does not conform to usual local practice and requires revision to enable better control over the project. A local consultant will provide a new bill of quantities. (A bill of quantities is a detailed document used in tendering so that materials and labour and their costs are itemized).

(f) The outcome of the procurement exercise for the construction contractor was disappointing. Only two eligible bids were received and both exceeded the budget by a wide margin and there is a risk that budgetary limits will compromise the project objectives.

(g) As the project progresses, there will need to be an increased emphasis on stakeholder management.

(h) Records should be kept of important issues affecting progress as the project proceeds, and lessons learned should be used to benefit future projects.

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I. INTRODUCTION

1. The Office of Internal Oversight Services (OIOS) conducted an audit of the planned construction of additional office facilities at the Economic Commission for Africa (ECA) in Addis Ababa. The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.

2. By its resolutions 56/270, 60/248 and 62/238, the General Assembly approved the construction of additional office facilities at the headquarters of the ECA in Addis Ababa.

3. The construction project has been subject to delays and cost escalation, and the Advisory Committee on Administrative and Budgetary Questions has criticized that "it is clear from the reports of the Secretary-General on construction projects at ECA...that the arrangements...for planning, managing and monitoring projects for the development of new facilities and major maintenance are neither adequate nor well-implemented." In its report A/63/465 to the General Assembly, the Advisory Committee on Administrative and Budgetary Questions went on to make further criticisms.

4. In its resolution 63/263, Agenda item 118 "Questions relating to the programme budget for the biennium 2008-2009," the General Assembly also expressed concern "about the delays and procedural difficulties in the execution of the projects at the ECA in Addis Ababa...which are contributing to project cost escalation." The General Assembly further requested "the Secretary-General to entrust the OIOS with ensuring continuing effective audit coverage as well as regular, thorough management reviews of the construction of additional office facilities at the ECA in Addis Ababa...to be reported on in the annual report of the OIOS to the General Assembly." It is intended that this report will form the basis of the requested information to be presented in the OIOS annual report.

5. Comments made by staff of the Department of Management are shown in *italics*.

II. AUDIT OBJECTIVES

6. The main objectives of the audit were to:

(a) Ascertain whether rules and procedures on procurement, contracting and project management have been complied with;

(b) Determine whether the budgetary provisions are adequate, whether adequate financial control has been applied, and whether payments have been authorized in a correct and timely manner; and;

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- (c) Determine whether the organizational and management structure for the planning and execution of the construction project has been effective.

III. AUDIT SCOPE AND METHODOLOGY

7. A risk-based audit approach was adopted in the examination of the planned construction project and its associated systems. This conforms with the general approach taken for audits conducted by the Internal Audit Division of OIOS.

8. OIOS interviewed key staff in both New York and Addis Ababa and examined project documentation. Construction had not yet commenced at the time of the audit and the scope included all aspects of the pre-contract stage. The goal of the audit was to form an opinion as to the adequacy of governance and progress to date, to determine where delays and inefficiencies had occurred and to note the lessons learned.

IV. AUDIT FINDINGS AND RECOMMENDATIONS

A. A timeline of events and causes of delay

9. A timeline of events is outlined below and is used to identify delays to the project schedule.

- | | |
|----------------|---|
| December 2001 | The Secretary-General defined the need for new office facilities. The proposal was for 6,770 square metres costing an estimated \$7,711,800. |
| May 2002 | The project was approved by the General Assembly. |
| August 2002 | Construction was scheduled for completion by January 2006. |
| June/July 2003 | The host country allocated additional land. A construction architect was recruited to set up a Project Coordination Unit at ECA. |
| 2004/2005 | Design Phase, followed by design revisions due to building repositioning and security requirements. In October 2004, construction was scheduled for completion by April 2007. |
| February 2005 | A geotechnical report uncovered drastically atypical soil conditions requiring strengthening of foundations. |

2006/2007	Design revisions were undertaken to add two floors to make a total of 9,550 square metres costing an estimated \$11,383,300. In July 2006, construction and interior set-up was scheduled for completion by September 2009.
April 2007	A new Project Coordinator took up the position at ECA.
April/June 2007	Design revisions were made including elevators and electrical circuitry. The General Assembly endorsed the revised project estimate of \$14,333,100.
August 2007	The international architect submitted construction drawings but further revisions were required.
October 2007	Construction and interior set-up was scheduled for completion by July 2010.
December 2007	Revised construction drawings from the international architect were accepted.
January 2008	A new local architect was hired to undertake construction administration and supervision.
May /June 2008	Construction tenders were issued. A bidders' conference was held in Addis Ababa. The bid submission date was extended from mid-July to mid-September 2008.
September 2008	Of the five construction contractors that were invited to bid, only three submitted bids, one of which was disqualified.
March 2009	The Assistant Secretary-General (ASG), Office of Central Support Services (OCSS) informed the Executive Secretary of the ECA that he had decided to "reject the recommendation made by the Headquarters Committee on Contracts to authorize a negotiated contract for the provision of construction services for a new office facility at ECA." This decision was taken in light of a report by the OIOS Procurement Task Force (PTF) on procurement operations at ECA.

Causes of delays

10. Delays are a prime cause of cost escalations with construction projects and are considered a major risk to achieving the business plan. In view of the length of time taken so far without having commenced

construction, OIOS has identified main causes of delays to the ECA new offices facilities project as follows:

(a) Requests for proposals were issued to four professional architectural and engineering services firms in November 2002, but none of the submissions were acceptable.

(b) Prolonged negotiations with the host country and local authorities resulted in the allocation of additional land (mid-2003) to ECA and approval (May 2004) for the re-routing of public roads for security reasons.

(c) In his report to the General Assembly (A/59/444 dated 19 October 2004), the Secretary-General stated that "the rebidding of the design contract and negotiations with the host country authorities...have resulted in a delay of some 20 months..."

(d) In February 2005, a geotechnical report uncovered "drastically atypical" soil conditions requiring the strengthening of foundations. This necessitated revision of construction documentation and an amendment to the design contract was issued in March 2005. Report A/59/444 stated that design documentation and final construction estimates were expected to be available by December 2004, but they were submitted for review only on 12 September 2005.

(e) In his report to the General Assembly (A/60/532, dated 3 November 2005), the Secretary-General stated that the contract was then 24 months behind schedule. An additional delay of five months was identified if the ECA or headquarters decided to include two extra floors within the building.

(f) An amendment to the architect's contract for revision of construction documents in light of the two additional floors was signed in July 2006. Completion of final construction documents was now "expected by the latter half of 2006."

(g) The architect submitted revised drawings in September 2006, but these were not acceptable to ECA who identified a number of deficiencies. Negotiations were undertaken with the international architect and amendments to the contract were signed on 13 June 2007. The architect submitted the next iteration to ECA at the end of August 2007.

(h) Headquarters then re-engaged the international architect for another round of revisions, which, according to ECA, "resulted in negligible improvements and significant delays." The Secretary-General reported to the General Assembly (A/62/487 dated 15 October 2007) that: "in view of the difficulty

encountered by the international architect in coordinating the project from abroad, a decision was taken to hire a locally based architect for the construction phase of the project...”

(i) The revised construction documents were received in January 2008, which enabled the United Nations to hire a local architect to finish the work.

(j) On 20 May 2008, PD issued requests for proposals to several construction firms. The deadline for returning the submissions was extended twice. The extensions were at the request of the bidders and were caused in part by European suppliers which were unable to provide prices during the summer vacation period. Only two eligible bids were received by the 12 September 2008 closing date. Both of these bids far exceeded the budget.

(k) On 19 November 2008, the ASG Executive Director, Capital Master Plan, on the basis of reasoned argument (see paragraphs 47 and 48 below), wrote to advise the ASG, OCSS that the Facilities Management Service (FMS) and PD jointly recommended that all bids be rejected and that immediate direct negotiations with the five companies which participated in the mandatory bidders conference be authorized.

(l) The ASG, OCSS approved this recommendation ((k) above) subject to conditions, but the findings of the PTF report on procurement operations at ECA led the ASG, OCSS to decide that negotiations with the bidders should not take place after all, and that a new bidding exercise should be conducted.

11. OIOS’ examination of records supports the view that much of the delay is attributable to the difficulties experienced in the procurement and contract management of architectural services and the protracted production of the construction documents. The delays in the production of construction documents were due to changes in scope and poor performance by the firm that was employed. Further delays have occurred because of the unforeseen difficulties in appointing a contractor to undertake the works within the available budget. Moreover, the extended periods that some key management positions at ECA have remained vacant have affected the overall governance of the ECA. The consequential decision to invite new bids for the construction work will add to the delays that have already occurred. These delays cannot be fully quantified at the current time. The recruitment of key posts should be a prerequisite to starting construction.

B. Organization and staffing. The respective roles of the United Nations Secretariat and the Economic Commission for Africa

12. When the Secretary-General's initial report on the proposed construction of additional office facilities at the Economic Commission for Africa was presented to the General Assembly (Agenda item 122, A/56/672, 3 December 2001) it stated that the project would be centrally managed with responsibility assigned to the Office of Central Support Services of the United Nations Secretariat. However, the Project Coordination Unit at ECA would be responsible for local management of the project including liaison and supervision of local architects, quantity surveyors and other essential personnel, as well as liaison and coordination with the intended tenants of the new building and local authorities.

13. This report identifies some areas where better understanding of local conditions on the part of the international architects and headquarters' departments would have improved progress to date. OIOS does not, however, recommend any change in roles.

Headquarters organization and coordination with ECA

14. PD and FMS have been involved in the arrangements associated with progressing the project since its early stages. PD conducted the initial request for proposals from international architects, and later arranged the solicitation of bids from prospective contractors. PD has also taken an active advisory role, including advice on the contract management of the architects.

15. FMS has been responsible for technical support and overall contract management. In OIOS' view, there may be scope for a greater role for the FMS through its Overseas Property Management and Information Exchange Network which in the past had a more prominent role in the organization.

16. During the course of the audit, it was clear that there have been times when a number of factors at both headquarters and ECA have contributed to poor organizational coordination and responsiveness. This was particularly the case in the earlier stages of the project, and had been exacerbated by staff turnover at headquarters and a lack of consistent project management capacity at ECA. It is evident that ECA has spent much time reviewing the documentation prepared by the international architects, and trying to promote an understanding of the local working practices. When criticisms were raised by ECA, the responses from headquarters have not always been prompt and sometimes the outcomes have not been satisfactory to ECA. Most of the local knowledge, particularly of the local construction industry and its methodology, is held at ECA.

17. The project coordinator position at ECA was vacant for most of 2005 and 2006. The present incumbent took up the post in 2007 and this caused a delay in reviewing documentation. The Office of Central Support Services stated that the general high vacancy rates at ECA adversely affected management support for the project. The parties involved were not always familiar with procurement and

other procedures for large construction projects and this was the source of misunderstandings. There were also disagreements over building requirements which the international architect and headquarters felt were important in ensuring that the office facilities would be fully functional. OIOS is aware of the constructive input that has recently been made by headquarters' staff including the ASG, Executive Director of the Capital Master Plan, Director of Facilities and Commercial Activities, and the Chief, Corporate and IT Procurement Section, PD, but this guidance has been provided after most of the problems occurred. As a result of their review of the project conducted in February 2009, it was agreed to recruit a senior project manager at ECA.

18. OIOS is of the opinion that headquarters' procurement staff need to demonstrate greater expertise of the construction industry at all stages of a project, and certainly during procurement and the contract management of international architects and construction contractors. In OIOS' view, the Procurement Division should consider plans for future construction and determine whether a procurement officer with construction or project management qualifications should be recruited. Alternatively, it may be possible to use consultants to provide the Division with ready access to construction industry procurement knowledge, as and when required. *PD commented that specialist staff with construction expertise had been employed for the capital master plan project.*

ECA Organization

19. ECA has employed a full-time Project Coordinator who reports to the Chief, Facilities Management Section. During construction, it is planned that the Project Coordinator will head a Project Coordination Unit staffed with an electrical engineer and a mechanical engineer (who are already in place). Additionally, four technical support staff are expected to join the Project Coordination Unit for the duration of the project. The duties of one of these engineers will include financial management, such as budget preparation, payments and cost control, change orders and liaison with procurement. At least one of the technical support staff will undertake full-time clerk of works duties. OIOS notes that it will be necessary to recruit staff and they will need to be on board before the construction commences, so as not to adversely impact the project or cause further delays. (Since the audit, it has been reported that a Project Manager at the P5 level will be appointed before construction commences).

20. The Project Coordinator will have an office on the construction site which will facilitate a continuing presence on site by staff of the Project Coordination Unit. The contract with the international architects has not been extended to cover the construction period, so there will be a role for the local architects to ensure that the works undertaken faithfully reflect the designs and drawings that have been prepared.

21. Following a visit to ECA by the ASG, Executive Director of the Capital Master Plan and Director of Facilities and Commercial Activities in February 2009, they identified the need for an independent consultant to provide

verification of quantities and quality. Preliminary drafts of a “proposed construction team and management structure” show this function as reporting directly to Director (currently Officer-in-Charge) of Administration with communication links to the Project Coordinator. OIOS appreciates the need for oversight, which is the rationale for the independent consultant reporting directly to the Director of Administration. However, the roles, responsibilities, contacts and reporting lines of the various members of the project team need to be firmed up and recorded. Also, ECA needs to clearly define the responsibilities for preparing and distributing progress reports (or construction project reports) and determining its distribution list.

22. During the OIOS visit to ECA, OIOS learned that some key management positions have remained unfilled for extended periods of time. The positions left unfilled included the Director of Administration, Chief of General Services and Chief of Procurement. OIOS is concerned that successful delivery of the project will be affected by the overall governance of the ECA offices which could impact on project control and oversight.

Recommendations 1 through 4

(1) The ECA Project Coordinator should determine when new technical support staff appointments should take effect, and consult the Director of Administration and the Chief, Human Resources Services Section at ECA to try and ensure that staff are recruited in a timely manner.

(2) The ECA Project Coordinator should prepare job descriptions for the staff in the Project Coordination Unit, and clear terms of reference and working practices for the independent consultants.

(3) The ECA Project Coordinator should determine the responsibility for preparing construction progress reports, their frequency and distribution.

(4) The Executive Secretary of ECA should ensure that a concerted effort is made to recruit suitable staff to key positions expeditiously.

23. *The ECA Administration and OCSS accepted recommendation 1 and stated that implementation is in progress and should be completed by January 2010. An updated project timeline has been developed in consultation with the Officer-in-Charge of Administration and the Chief, Human Resources Services Section at ECA to determine when additional technical staff will be needed to support the project.* Recommendation 1 remains open pending OIOS’ receipt of the project timeline and confirmation that the required staff members have taken up their appointments.

24. *The ECA Administration and OCSS accepted recommendation 2 and stated that implementation is in progress and should be completed by November*

2009. *The Terms of Reference for the additional project team members, Clerk of Works Technical Assistant, Financial Assistant, and Independent Technical Advisor were developed by the ECA Project Coordinator in consultation with the Officer-in-Charge of Administration and are being finalized.* Recommendation 2 remains open pending OIOS' receipt of the finalized terms of reference.

25. *The ECA Administration and OCSS accepted recommendation 3 and stated that the ECA Project Coordinator will be responsible for submitting progress reports on a monthly basis as specified in the "Administrative and Coordination Arrangements" document.* Based on the action taken, recommendation 3 has been closed.

26. *The ECA Administration and OCSS accepted recommendation 4 and provided an implementation date of December 2009. In his memorandum of 22 May 2009 to the ASG, OCSS, the Executive Secretary of ECA acknowledged the importance of timely recruitment and the need to strengthen the project team. He agreed that a P5 Senior Project Manager will be recruited by ECA to lead the project team and move the project forward into construction. As at mid-October 2009 the recruitment process was in the final stages of selection. Additional technical support staff will be recruited under the supervision of the new P5 Senior Project Manager once on board.* Recommendation 4 remains open pending OIOS' receipt of confirmation that the required staff members have taken up their appointments.

C. International architect

27. A firm of architects from the United States was selected to provide design and construction drawings. OIOS was informed that difficulties were experienced with the firm as follows:

(a) The architectural firm was not empathetic to local practices. Architectural practices in the United States differ from those adopted in other locations such as Europe and Africa. For example, when seeking bids, American architects normally provide details on the drawings and expect that contractors prepare their prices based on the drawings. Conversely, architects in Europe usually prepare a bill of quantities to supplement the information given on the drawings. The bill of quantities is then supplied to contractors, who base their bids on the quantities provided. In this project, the architectural firm did eventually provide a bill of quantities, but it was late and considered deficient by ECA. The ECA personnel and the contractors in Addis Ababa were more familiar with the European system of using comprehensive bills of quantities.

(b) The General Assembly was informed of difficulties experienced by the international architect in coordinating the project from abroad. (Agenda item 128, A/62/487, 15 October 2007).

(c) ECA personnel described the production of the drawings as "below standard" and stated that the US architect had not always followed the brief. It was stated that they did not carry out required amendments. Specific examples were given to support this statement:

(i) Electrical drawings were produced for 110 volt systems. Addis Ababa has 220 volts systems.

(ii) Fewer than the required number of elevators were specified. ECA got calculations from other sources to support this assertion.

(iii) Drawings were prepared in imperial measurements instead of metric, which is the standard used in Addis Ababa.

(d) Designs for electrical and mechanical services were sub-contracted. There were quality issues that ECA considers were caused by insufficient control by the principal firm.

(e) The contract with the architectural firm required the design to be within the available budget. This proved not to be the case, as the construction bids received were much higher than the budget. Reference was made to the inclusion of fire dampers near the windows. These were not included in the original cost estimates and would have cost around \$1 million. The fire dampers will now be omitted, but it is not clear to ECA why they were included in the first place. There are also other reasons why the bids were highly priced. See paragraphs 31 - 36 below.

28. A local firm of architects and engineers has now been commissioned and will make required design changes to the international architects' submissions. The Chief, Facilities Management Section and the Project Coordinator at ECA have identified a number of lessons learned from this project and OIOS includes one the lessons in the recommendation below. OIOS was informed during the audit that it is possible to formulate a project anywhere in the world, but there must be early contact with a local consultant.

29. In a recent audit report (AC2009/514/08) on the construction of additional facilities and improvements to conference facilities at the United Nations Office at Nairobi (UNON), OIOS recommended that in the future, if an international architect is engaged for a major construction project, it should have a local consultant as a complementary counterpart of its team to advise from an early stage. The Procurement Division and Facilities Management Service, Office of Central Support Services should include this requirement as a clause in the request for proposal. The Facilities Management Service accepted this recommendation.

Recommendation 5

(5) The Procurement Division should award future architectural, engineering and quantity surveying contracts to firms that have experience in local working procedures for the country or region where the construction is planned.

30. *OCSS accepted recommendation 5 and stated that implementation is ongoing. Future expressions of interest and requests for proposals should require that vendors, for the purpose of bidding, must demonstrate as part of their qualifications local and /or regional experience regarding architectural, engineering or quantity surveying (estimating) services. If the Statement of Works from the requisitioning office requires a local consultant, this will then be added to the request for proposal. Based on the action taken, recommendation 5 has been closed.*

D. Contract, design and construction drawings and bill of quantities

31. The prime instruments for reducing uncertainties for contractors are the contract, the drawings and the bill of quantities, and it is important that these are accurately prepared before bids are invited. This was not the case for the drawings and the bill of quantities at Addis Ababa.

32. Prior to the procurement of construction projects, it is essential that uncertainties are minimized for bidders in order to ensure that best value is obtained. When uncertainties exist, the following may occur:

(a) Delays: Bidders may react by asking questions that extend the bidding deadline;

(b) Increased costs: Bidders may raise prices to cover the perceived risks; or

(c) Reduced competition: Bidders may drop out of the competition altogether.

33. All three of these risks became actualities for the ECA project. Whatever form the contractors' reaction takes, it is fair to say that uncertainty works against the UN attaining the best value. Furthermore, projects that are ill-defined from the outset are more likely to suffer from misunderstandings, disputes, claims, delays and cost overruns. The preparation of sound design and construction drawings and a bill of quantities provide a good foundation in the event of a decision to enter into best and final offer negotiations, and OIOS would not favour entering into such negotiations until these documents are finalized.

34. Of five construction contractors that were invited to bid, only three responded by the extended closing date of 12 September 2008. Of these three, one contractor was disqualified for failing to follow the United Nations

procurement procedures. This left only two bids that were significantly higher than the estimated construction and site works cost. OIOS has been advised that the two submissions were substantially above market prices and is of the opinion that a contributing factor to the overpricing was the inadequacy of the design and construction drawings and bill of quantities. A local firm has now been commissioned to produce a revised bill of quantities, but this will need further revision to include cost reductions that will be required if the budget is not to be exceeded.

35. The form of contract used to solicit bids for this project was developed by the United Nations headquarters. OIOS was advised that personnel at ECA and contractors in East Africa are not familiar with the terms and conditions of the United Nations contract and usually use the standard form of the International Federation of Consulting Engineers (FIDIC). Use of this form of contract (or another international standard), would give the advantage of being better understood by contractors. It would also have been tested in arbitration or court for scenarios that may arise, given the complex nature of construction works. The possibility of using FIDIC had been raised with and addressed by the Office of Legal Affairs back in 2005. At that time, the Office of Legal Affairs was not in favour, but it may be worth revisiting this possibility for future projects. The World Bank uses FIDIC with additional clauses added for special circumstances, if required. (It is noteworthy that United Nations staff based in Nairobi also favour the use of FIDIC). In the audit report on the construction of additional facilities and improvements to conference facilities at UNON (AC2009/514/08), OIOS recommended that the Procurement Division, in consultation with the Office of Legal Affairs, should examine whether it would be acceptable to use international forms of construction contracts that are familiar to local technical staff and contractors for future construction works. OCSS accepted this recommendation.

36. There was still some uncertainty regarding several aspects of the contract. It was not clear to ECA whether there would be an advance payment, and if so what percentage would be advanced. There was also a lack of clarity with regard to how payments would be made, and whether this would be a headquarters or ECA responsibility. The ECA Project Coordinator stated that progress payments would only be made every two months, but it was not clear if valuations would still be conducted monthly (as is usually the case). Similarly, penalty and retention amounts had not been finalized. Moreover, the Statement of Works which was developed in New York also needed amendment. For example, it referred to a "Blue Book" which has no meaning in Ethiopia.

Recommendations 6 and 7

(6) The Facilities Management Service, Office of Central Support Services should ensure that sound documentation that is basic to bidding for and managing contracts is in place before bids are solicited. For construction contracts in most parts of the world that documentation includes accurate design and construction drawings, and a bill of quantities.

(7) The ECA Project Coordinator should ensure the ECA and headquarters staff liaise further and finalise contractual conditions prior to the solicitation of new bids for construction.

37. *OCSS accepted recommendation 6 and stated that it had been implemented. A local architecture firm, contracted in July 2008 to supervise the project during construction, was additionally contracted in June 2009 to review and revise all the documents and specifications for construction. These documents have been completed and will be issued in the new tender for construction. Based on the action taken, recommendation 6 has been closed.*

38. *The ECA Administration and OCSS accepted recommendation 7 and stated that all documentation required for the new request for proposal such as the statement of works, draft contract, special conditions of contract and construction documents are being reviewed and coordinated by ECA, the local architectural consultant, headquarters Facilities Management Service, and Procurement Division prior to being issued in the new tender for construction. Based on the action taken, recommendation 7 has been closed.*

E. Risk management and administration and coordination arrangements

Risk management

39. OIOS considers that a risk management approach, whereby a risk assessment is undertaken and a risk register prepared, would have helped to identify risks and present them in a structured manner during the pre-contract stage. The risks could then have been kept under continuous review and mitigating actions taken, as appropriate. This approach, for example, may have helped to alert staff to the risk of geotechnical conditions affecting design and enabled mitigating action to be taken at an earlier stage. A risk management approach would also aid project control during the construction stage.

Recommendation 8

(8) The ECA Project Coordinator, in collaboration with other members of the project team, should conduct a risk assessment for the construction of the new office facility and prepare a risk register. This should be kept under continuous review by the project team at regular intervals and decisions taken on mitigating actions, as appropriate, and responsibilities assigned.

40. *The ECA Administration and OCSS accepted recommendation 8 and stated that a risk assessment for the construction of the new office facility and preparation of a risk register would be developed by the project team and monitored weekly during construction. The date of implementation was stated as*

February 2010. Recommendation 8 remains open pending OIOS' receipt of the risk register.

Administration and coordination arrangements

41. The Chief, Facilities Management Section at ECA prepared an "Administrative and Coordination Arrangements" document for the project that was approved by the UN Controller on 8 March 2008. It passed through a number of iterations and there are recent proposed amendments to include areas such as risk management, security, quality control and auditing.

42. The Project Coordinator has been preparing Comprehensive Monthly Progress Reports since November 2007 and these give important management information in a well organized format.

43. The ASG, Executive Director of the Capital Master Plan and the Director of Facilities and Commercial Activities visited ECA in March 2009 and reviewed the project organization. Weekly video conferences are now being held between ECA and headquarters staff in an effort to improve coordination. The role of the proposed project coordination group is discussed in paragraphs 67-69 below.

Recommendation 9

(9) The ECA Chief, Facilities Management Section should update the "Administrative and Coordination Arrangements" document to reflect the proposed revisions and submit it through the Officer-in-Charge of Administration to the Assistant Secretary-General, Office of Central Support Services for approval.

44. *The ECA Administration and OCSS accepted recommendation 9 and stated that the "Administrative and Coordination Arrangements" document was revised and approved by the ASG of OCSS. The Executive Secretary of ECA acknowledged his agreement with the revisions in May 2009. Based on the action taken, recommendation 9 has been closed.*

F. Procurement for the construction project

45. Procurement was undertaken by the PD in New York. Six firms had responded to a request for expressions of interest made in January 2008.

46. On 20 May 2008, PD issued requests for proposals to these firms. The deadline for returning the submissions was extended twice because of queries raised by bidders that resulted in five amendments to the original request for proposals. Only three bids were received by the 12 September 2008 closing date. PD subsequently disqualified one of these firms as it had not followed mandatory procurement procedures

thus leaving only two firms (see paragraph 34). OIOS considers this a very disappointing outcome for the procurement process. The risk of collaboration between the contractors is considered high, especially since both bids were well above prevailing market rates.

47. On 19 November 2008, the ASG, Executive Director, Capital Master Plan wrote to advise the ASG, OCSS that in order to construct the new building within the approved budget, the scope of the request for proposal would need to be substantially revised. The basic design of the building would be maintained but the initial size of the building would be reduced. This would allow for future additions to complete the full design. A re-tender would add to costs and delay the project for another 6 months to one year, with no guarantee that the outcome of the re-tender would be significantly improved.

48. The ASG, Executive Director, Capital Master Plan, on the basis of reasoned argument stated that "...FMS and PD jointly recommend that all bids be rejected and that immediate direct negotiations with the five companies which participated in the mandatory bidders conference be authorized, pursuant to Financial Rule 105.15(c)."

49. The ASG, OCSS approved this recommendation, subject to: (a) the results of negotiations being presented to the Headquarters Committee on Contracts for recommendations before the contract is approved; (b) a clear presentation on scope and quality being provided to the Headquarters Committee on Contracts; and (c) arrangements fully reflecting any decision made by the General Assembly on the project in December 2008.

50. Events transpired that resulted in no negotiations with the bidders taking place after all. One of the nominated sub-contractors for the new office facility at ECA has been suspended from the United Nations' approved vendor list following a Procurement Task Force investigation at ECA. Subsequently, on 19 March 2009, the ASG, OCSS wrote to the Executive Secretary of ECA to inform him that he had decided to "reject the recommendation made by the Headquarters Committee on Contracts to authorize a negotiated contract for the provision of construction services for a new office facility at ECA."

51. OIOS considers that this unfortunate occurrence now gives an opportunity for ensuring that accurate design and construction drawings, bill of quantities and a finalized contract are agreed with ECA prior to inviting new expressions of interest from prospective bidders.

Recommendation 10

(10) The Facilities Management Service, OCSS should ensure that accurate design and construction drawings, bill of quantities and a finalized contract are agreed with ECA prior to inviting new expressions of interest for the project.

52. OCSS accepted recommendation 10 and stated that the local architecture firm has reviewed all of the documents and specifications for construction in June and July 2009 and has completed a bill of quantities. These will be issued as part of the RFP for the new construction tender. Based on the action taken, recommendation 10 has been closed.

Change Orders

53. Construction projects sometimes require change orders to be issued as work proceeds. Some of these change orders have a financial implication and will need to be funded from the project contingency sum. If change orders are not issued in a timely manner, then ensuing delays could result in a contractor lodging a claim for financial compensation and an extension of the contract period, especially if the contractor was unable to redeploy its workers.

54. OCSS stated that after careful consideration of all factors, including financial risks and possible construction delays, it was agreed in the "Administrative and Coordination Arrangements" that "any Change Orders during the construction that have financial and/or design implications will require prior authorization from FMS/UNHQ, before instructing the contractor accordingly. Change Orders that do not have financial nor design implications can be processed by FMS/ECA." FMS/UNHQ will ensure that requests for change orders are processed as a matter of priority.

55. Based on the explanation given, and the appropriate action taken by OCSS, OIOS is not making a recommendation on this issue.

56. There will need to be robust control over funding to ensure that the project's contingency sum is not overspent. Having staff in place to provide adequate skills and separation of duties would also be a pre-requisite.

Recommendation 11

(11) The ECA Project Coordinator should apply robust financial controls and prepare a written procedure for the issuance of change orders for approval by the Assistant Secretary-General, Office of Central Support Services.

57. The ECA Administration and OCSS accepted recommendation 11 and stated that a written procedure for the issuance of change orders for approval by the ASG, OCSS will be developed and approved by all parties involved prior to construction commencement. The implementation date given was February 2010. Recommendation 11 remains open pending OIOS' receipt of the written procedure.

G. Project budgeting and finance

Increases in project costs

58. The project was initially approved by the General Assembly in May 2002. At that time, the plan was for 6,770 square metres of office space built over four floors to be financed from the available balance of the construction-in-progress account. The projected cost was \$7,711,800.

59. At the end of 2005, the scope was changed to add two floors which increased the total capacity to 9,550 square metres at an estimated additional cost of \$2,390,600. Costs to the original project had also increased by \$1,280,900 and the total projected cost was \$11,383,300.

60. At the end of 2007, the General Assembly approved a revised project estimate of \$14,333,100 which included \$1,093,700 for contingencies. It was projected that \$566,158 of the contingencies amount would be used for design, consultancy services and project coordination.

61. OIOS identified the following reasons for the increases in estimated costs:

(a) "Scope creep." As time passes, the original business case for projects often becomes superseded. This was the case for the new office facilities at Addis Ababa where two floors were added to the scope to accommodate an increased number of staff. This led to projected cost increases of \$2,390,600, including \$1,871,000 for construction, \$148,000 for design, \$73,300 for site work and safety systems, \$102,000 for project coordination and \$196,300 for construction contingencies.

(b) Initial cost estimates sometimes prove to be inaccurate until designs and construction documents have been completed. However, the initial cost estimates (in the absence of more refined figures) necessarily become the basis of approvals, and are established as the initial budget figures. There needs to be an understanding that initial estimates may be subject to change, and this may be because of broader economic issues as well as the need to initially rely on rough estimates. For this project, the design firm revised the estimated cost of the original scope from \$7,711,800 to \$8,992,700 (at 2005 prices). OIOS enquired into the original estimates and received assurances that initial estimates were not under-cast in order to secure approval for the project. The magnitude of the variance between the original estimate and the revised estimate is particularly disappointing in view of the inclusion of a 10 per cent contingency amount

(\$662,700) in the original estimate, as well as a provision of \$422,100 for inflation and currency fluctuations.

c) The absence of finalized bills of quantities and drawings increased the likelihood of inaccurate cost projections. Also, potential bidders may have been deterred, and participating bidders probably loaded their bids with contingencies for risk.

(d) Some impacts on the project design and implementation would have been hard to predict. An example of this is the geotechnical report that was prepared by consulting engineers in February 2005. Unexpected subsoil conditions were identified and this necessitated substantial redesign and structural modifications.

62. OIOS also notes that the budget may be affected by factors that are external to immediate project management. These include changes in currency exchange rates and political uncertainty. The current economic slowdown may encourage more competitive bids as the depressed markets have resulted in lower prices for materials.

63. In a recent audit report (AC2009/514/08) on the construction of additional facilities and improvements to conference facilities at the United Nations Office at Nairobi (UNON), OIOS recommended that in the future, the initial estimates used to support decisions as to whether to proceed with construction projects should be prepared (or at least checked) by local firms of quantity surveyors or architects who are familiar with the local market. OCSS accepted recommendation and stated that all proposed future UN construction projects will be based on comprehensive programmatic requirements and sound estimating practices reviewed by local firms familiar with local conditions.

H. Stakeholder management

64. Some of the major stakeholders in the project are the staff of UN organizations that will be moving into accommodations at ECA. Decisions will have to be made as to the allocation of specific office space. Facilities managers of those locations will have to be consulted about specific requirements they may have with regard to IT infrastructure, communications and furnishings. Stakeholders will need to be made aware of the dates when they may take up occupancy and arrange removals. Also, they will need to negotiate the termination of existing leases and secure funding for requirements that may not be included in budgeted costs.

65. Other stakeholders that have been identified include ECA security, finance, administration, human resources, project coordination personnel; headquarters departments; contractors; and consulting firms. Also, local authorities, government departments, and possibly neighbouring residents and businesses may be affected.

Recommendation 12

(12) The ECA Project Coordination Unit in liaison with the Officer-in-Charge of Administration should prepare a stakeholder management plan to identify the project stakeholders, define an approach to communications and provide key project information. Furthermore, they should closely manage local community and host government expectations and concerns that could affect project progress.

66. *The ECA Administration and OCSS accepted recommendation 12 and stated that progress was being made with full implementation planned for June 2010. Discussions have begun between ECA/FMS and UNHQ/FMS regarding the formation of a "stakeholder" committee comprising the agencies, funds and programs that reside either within the ECA complex or will be moving into the ECA complex as a direct result of the construction project. The discussions have identified the need to develop an ECA facilities management plan of office space at the ECA and to include a move strategy once the building is completed. The General Services Section at ECA has been instrumental and successful in coordinating with the local authorities of the host country, the Ethiopian Ministry of Finance and Economic Development (MoFED) on all matters related to the construction of the building such as value added tax, utilities and road relocations. Recommendation 12 remains open pending its full implementation.*

Project Coordination Group

67. OIOS considers that a documented monthly project coordination group meeting would assist in involving stakeholders. Meetings could logically be chaired by the ECA Chief, Facilities Management Section and could include personnel outside the immediate construction arena such as the Officer-in-Charge of Administration, human resources, procurement, security, representatives of prospective occupants of the new offices and on occasion, the Executive Secretary.

68. The monthly progress reports referred to in paragraph 42 could form the agenda for discussions of the project. It is not OIOS' intention that participation in this group would involve stakeholders in the day to day project or site management, which should be the responsibility of the project management team.

Recommendation 13

(13) The Chief, Facilities Management Section at ECA should convene a project coordination group each month to discuss progress and obtain feedback

from stakeholders, including stakeholders who are outside the immediate construction arena.

69. *The ECA Administration and OCSS accepted recommendation 13 and referred to the comments already given for recommendation 12. Recommendation 13 remains open pending confirmation of its full implementation.*

I. Lessons learned

70. The Chief, Facilities Management Section and the Project Coordinator have identified and communicated a number of lessons learned so far from this project. Without doubt, there will be further issues that arise during the construction and post-construction periods that will be important to record to help manage future projects more efficiently.

Recommendations 14 and 15

(14) The ECA Project Coordinator should create registers to record current issues and lessons learned. These could be maintained on a common computer database to enable access, recording and review by all members of the Project Coordination Unit.

(15) The Director, Division of Administration at ECA should convene a meeting after the completion of the project, of all participants in all stages of the project management including pre-contract, construction and post-construction phases. Attendees should discuss lessons learned and produce a record for the Under-Secretary-General for Management and senior managers. This record should be used for the benefit of future projects.

71. *The ECA Administration and OCSS accepted recommendation 14 and stated that once the senior level project manager is on board, the process for establishing the registers will be implemented. The implementation was planned for February 2010. Recommendation 14 remains open pending confirmation that the registers are operational.*

72. *The ECA Administration and OCSS accepted recommendation 15 and stated that the implementation was planned for February 2012 (i.e. after construction). Recommendation 15 remains open pending completion of the lessons learned process.*

V. ACKNOWLEDGEMENT

73. We wish to express our appreciation to the Management and staff of the Department of Management and the Economic Commission of Africa for the assistance and cooperation extended to the auditors during this assignment.

STATUS OF AUDIT RECOMMENDATIONS

Recom. no.	Recommendation	Risk category	Risk rating	C/O	Actions needed to close recommendation	Implementation date ²
(1)	The ECA Project Coordinator should determine when new technical support staff appointments should take effect, and consult the Director of Administration and the Chief, Human Resources Services Section at ECA to try and ensure that staff are recruited in a timely manner.	Human Resources	High	O	Receipt of project timeline by OIOS and confirmation that the required staff members have taken up their appointments.	January 2010.
(2)	The ECA Project Coordinator should prepare job descriptions for the staff in the Project Coordination Unit, and clear terms of reference and working practices for the independent consultants.	Human Resources	Medium	O	Receipt of finalized terms of reference by OIOS.	November 2009.
(3)	The ECA Project Coordinator should determine the responsibility for preparing construction progress reports, their frequency and distribution.	Operational	Medium	C		Implemented.
(4)	The Executive Secretary of ECA should ensure that a concerted effort is made to recruit suitable staff to key positions expeditiously.	Human Resources	High	O	Confirmation to OIOS that the required staff members have taken up their appointments.	December 2009.
(5)	The Procurement Division should award future architectural, engineering and quantity surveying contracts to firms that have experience in local working	Operational	High	C		Implemented.

Recom. no.	Recommendation	Risk category	Risk rating	C/O ¹	Actions needed to close recommendation	Implementation date ²
(6)	<p>procedures for the country or region where the construction is planned.</p> <p>The Facilities Management Service, Office of Central Support Services should ensure that sound documentation that is basic to bidding for and managing contracts is in place before bids are solicited. For construction contracts in most parts of the world that documentation includes accurate design and construction drawings, and a bill of quantities.</p>	Operational	High	C		Implemented.
(7)	<p>The ECA Project Coordinator should ensure the ECA and headquarters staff liaise further and finalise contractual conditions prior to the solicitation of new bids for construction.</p>	Operational	High	C		Implemented.
(8)	<p>The ECA Project Coordinator, in collaboration with other members of the project team, should conduct a risk assessment for the construction of the new office facility and prepare a risk register. This should be kept under continuous review by the project team at regular intervals and decisions taken on mitigating actions, as appropriate, and responsibilities assigned.</p>	Operational	Medium	O	Receipt of the copy of the risk register by OIOS.	February 2010.
(9)	<p>The ECA Chief, Facilities Management Section should update</p>	Operational	Medium	C		Implemented.

Recom. no.	Recommendation	Risk category	Risk rating	C/O ¹	Actions needed to close recommendation	Implementation date ²
(10)	<p>the “Administrative and Coordination Arrangements” document to reflect the proposed revisions and submit it through the Officer-in-Charge of Administration to the Assistant Secretary-General, Office of Central Support Services for approval.</p> <p>The Facilities Management Service, OCSS should ensure that accurate design and construction drawings, bill of quantities and a finalized contract are agreed with ECA prior to inviting new expressions of interest for the project.</p>	Operational	High	C		Implemented.
(11)	<p>The ECA Project Coordinator should apply robust financial controls and prepare a written procedure for the issuance of change orders for approval by the Assistant Secretary-General, Office of Central Support Services.</p>	Operational	Medium	O	Receipt of a copy of the written procedure by OIOS.	February 2010.
(12)	<p>The ECA Project Coordination Unit in liaison with the Officer-in-Charge of Administration should prepare a stakeholder management plan to identify the project stakeholders, define an approach to communications and provide key project information. Furthermore, they should closely manage local community and host government expectations and concerns that could affect project progress.</p>	Operational	High	O	OIOS will follow-up this recommendation.	June 2010.

Recom. no.	Recommendation	Risk category	Risk rating	C/O ¹	Actions needed to close recommendation	Implementation date ²
(13)	The Chief, Facilities Management Section at ECA should convene a project coordination group by each month to discuss progress and obtain feedback from stakeholders, including stakeholders who are outside the immediate construction arena.	Operational	High	O	OIOS will follow-up this recommendation.	June 2010.
(14)	The ECA Project Coordinator should create registers to record current issues and lessons learned. These could be maintained on a common computer database to enable access, recording and review by all members of the Project Coordination Unit.	Operational	High	O	Confirmation to OIOS when these registers are operational.	February 2010.
(15)	The Director, Division of Administration at ECA should convene a meeting after the completion of the project, of all participants in all stages of the project management including pre-contract, construction and post-construction phases. Attendees should discuss lessons learned and produce a record for the Under-Secretary-General for Management and senior managers. This record should be used for the benefit of future projects.	Information Resources	High	O	Confirmation to OIOS that the meeting has been held and the record of lessons learned produced.	February 2012.

1. C = closed, O = open

2. Date provided by [client] in response to recommendations. [Insert "Not provided" where date is not provided; "Implemented" where recommendation is closed; (date) given by the client.]