



INTERNAL AUDIT DIVISION

REPORT 2014/143

Audit of the guaranteed maximum price contract for the renovation of the General Assembly building

Overall results relating to effective management of the guaranteed maximum price contract for the renovation of the General Assembly building were initially assessed as satisfactory

FINAL OVERALL RATING: SATISFACTORY

18 December 2014
Assignment No. AC2014/514/01

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AUDIT REPORT

Audit of the guaranteed maximum price contract for the renovation of the General Assembly building

I. BACKGROUND

1. The Office of Internal Oversight Services (OIOS) conducted an audit of the guaranteed maximum price contract for the renovation of the General Assembly building.
2. In accordance with its mandate, OIOS provides assurance and advice on the adequacy and effectiveness of the United Nations internal control system, the primary objectives of which are to ensure: (a) efficient and effective operations; (b) accurate financial and operational reporting; (c) safeguarding of assets; and (d) compliance with mandates, regulations and rules.
3. The capital master plan (CMP) was established by General Assembly resolution 55/238. The renovation of the General Assembly building was one of the sub-projects of CMP and was anticipated to cost \$148.7 million. On 2 July 2013, the Office of CMP entered into a guaranteed maximum price contract valued at \$66.8 million to renovate the building. The original contract was amended and restated to \$108.5 million in November 2013 and again in February 2014 bringing the total contract price to \$143.5 million. As of 31 May 2014, the contract price had been restated to \$156.5 million, of which total cumulative disbursements totaled \$59.1 million. The restatements were as a result of the strategy adopted by the Office of CMP to develop the contract incrementally by breaking it down into three parts: part one for early works, part two for the infrastructure package and part three for the finishes. The contract was signed with a construction manager, who acted as a constructor and negotiated individual trade contracts to provide various construction services within the guaranteed maximum price contract.
4. The renovations covered five stories and approximately 29,000 square metres of conference and office space. The design included historic preservation of the structure of the General Assembly building and significant modifications to its mechanical and electrical systems. The renovations were scheduled to start in January 2013 and be completed in time for the general debate of the General Assembly in September 2014. The commencement of renovations was however delayed to July 2013 due to delays in completing other CMP sub-projects and the effects of the storm Sandy, which impacted the United Nations Headquarters in October 2012. Building works were accelerated and the renovations were largely completed on time as scheduled.

II. OBJECTIVE AND SCOPE

5. The audit was conducted to assess the adequacy and effectiveness of the governance, risk management and control processes for the Office of the CMP in providing reasonable assurance regarding **effective management of the guaranteed maximum price contract for the renovation of the General Assembly building.**
6. This audit was included in the 2014 OIOS risk-based work plan due to financial and reputational risks related to construction contracts.
7. The key control tested for the audit was regulatory framework. For the purpose of this audit, OIOS defined regulatory framework as controls that provide reasonable assurance that policies and

procedures: (i) exist to guide the management of the guaranteed maximum price contract; (ii) are implemented consistently; and (iii) ensure reliability and integrity of financial and operational information.

8. The key control was assessed for the control objectives shown in Table 1.

9. OIOS conducted this audit from March to May 2014. The audit covered the period from June 2012 to May 2014.

10. OIOS conducted an activity-level risk assessment to identify and assess specific risk exposures, and to confirm the relevance of the selected key control in mitigating associated risks. Through interviews, analytical reviews and tests of controls, OIOS assessed the existence and adequacy of internal controls and conducted necessary tests to determine their effectiveness. OIOS reviewed the procurement and administration of the guaranteed maximum price contract; the processing of invoices, change orders, and construction manager controlled contingency allowance; and quality control activities related to the renovation of the General Assembly building.

III. AUDIT RESULTS

11. The Office of CMP governance, risk management and control processes examined were initially assessed as **satisfactory**¹ in providing reasonable assurance regarding **effective management of the guaranteed maximum price contract for the renovation of the General Assembly building**. The Office exercised adequate controls over procurement of trade contracts and processing of invoices, change orders and construction manager controlled contingency allowance. Quality control activities were generally adequate except for the delays in submitting quality plans by some trade contractors and architects. Due to the tight construction schedule for the renovation of the General Assembly building, construction works were accelerated. However, the Office of the CMP did not consolidate the anticipated acceleration costs at start of the renovations to allow for monitoring and control. Since the renovations were substantially completed, the Office of CMP agreed to note the need for timely submission of quality plans and for consolidation of acceleration costs in the lessons learned register for future United Nations capital projects.

12. The initial overall rating was based on the assessment of the key control presented in Table 1 below. The final overall rating is **satisfactory**.

¹ A rating of “**satisfactory**” means that governance, risk management, and control processes are adequately designed and operating effectively to provide reasonable assurance regarding the achievement of control and/or business objectives under review

Table 1:
Assessment of key control

Business objective	Key control	Control objectives			
		Efficient and effective operations	Accurate financial and operational reporting	Safeguarding of assets	Compliance with mandates, regulations and rules
Effective management of the guaranteed maximum price contract for the renovation of the General Assembly building	Regulatory framework	Satisfactory	Satisfactory	Satisfactory	Satisfactory
FINAL OVERALL RATING: SATISFACTORY					

Regulatory framework

Procurement of trade contracts by the construction manager was effective

13. In accordance with the coordination agreement between the United Nations and the construction manager, trade contracts were to be awarded to the lowest responsive bidder after negotiations had been held with trade contractors to obtain the most favorable price.

14. The process for bidding and awarding trade contracts was carried out by the construction manager in consultation with the Procurement Division and the Office of CMP. The audit reviewed the procurement of trade contracts with an initial value of \$79.3 million selected from the \$115.3 million set aside for trade costs in the guaranteed maximum price contract. All contractors identified by the construction manager for inclusion in the bidders' list were reviewed by the consultant programme manager, the Director of Construction and the Procurement Division before approval by the Executive Director, CMP. OIOS concluded that the trade contracts were awarded in accordance with the coordination agreement.

The integrity monitor screened trade contractors to ensure that they had a good performance record

15. In April 2009, the United Nations entered into a contract with a consultant for the provision of integrity monitoring services. The purpose of integrity monitoring was to prevent fraud, waste, abuse, and corruption by designing and implementing corruption prevention programmes and investigating irregularities when found.

16. OIOS reviewed the integrity monitoring reports for the three months from September to December 2013. Action plans to implement recommendations by the integrity monitor were discussed at weekly project monitoring meetings at the Office of CMP.

17. The integrity monitor also screened the trade contractors that were recommended for contract awards. The screening looked at issues including conflict of interest, performance records, and litigation and reputational issues relating to each trade contractor. Some of the trade contractors working on the General Assembly building had been cleared by the integrity monitor for previous sub-projects. OIOS reviewed 11 trade contractors employed and determined that eight had been screened by the integrity

monitor, while the other three were cleared on earlier contracts. OIOS concluded that trade contractors were adequately screened to ensure they had a good performance record before being awarded contracts.

The Office of Capital Master Plan agreed to include the requirement to consolidate acceleration costs in the lessons learned register

18. According to the guaranteed maximum price contract, if the Office of CMP reasonably determined that the construction manager had fallen behind the schedule for a sub-project, the construction manager was to take the steps necessary to improve progress and submit operational plans to demonstrate the manner in which the lost time was to be regained.

19. The renovation of the General Assembly building commenced in July 2013 instead of January 2013 due to delays in completing other sub-projects of CMP as well as the effects of storm Sandy, which impacted the United Nations Headquarters in October 2012. This necessitated the acceleration of the construction schedule by utilizing overtime, additional shifts and extra labour, which were approved through issuance of individual change orders by the construction manager. At the time of audit, the Office of CMP and the construction manager had not consolidated the acceleration costs to ensure that they were adequately monitored and controlled. Consolidation of the acceleration costs would also have provided management with data to undertake a cost-benefit analysis of the cost of delays versus the cost of acceleration.

20. The Office of CMP subsequently reported that the total costs associated with the acceleration were \$8.8 million. The Office also agreed to include the requirement for timely consolidation of acceleration costs in the lessons learned register for future capital projects, as they represented costs that would not otherwise have been required had the normal construction schedule been followed. OIOS therefore did not make a recommendation on this issue.

The Office of Capital Master Plan exercised adequate controls over invoice processing

21. In accordance with the United Nations Financial Regulations and Rules, all payments were to be made on the basis of supporting vouchers and other documents, which would ensure that the relevant services or goods had been received.

22. Twenty eight invoices amounting to \$32.9 million were processed as of 31 March 2014. The audit reviewed invoices totaling \$18 million or 55 per cent of the total expenditure together with supporting documentation and concluded that they were accurate and properly reviewed by the Office of CMP. Prior to approval of payments, supporting documents were examined by the Office of CMP and the consultant programme manager for accuracy. The supporting documents included timesheets and percentages of completion worksheets. The percentages of completion were agreed by the representatives of the construction manager, the consultant programme manager, the architects and representatives of Office of CMP. OIOS concluded that controls over invoice processing were adequate.

Controls over change orders were adequate

23. In accordance with the guaranteed maximum price contract, changes could be made to the sub-project by altering, adding to or deducting from the work (change work) and, if approved by Office of CMP, the guaranteed maximum price contract would be adjusted accordingly. All change orders were to be executed in conformity with the terms and conditions of the guaranteed maximum price contract.

24. Change orders were signed under the Procurement Division's delegation of authority granted by the Assistant Secretary-General, Office of Central Support Services. At the time of the audit a total of 33

change orders valued at \$14.5 million were issued. The audit reviewed change orders and one scope reallocation valued at \$7 million or 49 per cent of the total approved changes. The review checked compliance with the guaranteed maximum price contract, accuracy of cost and proper calculation of fees, mark-ups and insurances. The change order requests submitted by the construction manager were subjected to scrutiny by the consultant programme manager and the Office of the CMP. OIOS concluded that controls on change order processing were adequate.

The Office of Capital Master Plan agreed to include in the lessons learned register the need to prepare non-conformance reports and to obtain quality plans in a timely manner

25. The CMP project manual required the construction manager to prepare non-conformance reports to indicate work, material or equipment that did not meet specifications or set standards, or that was not satisfactory with regard to quality and established good work practice. Non-conformance reports included identifying and analyzing causes in order to initiate measures to be taken to prevent recurrence.

26. The construction manager did not prepare non-conformance reports as described in the project manual or maintain a quality control log as a way of monitoring issues raised by project managers and architects. The project managers informed OIOS that non-conformance issues were rectified on an ongoing basis. The construction manager also employed a dedicated quality assurance manager, who was responsible of securing quality of all works in the renovation of the General Assembly building in order to meet United Nations expectations. In the absence of a catalogue of non-conformance reports there was no basis for the evaluation of the construction management's team success in maintaining technical quality as part of the construction administration functions.

27. Additionally, trade contractors and architects were to present quality plans explaining the organization of their work, quality assurance and quality control procedures. The quality plans were to be reviewed and approved by the construction manager before the contractors started work. At the time of audit, only eight of the 24 main trade contractors had submitted quality plans. The architect had also not submitted a quality plan, although this was subsequently submitted and was being reviewed during the course of the audit. The delay in presentation of quality plans by some of the trade contractors could have resulted in sub-standard workmanship.

28. The Office of CMP explained that with the substantial completion of the General Assembly building in mid-September 2014, the extent of the work that remained to be completed by the construction manager was minimal. The Office would however reflect the need to prepare non-conformance reports and timely submission of quality plans by trade contractors and architects as part of its lessons learned to be handed over to future large scale capital projects. Based on the planned action by the Office of CMP, OIOS did not make a recommendation on this issue.

IV. ACKNOWLEDGEMENT

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

(Signed) David Kanja
Assistant Secretary-General for Internal Oversight Services

APPENDIX I

Management Response

United Nations  Nations Unies
INTEROFFICE MEMORANDUM MEMORANDUM INTERIEUR

TO: Ms. Muriette Lawrence-Hume, Officer-in-Charge
A: New York Audit Service, Internal Audit Division
Office of Internal Oversight Services

DATE: 11 December 2014

THROUGH: Christian Saunders, Director
S/C DE: Office of the Under-Secretary-General for Management

FROM: Mario Baez, Chief, Policy and Oversight Coordination Service
DE: Office of the Under-Secretary-General for Management

SUBJECT: **Draft report on an audit of the guaranteed maximum price contract for the
OBJET: renovation of the General Assembly building (Assignment No. AC2014/514/01)**

1. We refer to your memorandum of 19 November 2014 addressed to Mr. Takasu on the above subject matter.
2. We are pleased to note that the overall rating for this audit is **satisfactory** and that the draft report does not include any recommendations. However, we would like to request that the following corrections be made in the final report:
 - (i) In the second sentence of paragraph 3, the anticipated cost of the renovation should be revised from \$144.6 million to \$148.7 million.
 - (ii) In the fifth sentence of paragraph 3, the word “expenditure” should be replaced with the word “disbursement.”
 - (iii) In the first sentence of paragraph 22, the total costs associated with the acceleration should be revised from \$6.6 million to \$8.8 million.
3. We would also like to offer the following additional comments:
 - (i) With respect to the acceleration costs, it should be clarified that the benefits cannot always be quantified in monetary terms and in most cases the accelerations are intended to address overriding considerations of credibility and reputation. In the specific case of the General Assembly Building, the deadline for the completion was agreed upon by the General Assembly and the Secretariat years ago, and any postponement would have resulted in reputational damage to the Organization. The costs resulting from acceleration are captured and monitored on an ongoing basis. It should also be emphasized that as part of prudent project management, delays in implementation are taken into account in the planning and design stages, and costs associated with such delays are taken into account and included in the contingency of the overall project budget.

(ii) With respect to the non-conformance reports, it should be clarified that such reports are prepared and issued, on an ongoing basis, by the architects and engineers of record to the construction management company. They, in turn, take necessary remedial actions with the sub-contractors. From the early stages of the project, it was found that the architects and engineers of record are the only group qualified to make these professional determinations on the quality of the work performed rather than the Construction Manager, who does not possess that level of expertise. The architects and engineers of record are also professionally accountable for any errors or omissions from their construction documents. Thus, while the construction manager and the dedicated quality assurance manager supervise, monitor and evaluate the work performed by the sub-contractors, the architects and engineers of record undertake comprehensive inspections and issue the non-conformance reports for deviations from the technical standards and specifications in the design documents.

4. Thank you for giving us an opportunity to provide comments on the draft report.