

INTERNAL AUDIT DIVISION

REPORT 2023/017

Audit of the seismic mitigation retrofit and life-cycle replacements project in the Economic and Social Commission for Asia and the Pacific

The Commission needed to scale up risk management activities and closely monitor the construction schedule to ensure the project is completed in a timely manner and within budget as approved by the General Assembly

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Audit of the seismic mitigation retrofit and life-cycle replacements project in the Economic and Social Commission for Asia and the Pacific

EXECUTIVE SUMMARY

The Office of Internal Oversight Services (OIOS) conducted an audit of the seismic mitigation retrofit and life-cycle replacements project (SMP) in the Economic and Social Commission for Asia and the Pacific (ESCAP). The objective of the audit was to determine whether ESCAP internal controls over the project were implemented effectively to ensure timely completion within the scope and budget approved by the General Assembly. The audit covered the period from March 2022 to February 2023 and included: (a) project management, (b) procurement and other contract management activities; and (c) project oversight mechanisms.

As of March 2023, construction activities for the main works were four months behind schedule. This was partly due to the initial low head count of construction staff and supply chain issues related to COVID-19 restrictions. The project team, in coordination with the contractor and the construction administration firm had put measures in place to minimize slippage and manage associated costs. ESCAP had also invoked delay damages provided for in the contract, considering the delays. Various risk management activities were being undertaken; however, they may be impacted by delays in updating the risk register with emerging risks and changes to risk owners, as well as capacity issues in the Global Asset Management Policy Service (GAMPS) in the Department of Management Strategy, Policy and Compliance (DMSPC). In addition, several initiatives undertaken to mobilize additional resources for the project did not result in notable contributions. Insights gained from the efforts needed to be captured in a lesson learned document.

OIOS made six recommendations. To address issues identified in the audit, ESCAP needed to:

- Prepare an action plan to minimize schedule slippage and quantify the costs of staff and other resources that will be required to attain substantial completion of the project;
- Include a section dealing with close-out activities in the project management plan to guide the project team and ensure an orderly closure of construction activities;
- Update the risk register by incorporating new emerging risks, identifying risk owners and assigning responsibility for mitigating actions in the response plans;
- Prepare a transition risk assessment and plan to enable an orderly handover of systems and equipment; and
- Incorporate in the lessons learned document the need to prepare a resource mobilization strategy and implementation plan early, following approval of a project.

In addition, DMSPC needed to:

• Improve in-house capacity of GAMPS to support capital construction projects in Secretariat entities for the duration of the remaining construction projects.

ESCAP and DMSPC accepted the recommendations and have initiated action to implement them. Actions required to close the recommendations are indicated in Annex I.

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Audit of the seismic mitigation retrofit and life-cycle replacements project in the Economic and Social Commission for Asia and the Pacific

I. BACKGROUND

1. The Office of Internal Oversight Services (OIOS) conducted an audit of the seismic mitigation retrofit and life-cycle replacements project (SMP) in the Economic and Social Commission for Asia and the Pacific (ESCAP).

2. SMP is a large and complex project that was approved by the General Assembly in December 2016 through its resolution 71/272. The overarching objective of the project is to ensure the health and safety of staff, delegates and visitors at the Commission's premises in Bangkok through: (a) retrofitting the ESCAP secretariat and service buildings to mitigate against seismic risks; (b) updating building life-safety systems to meet current standards; and (c) replacing building systems that have reached the end of their useful lives. The project is also expected to result in energy and space efficiency, as well as improved accessibility.

3. The General Assembly approved a project budget of \$40.0 million, including a compounded escalation provision of \$3.5 million, and a contingency reserve of \$1.1 million. A total of \$29.1 million was appropriated for the project for the period 2017 to 2022. Cumulative project expenditure was \$25.3 million as of 31 December 2022. The resources appropriated in 2023 amounted to \$14.7 million, which includes the \$3.8 million unspent appropriations in 2022.

Year	2017	2018	2019	2020	2021	2022	2023	Total
Section 33								
Construction costs			1 536	1 013	2 992	9 520	10 257	25 318
Professional services	462	1 431	296	336	173	1 047.3	746	4 491
Escalation						1 742	1 742	3 484
Contingency			23				1 051	1 051
Subtotal	462	1 431	1 832	1 350	3 165	12 310	13 796	34 345
Section 19								
Project management	514	750	930	1 009	865	708	898	5 675
Grand Total	976	2 180	2 762	2 359	4 0 3 0	13 018	14 694	40 019

 Table 1: Revised cost plan – 2017-2023 (in thousands of United States dollars)

4. Construction works started in November 2021. Phase 1, comprising block B of the secretariat building and partial central core, was expected to be concluded in November 2022 and Phase 2, consisting of block A tower, partial central core and seismic reinforcement works in the service building, in November 2023. However, Phase 1 was already behind schedule by four months as of March 2023. Therefore, the close-out phase, which was scheduled to start in December 2023, was projected to commence in the first quarter of 2024, assuming no further delays are encountered. Despite the schedule delay, ESCAP anticipated that construction works would still be completed within the overall budget approved by the General Assembly.

5. The Executive Secretary of ESCAP as the SMP owner with overall accountability for the project designated the ESCAP Director of Administration as the Project Executive to oversee all strategic and operational issues related to the project. ESCAP also established a Stakeholders' Committee to support project governance, and a Change Control Board to review and approve change requests.

6. The Global Asset Management Policy Service (GAMPS) in the Department of Management Strategy, Policy and Compliance (DMSPC) provides risk management support and sharing of lessons learned from other Secretariat construction projects. An independent risk management firm (IRMF) was providing construction-related, independent, risk management services to this and other Secretariat construction projects.

7. The SMP project has a dedicated project team comprising 10 approved temporary posts led by a Project Manager at the P-5 level. As of March 2023, five posts were encumbered, two were under recruitment (Project Coordinator and Information Technology Assistant), and three were kept vacant to control the project management cost.

8. Comments provided by ESCAP and DMSPC are incorporated in italics.

II. AUDIT OBJECTIVE, SCOPE AND METHODOLOGY

9. The objective of the audit was to determine whether ESCAP internal controls over the seismic mitigation retrofit and life-cycle replacements project were implemented effectively to ensure timely completion of the project within the scope and budget approved by the General Assembly.

10. This audit was included in the 2023 risk-based work plan of OIOS due to the General Assembly's request for OIOS to provide oversight of the project and include information on its key findings in its annual report to the General Assembly (A/RES/71/272).

11. OIOS conducted this audit in March and April 2023. The audit covered the period from March 2022 to February 2023. Based on an activity-level risk assessment, the audit covered higher and medium risks areas in the seismic mitigation retrofit and life-cycle replacements project, which included: (a) project management; (b) procurement and other contract management activities; and (c) project oversight mechanisms.

12. The audit methodology included: (a) interviews with key personnel, (b) review of relevant documentation, (c) analytical review of data, and (d) sample testing of selected transactions.

13. The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.

III. AUDIT RESULTS

A. Project management

The quantitative risk analysis indicates the project may not be completed within the estimated maximum cost without value engineering

14. The ninth Monte Carlo simulation conducted by IRMF indicated that there was only a 35 per cent chance that the project would be delivered within the approved budget, significantly less than the Organization's target of 80 per cent. This was an upward trend, compared with the two previous estimates, which were at 20 per cent and 27 per cent in 2021 and 2022, respectively. The quantitative analysis indicated that the estimated project costs at 80 per cent confidence level would be approximately \$560,000 over the approved estimated maximum cost. While the confidence level has increased slightly, there remains a level of uncertainty around high value infrastructure systems, owner-directed changes and unforeseen conditions. As of March 2023, the balance on contingency reserve after charging variation orders stood at \$232,514,

while the remaining balance on the provision for escalation was 1.7 million. In his report on the project (A/77/330) of September 2022, the Secretary-General informed the General Assembly that the project may not be completed within the estimated maximum cost without continued value engineering; therefore, OIOS did not make any recommendation on this issue.

ESCAP needed to prepare an action plan in conjunction with the construction administration firm and the contractor to minimize schedule slippage

15. The Headquarters Committee on Contracts unanimously recommended in July 2021 a proposed contract award for the construction works for the seismic mitigation project at a fixed lump sum of \$35.7 million for a period of three years pursuant to Financial Rule 105.15 (b) – qualified most responsive proposal (lowest cost proposal). This was after ESCAP had used a multi-stage request for proposal with dialogue approach to solicit bids. During negotiations, the contract price was reduced via value engineering by THB 45 million to THB 840 million (approximately \$25.7 million). The contract was signed on 14 October 2021 and notice to proceed with mobilization issued on 5 November 2021.

16. The construction contract stipulated that works would be implemented in four phases. Phases 1A and 1B covering block B of the secretariat building and partial central core were scheduled for completion in November 2022. Phases 2A and 2B, covering block A tower, partial central core and seismic reinforcement works in the service building were planned to be completed in November 2023.

Works on Phase 1A and 1B were already four months behind schedule as of March 2023. The main 17. causes of Phase 1 delay included the low head count of construction staff and supply chain issues as imported materials took a long time to be transported from suppliers due to COVID-19 restrictions. Upon hearing of the potential delay in October 2022, the Project Executive and SMP immediately engaged the contractor at the most senior management levels in Thailand and in Japan and demanded specific actions to be taken to minimize these delays. ESCAP also informed the Fifth Committee in its hearing in November 2022 that interim delays to Phase 1 construction works were anticipated. The contractor responded by increasing the labour workforce, supplementing the project management team by reassigning additional skilled staff at the mid and senior management level from neighbouring countries in the region and leveraging other opportunities to expedite supply of specific materials imported from abroad. The number of workers was increased progressively, and the head count stood at 66 (October 2022); 81 (November 2022); 92 (December 2022); 112 (January 2023); and 179 (February 2023). The contractor also brought on board testing and commissioning agents and other specific experts. Schedule discussions were being held between the SMP team and the contractor on a weekly basis, on Wednesdays and Fridays. Despite these meetings, there was still no estimate with certainty as to when the construction would be substantially completed. The revised schedule indicated substantial completion of Phases 1A and 1B by quarter 2 in 2023.

18. Phase 2 construction works in Block A were originally scheduled to commence in November 2022 and be completed by November 2023. Since Phase 1 is on a critical path, commencement of Phase 2 will also be delayed and likely be completed in quarter 1 of 2024. It is therefore critical that the SMP team prepare an action plan, in conjunction with the construction administration firm and the contractor detailing what they intend to do to bring the project on track. The team needed to quantify the costs that are likely to be incurred because of the slippage. These should be based on the identification of key staff and consultant resources that will be required to ensure a smooth substantial completion.

19. On 19 January 2023, ESCAP issued a "notice of time for completion expiry," advising the contractor of ESCAP's right to claim damages and stated that delayed damages will take effect from 23 November 2022 at the rate of \$3,000 per calendar day for every day thereafter until Phases 1A and 1B reach substantial completion, up to a maximum limit of \$1.2 million as stipulated in the contract. The amount is

to be recovered monthly as a deduction from progress payments. There were delays of 39 days in November and December 2022 amounting to damages of \$117,000 and this was deducted from progress payment number 10. Subsequently, \$93,000 was deducted in January 2023 and additional deductions were expected once the invoice for February 2023 is received.

20. The contractor acknowledged receipt of the delay notice and requested favourable consideration. The contractor further stated that the project had been adversely impacted by various issues outside of their control, including a delay in importing critical goods due to COVID-19-related port closures and lockdowns. Such delays had substantially prolonged the related works. The contractor added that they were further identifying the source of divergencies between the original contractor schedule and actual progress and compiling the related causes. This will facilitate ESCAP and the contractor to objectively consider the implications of events outside the contractor's control. At the time of field work, the contractor had not yet completed this analysis. Therefore, the delayed damages remained subject to potential dispute and ESCAP needed to manage the process diligently and methodically record all contract divergencies.

21. OIOS noted that ESCAP had invoked delay damages in compliance with sub-clause 8.7 (a) of the contract without seeking advice from the Procurement Division and/or the Office of Legal Affairs. This consultation is a necessary process in managing potential disputes and to ensure that indeed the contractor had breached the agreement given the possible extenuating circumstances already alluded to by the contractor in their response dated 6 February 2023. ESCAP indicated that consultations had been held with its Procurement Unit and GAMPS. The issue was also discussed with the contractor's head office management in Japan. ESCAP would nevertheless continue to identify and record divergences with the contractor and consult with OLA for their advice on delay damages and other matters, as an additional layer of caution to minimize any risks that may arise. Therefore, OIOS did not make a recommendation in this regard.

(1) ESCAP should prepare and implement an action plan in conjunction with the construction administration firm and the contractor to minimize schedule slippage and quantify the costs of staff and other resources that will be required to attain substantial completion of the seismic mitigation retrofit and life-cycle replacements project.

ESCAP accepted recommendation 1 and stated that an action plan was in place to minimize schedule slippages. In addition, ESCAP would, in consultation with GAMPS and the Office of Programme Planning Finance and Budget, include in the annual report of the Secretary-General to the Member States at their seventy-eighth session, all costs related to project delays and a summary highlighting related risks.

The project management plan was updated to revise controls for change order processing but a section on close-out procedures was needed

22. During the audit period, the Project Executive approved 16 change orders of which 12 resulted in increased costs of approximately \$1.6 million (TBH 54.7 million) and 4 resulted in savings valued at approximately \$765,000 (TBH 26 million). All change orders were reviewed by the Project Manager and approved by the Project Executive as they fell within her delegated authority. However, change orders were not classified as either: owner directed, unforeseen field conditions or improvements to existing designs, which was needed to determine funding sources for the proposed changes. ESCAP took note and stated that it will ensure that change orders are appropriately classified on approval forms.

23. OIOS also observed that the project management plan had not been updated with changes to the delegation of procurement authority. Therefore, two change order requests above \$500,000 were not referred to the Change Control Board as required by the plan, since they were within the new delegated

authority of the Project Executive. ESCAP confirmed that they had subsequently updated the project management plan with the revised delegation thresholds; therefore, no recommendation is made on this issue.

24. Additionally, OIOS noted that the project management plan did not include project close-out procedures following substantial completion of the project. Substantial completion is the point at which the day-to-day operations and maintenance of the asset are transferred to the Organization and the defects liability (warranty) period begins and the liquidated damages period ends. This is a key requirement for capital construction projects and is included in the guidelines for capital construction projects in the Secretariat. The project close-out phase includes activities stipulated in the contract, including occupancy, defects liability (warranty) period, final completion, release of retention and final payment, record documents, lessons learned, project close-out report and other activities relating to the completion of construction works as set out in the project close-out plan. These steps should be clearly documented and a checklist for the purpose prepared to ensure orderly handover of the project.

(2) ESCAP should include a section dealing with close-out activities in the project management plan to guide the project team to ensure orderly closure of contruction activities on the seismic mitigation retrofit and life-cycle replacements project.

ESCAP accepted recommendation 2 and stated that it would ensure that the project management plan is updated to include a section on construction close-out activities to guide an orderly closure of the construction activities under the SMP.

GAMPS should reassess its ability to provide independent risk management services by improving capacity or acquiring additional resources for that purpose

25. In its last audit report on the project (2022/022), OIOS noted that while GAMPS continued to actively oversee the project by attending touch point meetings and meetings with the SMP team monthly or bi-weekly as needed, GAMPS coordination activities with IRMF were not effectively executed, particularly regarding timeliness in risk reporting activities. This issue was resolved during the current reporting period as both touch point meetings and issuance of biannual reports were timely. However, a new risk emerged regarding the independent risk management support provided by GAMPS and IRMF to capital construction projects in the Secretariat.

26. IRMF supports GAMPS in delivering independent risk management activities to ongoing construction projects at the United Nations Office at Nairobi (UNON), Economic Commission for Africa (ECA), ESCAP and Economic Commission for Latin America and the Caribbean (ECLAC). The contract was signed on 3 November 2017 and remains in effect until 10 November 2024. GAMPS initiated negotiations with IRMF to extend the current contract for the various projects until they are substantially completed. However, for economic reasons, IRMF was not willing to continue to provide the services under the terms of the present contract. As negotiated, IRMF will complete quantitative analyses when needed and GAMPS will deliver other contracted services for ongoing United Nations capital construction projects, including qualitative risk assessments. Consequently, for ESCAP, only one biannual report for 2023 will be produced with input from IRMF and the end of project report incorporating lessons learned will be supported if close-out is achieved before November 2024. Given the increased cost pressures that almost each of the four ongoing capital projects face, there is a risk that GAMPS may not be able to support capital construction projects in offices away from headquarters without improving in-house capacity. GAMPS should flag this risk in the next qualitative risk assessment report.

27. OIOS noted that staff resources at GAMPS have also been negatively impacted. The Chief of Service, GAMPS, who was instrumental in coordinating activities between GAMPS and project

management units in ESCAP, ECA, ECLAC and UNON was reassigned to UNON effective June 2022. Similarly, a staff member at the P-4 level, who was a shared resource between ESCAP and ECA, was reassigned in January 2023 to the Facilities and Commercial Activities Service. In addition, one P-2 and one P-3 posts were also vacant. All the four vacant positions were at different stages in the recruitment process and GAMPS advised that they will most likely be filled by the end of 2023. With such a shortage of staff resources, GAMPS may not provide the required level of support to capital construction projects in offices away from headquarters without finalizing recruitment of staff.

(3) DMSPC should take steps to improve in-house capacity of the Global Asset Management Policy Service to support capital construction projects in the Secretariat entities for the duration of the remaining construction projects.

DMSPC accepted recommendation 3 and stated that GAMPS intended to hire in 2023, a D1 Chief of Service, a P2 Associate Architect, a P3 Headquarters coordinator for the UNON and ECLAC projects, and a P4 Finance and Budget Officer to enhance support to all projects. In the absence of the D1 Chief of Service, GAMPS reports directly to the Director of the Field Operations Finance Division, who provides guidance on the work of the Service.

ESCAP should scale up its risk management activities

28. During the audit period, quarterly touch point meetings to discuss risks affecting the project were held in April 2022, June 2022 and January 2023. Similarly, biannual progress reports were issued in December 2022 and February 2023. A review of the integrated risk register for SMP revealed the following four risks that were ranked as high among others: (a) owner directed changes; (b) currency fluctuation; (c) impact of COVID-19; and (d) lack of project management resources. The tenth biannual progress report issued in February 2023 confirmed these risks as high and made recommendations on various remedial actions that could be used to mitigate them.

29. Owner directed changes remained a top risk as construction commenced. This risk pertains to owner requirements that may not have been captured in the baseline design and construction documents and that could potentially result in additional costs if change orders are received during construction. ESCAP explained that owner directed changes came not only from occupants and rent paying tenant groups but also internal stakeholders such as the Facilities Management Unit (FMU), Safety and Security Section (SSS) and Information Management and Communications Technology Service (IMCTS) and these requests typically required improvements including code compliance related changes that were previously unforeseen.

30. While the integrated risk register was in place, it nevertheless needed to be updated more regularly. For example, management of the risk of owner directed changes was still assigned to the former Director of Administration who retired on 31 March 2021. Similarly, the related response plan did not indicate the person responsible for addressing owner directed changes, and this could delay progress in mitigating the risk. The SMP team explained that the risk register is updated regularly, and this could have been an oversight on their part. Furthermore, new emerging risks such as transition planning, close-out processes including systems and equipment handover activities should also be incorporated in the risk register and closely monitored for effective risk management.

(4) ESCAP should update the risk register of the seismic mitigation retrofit and life-cycle replacements project by incorporating new emerging risks, identifying risk owners and assigning responsibility for mitigating actions in the response plans.

ESCAP accepted recommendation 4.

There is a need to activate an archiving plan as more systems are handed over to FMU following substantial completion

31. In report 2022/022, OIOS noted that ESCAP had no retention policy or archiving plan for the various documents and systems handed over to FMU following substantial completion of the swing space. While some of the "as built and project close-out documents" are needed for operational purposes, most of them will require to be safely stored away, digitally or otherwise, to allow for access when required. OIOS recommended the creation of an archiving plan for the retention of records unique to the seismic mitigation retrofit and life-cycle replacements project to support future maintenance operations.

32. To address this adequately, the SMP team could seek the support of the Archives and Records Management Section at Headquarters and draw on lessons learned on other capital construction projects such as the Capital Master Plan (CMP) at the Secretariat in New York. Documents relating to the swing space needed to be catalogued and transmitted to appropriate offices such as FMU, SSS and IMCTS. The same procedures and activities will need to be activated once the main construction works are substantially completed by the end of 2023. ESCAP explained that the transition and archiving processes have significantly changed since the CMP was completed with most documents being digitalized. Design documents will be issued in a three-dimensional digital model for easy storage. Nevertheless, ESCAP will seek guidance from GAMPS on best practice for archiving digital records.

33. A transition plan was also required to enable an orderly handover of systems and equipment to FMU. The SMP project team explained that it will initiate transition measures with teams within the Division of Administration, including FMU from September 2023, to allow sufficient time to ensure all aspects of the project are effectively handed over and to minimize any risks associated with the delay. ESCAP was considering a contingency plan of extending selected SMP project team position(s) to play a critical role in finalizing the construction process within the existing resources of ESCAP. The process may include the training of staff in FMU on the use of systems and equipment after they have been tested and commissioned after substantial completion.

34. The SMP team had not carried out an assessment of transitional risks involving handover of systems and equipment from the contractor to FMU. This process will require identifying and categorizing systems and equipment that will be handed over to FMU, SSS or IMCTS following substantial project completion.

(5) ESCAP should prepare a transition risk assessment and plan to enable an orderly handover of systems and equipment to the Facilities Management Unit, Safety and Security Section or Information Management and Communications Technology Service.

ESCAP accepted recommendation 5.

While ESCAP had taken some concrete steps to mobilize voluntary contributions, it needed to incorporate in the lessons learned document the requirement to prepare a resource mobilization strategy early in a project's life cycle

35. In report 2022/022, OIOS noted that the SMP team had held discussions with the Strategy and Programme Management Division (SPMG), which is responsible for seeking extrabudgetary resources for the implementation of normative programmes for ESCAP, to assist with the preparation of a resource mobilization strategy using broad principles currently being applied by SPMG.

36. ESCAP had also taken steps to mobilize voluntary contributions by requesting two Member States to provide a total of three junior professionals officers (JPO) in the areas of construction and civil engineering. However, these efforts did not materialize, and no JPOs were recruited to work on the SMP.

Similarly, a request made to the Ministry of Foreign Affairs of Thailand to second a full or part time medical officer to support the implementation of COVID-19 risk mitigation measures for the construction phase of the SMP did not materialize.

37. Furthermore, at the 398th session of the Advisory Committee of Permanent Representatives, ESCAP specifically called for voluntary contributions to support project objectives as described in the project management plan in areas such as: energy efficiency; waste management; sustainability; accessibility; future technology; and meeting areas. This too did not result in any notable contributions to the project, although it was noted that the host government had provided in-kind contributions such as technical support and advice on local construction codes and given guidance on accredited suppliers of construction materials in the local market. ESCAP also designed a detailed brochure advertising the various common areas under development that Member States could support that included the Sustainable Development Goals (SDG) collaborative hall, SDG café, delegates lounge and prayer/meditation room among others.

38. Given that the project will be substantially completed by the first quarter of 2024, efforts to prepare a resource mobilization strategy and an implementation plan may no longer be appropriate, and the project has no additional resources to undertake resource mobilization activities. Such activities could have been more appropriate at the time the feasibility studies for the project were approved by the General Assembly in resolution 71/272 of December 2016. As part of documenting best practices and lessons learned from capital construction projects, ESCAP should include the need to proactively prepare a resource mobilization strategy and an implementation plan at the early stage of the project cycle to allow for related activities to be undertaken during the project as opposed to when the project is nearing completion.

(6) ESCAP should incorporate in the lessons learned document the need to prepare a resource mobilization strategy and implementation plan early, following approval of a project, to increase the likelihood of better outcomes.

ESCAP accepted recommendation 6.

B. Procurement and other contract management activities

Project construction expenditures to March 2023 were paid in accordance with contracts and were adequately supported

39. Cumulative construction expenditures from the issuance of the notice to commence construction in November 2021 amounted to approximately \$5.3 million (THB 182 million) through three purchase orders. OIOS sampled five invoices totaling \$2.5 million (THB 88 million) for detailed testing and noted that they were all properly authorized and in line with approved project scope. All payments were made less 5 per cent retention and 10 per cent advance payment recovery.

40. Following the award of the contract, the contractor was advanced \$2.5 million, which was approximately 10 per cent of the contract value of approximately \$25 million (THB 840 million). This was in accordance with clause 14.2 of the contract, which stated that ESCAP shall make an advance payment to the contractor, as an interest free loan for mobilization and cash-flow support. This was in exchange of a bank guarantee of equal value from the contractor and was to be repaid at each interim progress payment.

Since this was an exception under Financial Rule 105.19 (a),¹ prior approval was obtained from the Assistant Secretary-General, Office of Supply Chain Management, Department of Operational Support on 22 June 2021. The total amount recovered as of March 2023 was \$587,840 (approximately THB 20 million). OIOS concluded that the amount spent on construction for the period under review was within budget and adequately supported, and the correct retention and advance recovery were made as contractually agreed.

The furniture systems contract was successfully concluded but schedule delays were impacting delivery of furniture and will need to be closely monitored

41. In report 2022/022, OIOS noted that the construction contract was successfully signed on 14 October 2021 and construction commenced on 23 November 2021. The only other contracts signed on behalf of SMP during the audit period was the furniture contract awarded to three furniture suppliers in June 2022 for a combined "Not to Exceed" amount of approximately \$5.8 million. This contract was approved by the Headquarters Committee on Contracts in the meeting held on 29 December 2021. OIOS noted that as of March 2023, no disbursements had been made to any of the furniture suppliers by ESCAP. This is consistent with the current baseline schedule as furniture will only be installed once construction is completed. Consequently, no progress billings were made.

42. However, ESCAP, including its tenants, were required to issue purchase orders eight weeks in advance of the completion of each floor. If the construction schedule and furniture purchase plans are not synchronized, there is a risk that: (a) furniture delivery may be delayed, and this will affect restacking of the floors; and (b) furniture may be delivered before construction is completed. The later risk materialized as furniture ordered for floors 3 to 15 and expected to be delivered in March 2023 was put on hold because the floors were not yet complete as scheduled. Consequently, the furniture manufacturers advised the SMP team of the storage costs per day. For example, one of the suppliers indicated that the storage charges were 1.5 per cent of the product value per month. Discussions were held between the SMP team and the contractor and via email dated 5 January 2023, the contractor noted the demurrage costs as advised by furniture manufacturers though there was no express agreement that they will be responsible for meeting the costs. ESCAP further noted that with the support of OLA, they created an amendment in the contract whereby the contractor and furniture companies can recover storage costs from each other. This issue needs to be carefully managed to avoid a dispute that could further delay the project and/or incur additional costs. ESCAP stated that together with the contractor and the furniture vendors, the project team had already put in place several measures to ensure furniture deliveries are not delayed and that there are appropriate risk mitigation measures to manage early deliveries. Based on the actions taken, OIOS did not make a recommendation on this matter.

Environment, health and safety plan

43. The contractor produced a project environmental, health and safety plan effective 12 May 2022. The plan was very detailed and included the roles and responsibilities of all stakeholders involved in the project. The plan also included standard compliance requirements that were to be monitored and enforced for the work performed at the construction site. While the SMP team was not successful in recruiting a Safety Officer, the Project Executive availed the services of the Occupational Safety and Health Officer in the Medical Services Unit, who carries out random site inspections once a week. In addition, the contractor, SMP team, a representative from SSS and a representative of the construction administration firm held

¹ Except where normal commercial practice or the interests of the United Nations so require, no contract or other form of undertaking shall be made on behalf of the United Nations which requires a payment or payments on account in advance of the delivery of products or the performance of contractual services. Whenever an advance payment is agreed to, reasons therefore shall be recorded.

weekly meetings. OIOS reviewed the minutes of the weekly meetings, the hazard risk register and inspection reports and no exceptions were noted.

44. The SMP team had also put in place COVID-19 protocols whereby weekly tests were conducted on all workers during the reporting period until September 2022 when the ESCAP COVID-19 Contingency Management Team relaxed the testing protocols to only those with symptoms. As a precautionary measure, workers were still encouraged to wear masks, sanitize and advised to stay at home should they develop COVID-19 related symptoms. A review of incidence reports and interviews with the Occupational Safety and Health Officer indicated that no major injuries had occurred in the past 480 days. OIOS concluded that the environmental health and safety measures put in place were adequate.

C. Project oversight mechanisms

The Stakeholder Committee should advise on actions to take to mitigate owner directed changes as part of their oversight and guidance on risk management

45. The Stakeholder's Committee (the Committee) was established in January 2017 to assist the Project Owner and the Project Executive to proactively manage the project. The Committee was expanded in October 2019 to include a broader set of stakeholders, including increased representation of United Nations agencies, funds and programmes that were tenants of ESCAP. In 2022, the Stakeholders Committee met in February, July and December.

46. In a prior year audit, OIOS had recommended that the Committee should include on its agenda: (a) guidance on seeking voluntary contributions from Member States; and (b) updates on risk management and related mitigation measures.

47. Even though risk management and guidance on seeking voluntary contributions formed part of the agenda in subsequent meetings of the Committee, the minutes showed that no advice was provided. For example, in the July 2022 meeting, the SMP team highlighted the top five project risks that would impact the project as reported in the Secretary-General's report A/77/330 that included owner directed changes. These were provided for information purposes only and no discussions were held on how they would be mitigated. A discussion on owner directed changes and how these would be funded could have been appropriate for discussion in this Committee to ensure that the project is completed within budget and schedule approved by the General Assembly. The SMP team explained that stakeholders were mostly interested in matters affecting their constituents such as space allocation. However, the SMP team undertook to encourage the Committee to become more involved especially in identifying donors and lobbying for voluntary contributions. Therefore, no recommendation was issued on the matter.

IV. ACKNOWLEDGEMENT

48. OIOS wishes to express its appreciation to the management and staff of ESCAP for the assistance and cooperation extended to the auditors during this assignment.

Internal Audit Division Office of Internal Oversight Services

STATUS OF AUDIT RECOMMENDATIONS

Rec. no.	Recommendation	Critical ² / Important ³	C/ O ⁴	Actions needed to close recommendation	Implementation date ⁵
1	ESCAP should prepare and implement an action plan in conjunction with the construction administration firm and the contractor to minimize schedule slippage and quantify the costs of staff and other resources that will be required to attain substantial completion of the seismic mitigation retrofit and life-cycle replacements project.	Important	0	Receipt of evidence that the action plan to minimize schedule slippage has been operationalized and the quantification of costs of staff and other resources related to construction delays has been included in the report to Member States.	31 March 2024
2	ESCAP should include a section dealing with close- out activities in the project management plan to guide the project team to ensure orderly closure of contruction activities on the seismic mitigation retrofit and life-cycle replacements project.	Important	0	Receipt of the updated project management plan that includes a section dealing with close-out activities to ensure orderly closure of construction activities.	31 March 2024
3	DMSPC should take steps to improve in-house capacity of the Global Asset Management Policy Service to support capital construction projects in the Secretariat entities for the duration of the remaining construction projects.	Important	0	Receipt of evidence that the in-house capacity in GAMPS has improved to an acceptable level.	31 March 2024
4	ESCAP should update the risk register of the seismic mitigation retrofit and life-cycle replacements project by incorporating new emerging risks, identifying risk owners and assigning responsibility for mitigating actions in the response plans.	Important	0	Receipt of the updated risk register incorporating emerging risks, identifying risk owners and assigning responsibility for mitigating actions in the response plans.	31 March 2024
5	ESCAP should prepare a transition risk assessment and plan to enable an orderly handover of systems and equipment to the Facilities Management Unit, Safety and Security Section or Information Management and Communications Technology Service.	Important	0	Receipt of the transition risk assessment and plan to handover systems and equipment.	31 March 2024
6	ESCAP should incorporate in the lessons learned document the need to prepare a resource mobilization strategy and implementation plan	Important	0	Receipt of evidence that the lessons learned document that incorporates a section dealing with resource mobilization.	31 March 2024

STATUS OF AUDIT RECOMMENDATIONS

Rec. no.	Recommendation	Critical ² / Important ³	C/ O ⁴	Actions needed to close recommendation	Implementation date ⁵
	early, following approval of a project, to increase the likelihood of better outcomes.				

² Critical recommendations address those risk issues that require immediate management attention. Failure to take action could have a critical or significant adverse impact on the Organization.

³ Important recommendations address those risk issues that require timely management attention. Failure to take action could have a high or moderate adverse impact on the Organization.

⁴ Please note the value C denotes closed recommendations whereas O refers to open recommendations.

⁵ Date provided by ESCAP in response to recommendations.

APPENDIX I

Management Response

Management Response

Rec. no.	Recommendation	Critical ¹ / Important ²	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
1	ESCAP should prepare and implement an action plan in conjunction with the construction administration firm and the contractor to minimize schedule slippage and quantify the costs of staff and other resources that will be required to attain substantial completion of the seismic mitigation retrofit and life-cycle replacements project.	Important	Yes	Senior Programme Management Officer	31 March 2024	ESCAP accepts the recommendation. An action plan is in place to minimize the slippage. ESCAP, in consultation with GAMPS and OPPFB, will include in the annual report of the SG all costs related to the project delays and a summary highlighting related risks.
2	ESCAP should include a section dealing with close-out activities in the project management plan to guide the project team to ensure orderly closure of contruction activities on the seismic mitigation retrofit and life-cycle replacements project.	Important	Yes	Senior Programme Management Officer	31 March 2024	ESCAP accepts the recommendation and will ensure that the project management plan is updated to include a section on construction close-out activities by 31 December 2023.
3	DMSPC should take steps to improve in- house capacity of the Global Asset Management Policy Service to support capital construction projects in the Secretariat entities for the duration of the remaining construction projects.	Important	Yes	Director, FOFD (Facilities Management Officer)	31 March 2024	DMSPC accepts the recommendation, and the GAMPS intends to hire in 2023 a D1 Chief of Service, a P2 Associate Architect through the MRP, a P3 HQ coordinator for the UNON A-J and ECLAC projects, and a P4 Finance and Budget Officer to enhance support to all projects, in lieu of the P4 HQ Coordinator just for the ESCWA and ECA projects, a

¹ Critical recommendations address those risk issues that require immediate management attention. Failure to take action could have a critical or significant adverse impact on the Organization.

 $^{^{2}}$ Important recommendations address those risk issues that require timely management attention. Failure to take action could have a high or moderate adverse impact on the Organization.

APPENDIX I

Management Response

Rec. no.	Recommendation	Critical ¹ / Important ²	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
						function that will be performed by an existing resource within the GAMPS. In the absence of the D1 Chief of Service, GAMPS reports directly to the Director of the Division who provides guidance to the work
4	ESCAP should update the risk register of the seismic mitigation retrofit and life- cycle replacements project by incorporating new emerging risks, identifying risk owners and assigning responsibility for mitigating actions in the response plans.	Important	Yes	Senior Programme Management Officer	31 March 2024	ESCAP accepts the recommendation.
5	ESCAP should prepare a transition risk assessment and plan to enable an orderly handover of systems and equipment to the Facilities Management Unit, Safety and Security Section or Information Management and Communications Technology Service.	Important	Yes	Senior Programme Management Officer	31 March 2024	ESCAP accepts the recommendation.
6	ESCAP should incorporate in the lessons learned document the need to prepare a resource mobilization strategy and implementation plan early, following approval of a project, to increase the likelihood of better outcomes.	Important	Yes	Senior Programme Management Officer	31 March 2024	ESCAP accepts the recommendation.