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Financing of the International Residual Mechanism for Criminal Tribunals

Construction of a new facility for the International Residual Mechanism for Criminal Tribunals, Arusha branch

Report of the Secretary-General

Summary

In its resolution [73/288](#), the General Assembly noted the progress made in the construction of the new premises and requested the Secretary-General to submit a final report during its seventy-fourth session. The Assembly also requested the Secretary-General, in the context of his final report, to include an analysis of and comprehensive information on lessons learned and best practices for application, as appropriate, to other construction projects.

Accordingly, the present report is the ninth and final report on the construction of a new facility for the International Residual Mechanism for Criminal Tribunals, Arusha branch, and provides an update on the project since the submission of the previous progress report ([A/73/718](#)). The report provides an overview of progress made, including: (a) the completion of the outstanding work; (b) the remediation of defects relating to the heating, ventilation and air conditioning system; (c) efforts to pursue the recovery of the direct and indirect costs arising from errors and delays, where economically feasible; (d) projected total costs and final expenditures; (e) the closure of accounts and the settlement of claims and liabilities; and (f) analysis of lessons learned and best practices for application, as appropriate, to other construction projects.

The General Assembly is requested to take note of the final report and to take note that information on the final settlement of accounts and liabilities on the project will be reported in the context of the performance report on the budget of the Mechanism for 2020.



I. Introduction

1. Following the adoption by the General Assembly of its resolution [66/240 A](#), the project for the construction of a new facility for the Arusha branch of the International Residual Mechanism for Criminal Tribunals commenced in January 2012. It will be recalled that the Mechanism was mandated by the Security Council in its resolution [1966 \(2010\)](#) to perform a number of essential residual functions of the pioneer International Criminal Tribunal for Rwanda and International Tribunal for the Former Yugoslavia. The Arusha branch, which commenced functioning on 1 July 2012, inherited functions from the International Criminal Tribunal for Rwanda, while the branch in The Hague, the Netherlands, which commenced functioning on 1 July 2013, inherited functions from the International Tribunal for the Former Yugoslavia. In its resolution [66/240 A](#), the Assembly appropriated an initial amount of \$3 million to cover expenses related to the conceptual design phase of the project, as part of the budget of the Mechanism. In its resolution [67/244 B](#), the Assembly authorized the activities related to all phases of the construction of the facility and authorized the Secretary-General to establish a multi-year special account for the project. In its resolution [68/257](#), the Assembly appropriated an additional amount of \$5,787,733, reflecting approved resources for a total of \$8,787,733 for the project.

2. Eight progress reports have been submitted previously to the General Assembly, outlining project expenditure and costs, as well as the implementation of the requests and recommendations of the Assembly. The present report constitutes the ninth and final report. Further updates, including information on the final settlement of accounts for the project, will be reported in the context of the performance report on the budget of the Mechanism for 2020.

3. The present report describes the progress made since the issuance of the previous report ([A/73/718](#)) and provides updated information on the governance of the project, progress made during the reporting period regarding outstanding matters and updated expenditure and projected cost to completion.

4. Substantial completion of the project was achieved on 1 December 2016. This marked the conclusion of the construction phase and the beginning of the post-occupancy phase. The Mechanism moved into the facility, the sole seat of its Arusha branch, on 5 December 2016 and has operated from the facility ever since.

5. The project continued to remain within the overall approved budget of \$8,787,733.

6. The Secretary-General once again expresses his gratitude to the host State, the United Republic of Tanzania, for its unwavering support and involvement alongside the project team to facilitate the completion of the project and its crucial final steps.

7. The present final report provides an overview of the main activities undertaken during the reporting period (the project closeout), including:

- (a) Formal closure of the punch-list;
- (b) Closure of accounts and settlement of claims and liabilities with the contractor;
- (c) Recovery of direct and indirect costs arising from errors and delays, where economically feasible;
- (d) Remediation of heating, ventilation and air conditioning (HVAC) system defects;
- (e) Project total costs and final expenditures;
- (f) Lessons learned and best practices.

II. Governance

A. Stakeholders

Project team

8. The project team is responsible for the overall coordination and oversight of the project. The Assistant Secretary-General and Registrar of the Mechanism has served as the project owner since assuming office on 1 January 2017. Since November 2018, he has been assisted by the Chief Administrative Officer of the Mechanism, who serves as the Coordinator for the project during the current closeout phase, to coordinate the contribution of multiple stakeholders on all aspects (i.e. legal, financial and administrative) linked to the completion of the project. As noted in the previous report, a new project manager was recruited in August 2018 following the departure of the two previous project managers, who left the project in December 2016 and July 2018, respectively. There has not been any change in the project management since the previous report.

Host State

9. Cooperation between the Mechanism and the Government of the United Republic of Tanzania continued to be excellent throughout the reporting period and the project as a whole. The Secretary-General reiterates his deep appreciation for the unwavering support of the Government and its officials during the closeout period and, in particular, regarding the issues related to the remediation of the HVAC system.

Other stakeholders

10. The Mechanism has been operating as a fully self-standing institution since 1 January 2018, following the closure of the International Criminal Tribunal for Rwanda and the International Tribunal for the Former Yugoslavia in 2015 and 2017, respectively. The project has accordingly been supported by the Registry of the Mechanism and its various sections (Legal Team, Archives and Records Section, Administration and Safety and Security Section).

11. The United Nations Secretariat, in particular through the Global Asset Management Policy Service of the Office of Programme Planning, Finance and Budget, the Procurement Division and the Office of Legal Affairs continued to provide technical advice and support. The Mechanism and the Global Asset Management Policy Service liaised on a weekly basis, via videoconferences, conference calls, meetings and correspondence.

B. Oversight

Audits

12. As previously reported, the Office of Internal Oversight Services (OIOS) delivered a three-stage audit of the project in accordance with General Assembly resolution [67/244](#) B. The first two audits, on planning and governance during the pre-construction phase and on the effectiveness of management of the construction phase (assignments No. AA2016/261/03 (10 April 2017) and No. AA2015/261/01 (16 February 2016), respectively), were reported in previous reports of the Secretary-General ([A/70/698](#) and [A/71/753](#)). The overall results were found to be satisfactory, while two recommendations were made in the second report regarding the recovery of delay damages and value added tax (VAT) claims with local authorities. The third and final audit of the project (No. AA2017/261/07, Audit of post-construction and

occupancy of the new office facility at the Mechanism for International Criminal Tribunals at Arusha, report 2018/007), covering the immediate post-construction phase, included eight recommendations that were accepted by the Mechanism, as follows: (a) closure of the punch-list; (b) improvements to fire detection and firefighting equipment; (c) completion of the court building; (d) HVAC remediation; (e) remediation of the impact of sandstorms; (f) security requirements, including fence foundation and ablution; (g) rerouting of water pipes and power sources in the data centre; and (h) space allocation guidelines. In addition, since the substantial completion of the project, the Board of Auditors has issued four recommendations in direct relation to the project, regarding: (i) completion of the punch-list and recovery of liquidated damages; (ii) HVAC remediation; (iii) modification of water pipes running through the data centre; and (iv) receipt of as-built drawings and operational manuals for building equipment (see [A/72/5/Add.15](#), [A/73/5/Add.15](#) and [A/74/5/Add.15](#)).

13. Recommendations with respect to closure of the punch-list, withholding of payment in relation to delay damages and remediation of the HVAC system, raised by both OIOS and the Board of Auditors, are being addressed, as noted in the present report. Accordingly, the Board has indicated its intention to close the recommendation regarding delay damages. The other common recommendation regarding rerouting of the water pipes through the data centre has been implemented. In addition, the Board recommendation relating to the updating of as-built drawings was closed during the Board's annual interim audit conducted at the time of writing.

14. Implementation of several other recommendations made by OIOS is either well advanced or completed. For example, with regard to an outstanding recommendation referring to the reimbursement by the authorities of the United Republic of Tanzania of VAT, good progress had been made at the time of writing, with 66 per cent of VAT claims related to the main contract paid. The Secretary-General would like to express his gratitude to the authorities of the United Republic of Tanzania for the refunds received, and is confident that payment of the remaining claim will be forthcoming so that the recommendation can be closed. In addition, with regard to security requirements, the construction of a fence foundation was completed at the beginning of 2019, while the construction of ablution facilities for use by security personnel guarding the primary entry point to the premises is currently ongoing, with an expected completion date in February 2020. Furthermore, all offices and common spaces contain fire detection equipment. The courtroom is fully operational, as evidenced by the judicial activity undertaken there during the course of 2019. Space allocation is addressed on an ongoing basis in the light of fluctuating staffing levels in relation to judicial activity, with due regard given to restrictions imposed by the required segregation of functions.

15. One of the recommendations, which concerns the impact of sandstorms on the office building, is still pending. The Mechanism remains actively engaged on all outstanding recommendations and continues to work towards their full implementation within the parameters of its financial and human resources.

Office space

16. The Mechanism has had initial preliminary discussions regarding space allocation matters with the United Nations Office at Nairobi to establish the extent to which the Office could be of assistance in the development, promulgation and implementation of space allocation guidelines. Specific attention is given to fluctuating staffing levels in relation to judicial activity and the utilization of space to the maximum extent, with due regard given to restrictions imposed by the required levels of confidentiality and segregation of functions. The discussions with the Office are expected to continue in 2020.

III. Progress made during the reporting period

17. Throughout the reporting period, the Mechanism continued to make full use of the office and courtroom buildings. The courtroom successfully hosted a review hearing in the *Ngirabatware* case (Case No. MICT-12-29-R) starting on 16 September 2019, which concluded with the issuance of the review judgement of the Appeals Chamber on 27 September 2019. The courtroom continued to host status conferences in the *Turinabo et al.* case (Case No. MICT-18-116), involving five accused persons, at regular intervals. There was an initial appearance in the new *Ngirabatware* contempt case (Case No. MICT-19-121) on 17 October 2019. Furthermore, the Arusha branch continued to welcome researchers, students, government officials and other visitors to its premises during the reporting period.

18. The Mechanism made significant progress with regard to the remediation of the HVAC system defects and the consideration of contractual remedies relating to design defects and project delays, and closed the punch-list, as described in more detail below.

A. Closure of the punch-list

19. As previously indicated, closeout of punch-list items continued past the contractual one-year defects liability period, which was extended until 30 April 2018 with respect to all of the construction work to enable the contractor to work on the punch-list items. In the eighth progress report, it was reported that 90 per cent of the 880 items originally recorded on the punch list had been successfully completed. The Mechanism has since achieved formal closure of the punch list.

20. In February 2019, the project team had reached an informal agreement with the contractor for the closure of outstanding minor work remaining on the punch list. Closure was achieved by a review of outstanding items, which had been closed either by completion of the work required or by assigning a valuation to the uncompleted work for an amount to be deducted from the final payment to the contractor.

21. The contractor and the Mechanism have now formally agreed on the final valuation of the outstanding punch-list items. This amount was reflected in the penultimate invoice received from the contractor in December 2019 and has been accordingly deducted from the payment. As such, the punch list has now ceased to exist.

22. Outstanding items ranged from minor items, such as window hatches and positions of light fixtures, to more significant issues, such as water filtration into manholes and incorrect electrical cabling. Most of these items had only minimal impact on the functioning of the facility. Items with an impact on the functioning of the facility have been or are being addressed by the Facilities Management Unit of the Mechanism and are now part of the overall facilities management portfolio. This formally closes the matter of the punch list.

B. Closure of accounts and settlement of claims and liabilities with the contractor

23. Since the previous payment made in December 2017, the Mechanism had not released any new payment to the contractor until December 2019. In accordance with the agreed punch-list valuation amount, in early 2019 the Mechanism requested a final invoice from the contractor in order to settle the final accounts and obtained a pro forma invoice for the penultimate project payment. However, discussions relating

to a final project payment were temporarily halted owing to concomitant discussions pertaining to the HVAC remediation work, as well as the notification made by the Mechanism to the contractor in June 2019 that the United Nations would seek to recover delay damages from the final payment owed to the contractor, as noted in section C below.

24. In July 2019, the contractor indicated its intention to contest the decision to withhold delay damages, and later transmitted a letter bringing forward a claim under the contract, which purportedly caused significant additional costs for the contractor. The Mechanism responded that it did not consider the letter received from the contractor to be a valid claim notice under the contract and reiterated its request for a final invoice. In August 2019, the contractor replied that it would not submit a final invoice before the final value of the contract was determined.

25. Discussions on final project payment resumed in October 2019 when the Mechanism formally requested from the contractor a draft final statement with supporting documents, showing in detail the value of all work done and any further sum that the contractor considered to be due under the contract. The Mechanism advised that, under the contract, should a dispute exist on the final statement, the United Nations may issue an interim payment certificate for the agreed parts of the final statement. The Mechanism therefore demonstrated goodwill by encouraging the contractor to agree to payment of the undisputed amount on the final statement. The contractor provided a draft final statement in November 2019 and a formal penultimate invoice in December 2019. This invoice reflects the agreed deduction to close the punch list and takes into account adjustments to the provisional sums included in the contract amount, as well as variation orders, for a total invoice amount of approximately \$464,000. The invoice further reflects the amount of \$230,000 withheld for delay damages, as detailed in section C below. The net payment was therefore approximately \$234,000.

C. Consideration of contractual remedies regarding design defects and project delays

26. In line with General Assembly resolutions [70/258](#) and [73/288](#), and in close coordination and consultation with the Global Asset Management Policy Service, the Procurement Division and the Office of Legal Affairs, the Mechanism continued to examine options for the appropriate recovery of direct and indirect costs arising from errors and delays that may be attributable to the Mechanism's contractual partners, where economically feasible. This assessment is being made in the context of the ongoing activities of the project's closeout phase.

27. In consultation with the Global Asset Management Policy Service, the Procurement Division and the Office of Legal Affairs, the Mechanism has continued to carefully consider its options for the recovery of potential remedies stemming from errors and delays in the context of protracted negotiations regarding the completion of the remedial work on the HVAC system.

28. With regard to the architect, the project team continues to explore the viability of each of the possible avenues for the additional recovery of costs stemming from design defects or delays that may be attributable to the architect. In the interim, the Mechanism has retained payment of architectural fees amounting to \$77,472, corresponding to the final payment under the contract for the final stage of the project, until successful installation and certification of the HVAC system redesign.

29. The contract entered into with the contractor provides that the United Nations may elect to impose delay damages, which are calculated for each day of delay with

a cap of 10 per cent of the total contract value. The Mechanism undertook careful and thorough discussions with the Office of Legal Affairs, the Global Asset Management Policy Service and the Procurement Division regarding the amount that the United Nations would seek to recover, as it was considered that the contractor was still performing work under the contract in relation to the remedial work on the HVAC system. Following those consultations, in June 2019, the Mechanism decided to seek the recovery of delay damages in the amount of approximately \$230,000.

30. This assessment was deemed to adequately balance, on the one hand, the rights and interests of the United Nations, where economically feasible, to recover any direct or indirect costs arising from errors and delays and, on the other hand, the need to achieve completion of the project and planned work as expeditiously and as smoothly as possible in collaboration with contractual partners, in line with the request made by the General Assembly in its resolution [73/288](#).

31. The Mechanism thereafter informed the contractor that, pursuant to the contract, the Mechanism would opt to exercise this remedy by withholding \$230,000 in delay damages from the final payment owed to the contractor upon submission of a final invoice. As stated above, while the contractor had indicated its intention to contest this decision, the deduction is reflected in the penultimate invoice and accordingly has not been paid.

D. Design defects regarding the heating, ventilation and air conditioning system

32. In line with General Assembly resolution [73/288](#), the Mechanism has pursued its efforts to secure the most efficient solutions for the proper commission of the entire HVAC system redesign.

33. It will be recalled that, during the first year of occupancy of the facility, the project team recorded design-related deficiencies (see [A/73/718](#) and [A/72/734](#)), which were communicated to the architect. Specifically, the HVAC system originally designed by the architect and installed at present in the main repository (designed to store paper-based records) and the cold vault (designed to store non-paper based media, such as magnetic tapes) of the Archives Building does not fully meet the air quality, temperature control and relative humidity standards required by the Mechanism to preserve and manage the archives of the International Criminal Tribunal for Rwanda and the Mechanism, pursuant to the Mechanism's mandate.

34. In June 2018, and at no additional cost to the United Nations, the architect provided a conceptual design of the HVAC system for the cold vault. The architect did not provide a similar redesign for the main repository.

35. An initial cost estimate for the HVAC remediation work, including remediation of both the main repository and the cold vault, was provided by the contractor in July 2018. At that stage, the remedial part of the work was estimated at approximately \$280,000. The contractor initially indicated its availability and willingness to supply and install the HVAC system redesign for the cold vault and the main repository.

36. In April 2019, in the midst of ongoing discussions with the main contractor regarding the final payment and the recovery of direct and indirect costs arising from delays, as indicated above, the contractor issued a quotation for the HVAC remediation work amounting to the higher sum of approximately \$450,000.

37. As a result of protracted negotiations with the contractor, progress on the HVAC remediation work appeared durably stalled. The Mechanism therefore devoted substantial time and resources to identifying and promptly implementing the most

viable alternative solution, in consultation with the Global Asset Management Policy Service and the Procurement Division. It was decided that expert technical advice was needed to assist the Mechanism in the development of the statement of requirement and technical evaluation criteria for the solicitation in order to implement the redesign of the cold vault, as provided by the architect.

38. In September 2019, the Mechanism identified and contracted an independent expert consultancy firm employed by the Economic Commission for Africa (ECA), to provide input for the solicitation documents and to assist with the technical evaluation of the proposals. The Mechanism benefited from the same competitive rates as ECA. The consultant visited the Mechanism premises in October 2019 and provided guidance on a number of preliminary remediation works, partially addressing the insufficient HVAC performance, which the Mechanism can implement with minor procurement action or entirely in-house. The consultant also proposed that a new schematic and detailed design be developed for all the areas covered by the HVAC system, including the cold vault and the main repository of the Archives Building.

39. In consultation with the Global Asset Management Policy Service and the Procurement Division, this proposed course of action was approved and is currently being implemented by the Mechanism in close coordination with the consultant. As at 1 December 2019, the consultant has delivered a schematic design for both the cold vault and the main repository. In the schematic design, the consultant proposes the most efficient use of existing components, with minimal redundancy and cost for the United Nations. The Mechanism has already implemented most of the preliminary remediation work advised by the consultant, where in-house implementation was feasible. At the time of drafting, it was too early to assess the actual impact of the preliminary remediation work on temperature, relative humidity and air quality in the cold vault and the main repository.

40. It is expected that the consultant will be engaged further for the development of a detailed design and the statement of requirements needed to procure the equipment necessary to implement the detailed design. The timeline for the final remediation of the HVAC system is estimated to last until September 2020.

IV. Project expenditure and costs

41. The total budget approved for the project amounts to \$8,787,733, inclusive of a contingency provision in the amount of \$1,050,371.

42. On the basis of lessons learned from other capital projects, and in line with industry best practice, the General Assembly approved, as proposed by the Secretary-General, a contingency provision representing 15 per cent of the estimated project cost. It will be recalled that the contingency provision serves as a necessary safeguard against unforeseen cost overruns during project implementation, which includes field conditions, errors and omissions by the architect or other unexpected contractual issues (see also paragraph 9 of Assembly resolution [69/276](#)).

43. The table below shows actual expenditure, including the contingency provision, from the start of the project up to 31 December 2019. It presents a consolidated overview of project expenditure and costs throughout the project.

44. In the previous report, it was reported that a total of approximately \$850,000 in expenditure was expected to be charged against the contingency provision. That amount took into account an estimate of \$280,000 covering the construction, project supervision and management of the HVAC remediation work based on a quotation provided by the contractor in July 2018. However, in the light of the latest

developments, and considering the preliminary assessment made by the consultant, it appears that the initial scope of work and corresponding estimate provided by the contractor no longer reflect the needs of the Mechanism to remediate the HVAC system defects. Nonetheless, at the time of writing there was no indication that the final HVAC remediation costs would exceed the estimate provided in the previous report.

45. The project team therefore expects that the final project costs will remain within the overall approved budget of \$8,787,733. Consistent with the guidance of the General Assembly in its resolution 71/272 A, in the context of its consideration of reports of the Secretary-General on other construction projects, any remaining unused contingency funds would be returned to Member States at the conclusion of the project.

46. The Secretary-General intends to include information on the final settlement of claims and liabilities in the context of the performance report on the budget of the Mechanism for 2020.

Project expenditure, including charges against the contingency provision for the period 2013–2019

(United States dollars)

Description	Appropriation			Expenditure (including charges against the contingency provision)			
	Approved	Approved contingency	Total	2013–2018 disbursements	2019 final disbursements	Total expenditure 2013–2019	Project balance ^a
	(1)	(2)	(3)=(1)+(2)	(4)	(5)	(6)=(4)+(5)	(7)=(3)-(6)
Construction	6 365 887	954 883	7 320 770	6 267 479	233 897	6 501 376	819 394
Architect and project management	1 371 475	95 488	1 466 963	1 983 516	–	1 983 516	(516 553)
Total	7 737 362	1 050 371	8 787 733	8 250 995	233 897	8 484 892	302 841

^a Subject to the settlement of final accounts.

V. Other matters

Maintenance services

47. Upon occupancy of the new premises of Arusha branch, the Mechanism has put in place long-term facilities-related contracts for janitorial services, grounds maintenance and window washing, as well as separate maintenance contracts for specialized equipment, such as the generators, fire hydrant systems, domestic water pumps, a HVAC system and the fire suppression system deployed in the data centre. Where such solicitation has not yet been concluded, one-off maintenance services have been ordered and received in order to ensure compliance with the maintenance schedule for the equipment. This is the case for the elevator, uninterrupted power supply systems and the Archives Building firefighting system, all of which are in advance stages of the procurement process.

48. In addition, a contract for local (skilled and unskilled) labour is in place to cover small building maintenance work. The Mechanism's facilities management staff also perform routine maintenance activities as part of their regular portfolio.

Lessons learned and best practices

49. As requested by the General Assembly in its resolution [73/288](#), an analysis of the lessons learned and best practices for application to other construction projects is provided in the annex to the present report.

VI. Actions to be taken by the General Assembly

50. The General Assembly is requested to:

(a) Take note of the present report as the final report related to the construction of a new facility for the International Residual Mechanism for Criminal Tribunals, Arusha branch;

(b) Take note that information on the final settlement of accounts and liabilities on the project will be reported in the context of the performance report on the budget of the Mechanism for 2020.

Annex

Lessons learned and best practices for application, as appropriate, to other construction projects undertaken by the Organization

Governance

1. An effective organizational and management structure, including a project owner, project executive and dedicated project team, with guidance and support from Headquarters (Global Asset Management Policy Service of the Office of Programme Planning, Finance and Budget) should be established to facilitate the successful planning and execution of the project.
2. An accountable and efficient governance structure must be developed and implemented as part of the initial project structure. It should establish clear lines of authority, defining the purpose and role of each governance component. The governance structure should be adjusted, as appropriate, during the project to reflect changes in the project's risk profile as it evolves through its various stages.
3. Recent capital projects within the Secretariat, including the construction of new office facilities in Addis Ababa and Nairobi, as well as the construction of a new facility for the International Residual Mechanism for Criminal Tribunals, Arusha branch, have clearly indicated the need for additional assistance from a locally based, full-time dedicated project manager to ensure day-to-day management, coordination and timeliness of action, ultimately resulting in savings for the United Nations.
4. In terms of an appropriately sized dedicated project management team, sufficient dedicated resources should be allocated early enough in the process in relation to the size and magnitude of the project in order to keep the workload and responsibilities manageable. The project team should have the proper balance of staff, with both international and local experience, including expertise in relevant technical disciplines (architecture, engineering and project administration). Roles and responsibilities within the project team should be clearly defined.
5. The project team should also be able to work seamlessly with existing facilities management staff as required, including soliciting information regarding existing conditions and management practices. The recruitment of facilities management staff for the new Mechanism building should be accounted for earlier in the construction process to aid the transition of long-term maintenance and repair from the project team to the facilities management team.
6. Furthermore, continuity of the project team, and in particular the project manager, throughout the planning, design, construction and post-construction phases, and at least until the end of the defects liability period, is critical to the successful completion of the project. The retention of key project team staff throughout the project, in particular the project manager, should therefore be considered and given priority.
7. Changes to key personnel of the project team should be accounted for in project scheduling, and a standard format for handover documents should be developed as part of the guidelines. In addition, it is highly recommended that there is an overlap between the departing and incoming key personnel, in particular the project managers, to allow for sufficient handover of detailed knowledge that is not necessarily captured in handover documents.
8. A log of lessons learned in the project, as well as lessons learned and best practices in other projects applied to the project, should be maintained on a regular basis for future reference and sharing.

9. The project should be led in accordance with the global guidelines of the Global Asset Management Policy Service for the management of construction projects, in particular pertaining to the substantial completion phase and the post-construction phase.
10. A rigorous and transparent communication plan among stakeholders and risk owners should be maintained and implemented throughout the project as a means of implementing appropriate change and risk management.
11. All decisions requiring approval, in particular those needing input by project stakeholders, should be identified early in the planning process in order to ensure that decisions can be made within an appropriate time frame and do not have a negative impact on project execution.

Contract

12. A contractual framework based on an industry standard form of contract, familiar to local contractors and the market, should be considered and made available.
13. The most appropriate contractual mechanism for design and construction must be determined early in the project planning stages, with adequate knowledge of the local market. A determination should be made of whether a lump sum or bill of quantities contract is most appropriate, considering local skills.
14. For construction contracts, payment terms for the importation of materials must be determined prior to the awarding of the contract, with the terms clearly documented in the awarded contract.

Risk management

15. The risk of programme variances (owner-directed changes), which can have an impact on the schedule and cost during project evolution, should be duly considered.
16. Project risks should be assessed using qualitative and quantitative methodologies and actively managed through the assignment of ownership of risks and response measures to line managers. Control measures should be regularly adjusted to reflect the progress made in a project.

Budget

17. The budget should include a provision for contingency in an amount appropriate to cover reasonable project risks, which would vary depending on the project stage. Contingency funds are required to cover unforeseen project conditions, such as field conditions, construction escalation, delays, errors and omissions by the architect and the contractor, or other unexpected conditions outside the direct control of the Organization.
18. A construction project budget includes provisions for contingency, cost escalation and the general contractor's and architect's fees, which are items relating to capital expenditure and are not typically found in an operating budget such as the programme budget of the United Nations. It is important that such elements and their usage be clearly defined at the project planning phase. Once determined, they should be consistently treated and reported by the Organization throughout the project life cycle, as established at the scope and budget formulation stage.

Planning

19. A detailed project manual should be created as early as possible in the implementation of the planning phase in order to provide clear operational procedures

and internal project control mechanisms to manage the costs and schedule, drawing on the global guidelines for the management of construction projects.

20. From the pre-planning stages, a formal sign-off by senior managers of departments concerning what will be delivered, including project objectives and expected benefits, is critical to limit changes in user requirements while the construction project is in progress.

21. Sufficient time should be planned for project consultants and industry experts (architects and engineers) to prepare the contract, construction documents and cost estimates.

22. The engagement and support of the senior management are critical early on for the formulation of the project. The goals and objectives, the budget and schedule, the risks and exposures and the limits of the work that will be achieved should be clearly communicated and documented, not only in reports of the Secretary-General, but also in briefings and online communications as a means of establishing baseline change management. Where feasible, consideration should be given to developing project programming, involving a wide array of stakeholders from the outset of the project. Given that project start-up is often a slow process, an in-house project programme may result in financial savings, shorten the duration of the project and help to foster a sense of ownership of the project among all stakeholders from its inception.

Design

23. To be effective, the project structure should include specialized consultants, especially when part of the work requires highly technical knowledge and experience (e.g. archival facilities and courtrooms), and a single construction manager who would coordinate all elements of project implementation. The United Nations should be the decision maker for the overall programme and design, which allows it to retain direct control over the project costs and schedule. Close inter-entity and interdepartmental collaboration throughout all stages of the project should be sought, to ensure that all design requirements and applicable best practices are adequately incorporated.

24. The architect should establish design standards and oversee and coordinate the work of the main contractor and various subcontractors. Specialized engineers (e.g. plumbing, electrical and heating, ventilation and air conditioning mechanical engineers and audiovisual technicians) should be employed to coordinate design and integration issues relating to the various systems to be installed.

25. Design objectives, programmatic and functional requirements and expected benefits should be clearly defined from the outset of the project, preferably during the planning phase and at the latest during the design phase, in close coordination with identified end users, as well as facilities management services, in order to develop maintenance requirements early on and to guarantee sustainable maintenance and usage in the long-term.

26. Gathering the appropriate expertise for the definition of functional requirements and making sure that such information is understood and thoroughly implemented in the course of the project is particularly important when highly specialized projects are undertaken, such as the construction of an archival facility or a courtroom. Meticulous follow-up is therefore required throughout the project. Furthermore, increased attention should be given to the existing environmental conditions and requirements necessary to reach the expected targets in terms of air quality, humidity and temperature levels.

27. Design documents should accurately reflect applicable international best practices and standards, in addition to local codes, and should also consider local

construction techniques and practices, in order to include local knowledge and capacity in the implementation of the project.

28. Close inter-entity and interdepartmental collaboration throughout all stages of the project should be sought, to ensure that all design requirements and applicable best practices are adequately incorporated.

Construction

29. The project should adhere to current best practices for sustainable building standards in the design and construction industries (e.g. the use of passive energy in a region where solar energy is in abundant supply) in order to minimize the consumption of energy, water and other resources, which will, in turn, minimize the long-term operating costs of the facility, the emission of greenhouse gases and construction waste, as well as promote regional building practices. Examples of such best practices include the implementation of environmentally friendly disposal of waste in order to produce biogas and compost manure, and the introduction of rainwater harvesting in a pond that can be used for firefighting and irrigation on the premises.

30. The presence of the architect or the architectural consultant on site during the construction work should be ensured so that all specifications and functional requirements are met in accordance with specifications and that the contractor benefits from adequate supervision. The construction work should take place under the full-time supervision of the architect or architectural consultant's staff, and in the regular presence of the facilities management services.

31. Furthermore, a United Nations coordinator should regularly be on site to coordinate the work of the main contractor and other contractors installing United Nations equipment, if required. This approach helps to minimize the risk of disruptions of each contractor's works.

32. It is advised that locally available fixtures be used for a project as a preference, so that they may be easily maintained and replaced for long-term use. The project team should also rely on previous knowledge and experience of the locally based facilities management team for the selection of adequate fixtures.

33. Detailed contractor submittal procedures should be developed for each project to ensure that the products are proposed and reviewed in a timely manner to allow for lead times (including importation, if required). Special attention should be placed on the review of substitutions proposed by contractors.

Post-construction

34. The dedicated project management team, especially on smaller projects, should include adequate staffing for post-construction activities. To the extent possible under the Staff Regulations and Rules of the United Nations, incumbent project staff members should be given incentives to remain with the project until final completion and move-in. The continued involvement of the architect is necessary after substantial completion of the project in order to oversee the closure of punch-list items, throughout the defect liability period and thereafter, as appropriate.

35. The Office of Legal Affairs and the Procurement Division should be closely involved during the post-construction phase, to provide support for the expedient resolution of any contractual issues that may arise and to enable the settlement of final accounts with the contractor and the architect.

Cost control

36. A robust design review process should be established to avoid, as much as possible, out-of-sequence design changes. The project should be regularly monitored against the established project objectives to avoid “scope creep”. Scope documents should be created and agreed to prior to the commencement of design services.
37. Construction costs should be known and validated prior to entering into any construction contract agreement. All associated and support costs must be identified at the outset of a project and should be included in the overall project cost plan so that they can be managed within the project.
38. A detailed procedure for change orders and appropriate levels of financial and procurement delegation for change orders, including oversight mechanisms, should be established at the outset of the project, and applied consistently throughout. This approach will greatly facilitate the smooth settlement of final accounts with the architect and the contractor.
39. Value engineering negotiations and resulting decisions should be thoroughly documented and reported. Due consideration should be given to the reutilization of existing furniture and equipment, as cost savings may be achieved by reusing existing assets to the maximum extent possible.
40. Budget control and reporting mechanisms should be developed early in the planning process and must be applied consistently throughout the project.

Procurement

41. All the appropriate procedures and objectives should be consolidated in a project manual, so that all contractors comply with the procurement guidelines and principles of the Organization.
42. For highly specialized and time-sensitive types of work (e.g. construction of an archival building with specific conservation requirements), an expeditious method of implementing sole-source selection or fast-track selection is needed. This requirement must be fully explored, in advance, with the Procurement Division and the Office of Legal Affairs.

General and administrative issues

43. A calendar of regular project team meetings should be kept and shared with all and centrally managed. All key decision makers should be present at team meetings, and all decisions should be meticulously documented and recorded for future reference, to ensure an adequate handover in the event of a change of project manager.
44. In addition to project team meetings, regular coordination meetings with all stakeholders and United Nations Headquarters (Global Asset Management Policy Service, Procurement Division and Office of Legal Affairs) should be held and recorded to solicit feedback and obtain agreement on the way forward. More generally, ongoing dialogue between Headquarters and offices away from Headquarters should be maintained to provide support throughout the project.
45. Document management procedures should be established in order to ensure knowledge-sharing and continuity within the project team and with relevant stakeholders.

Host State coordination

46. Cooperation with the host State in all aspects of the project regarding the establishment of duty-free and importing/shipping procedures, is essential. This

allows any location constraints and related challenges to be addressed, such as those related to the importation of construction material, which may delay the project, in order to accurately project and manage the overall schedule.

47. A local business presence should be required, both for an architect consultant and a construction contractor, in coordination with the host State. Holding seminars on United Nations procurement processes could help to ensure that international as well as local contractors have the requisite knowledge of the process to compete effectively.

Other

48. Warrantee service and maintenance contracts for specialized equipment should be set up early on during the implementation of the project, preferably as early as the design and construction phases, considering delays for procurement, in order to prevent any equipment deterioration.
