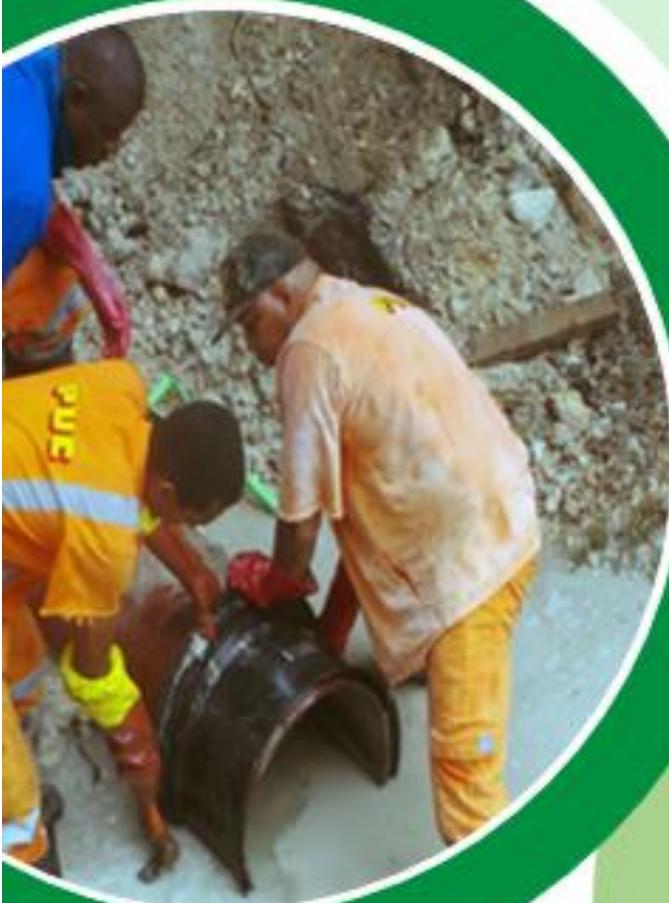




OFFICE OF THE AUDITOR GENERAL

**SPECIAL AUDIT OF THE PUBLIC UTILITIES CORPORATION
PROCUREMENT FOR THE YEARS 2020-2023**



Office of the Auditor General

AUDITING FOR SEYCHELLES

The Auditor General is head of the Office of Auditor General (OAG).

The OAG assists the Auditor General to carry out his duties under the constitution and Auditor General Act, 2010. OAG undertakes financial statement audits, compliance audits, performance audits, special reviews of public sector bodies and provide independent reports to the National Assembly, the Seychelles government and the public.

The aim of public sector auditing is to promote and improve the financial good governance, transparency and accountability as well as the economy, efficiency and effectiveness of various public projects and programmes.

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Audit Team

Ramona Louise
Eileen Sinon

25 September 2025

Dear Honourable Speaker
The National Assembly
Ile du Port

I have undertaken an independent audit of the procurement activities of Public Utilities Corporation, for the period 2020 to 2023, with a view to assess the level of its compliance with procurement laws and regulations. The audit was requested by FPAC of the National Assembly, and conducted in accordance with the authority contained in Section 13 of the Auditor General Act, 2010. Under Section 22 (2) of the same Act, I have honour to submit the report for presentation to the National Assembly.

Following its presentation, the report will be placed on the website of the Office of the Auditor General – <http://www.oag.sc>

Gamini Herath
Auditor-General
Office of the Auditor General
Victoria, Seychelles

Acknowledgements

I wish to express my personal gratitude to members of my staff who carried out their duties willingly and satisfactorily despite certain constraints. I also acknowledge the assistance and co-operation given by the management and staff of the Public Utilities Corporation who appreciate the role of my office and recognise the valuable contribution it can make in ensuring and enhancing the financial good governance and promoting economy, efficiency and effectiveness across the government.

Finally, I would like to thank the Finance and Public Accounts Committee (FPAC) of the National Assembly who reviews my reports and makes appropriate recommendations to the government for improvements.

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Executive Summary

1. The Public Utilities Corporation (PUC) is responsible for ensuring nationwide access to potable water and electricity in Seychelles. As the sole provider of these essential services, it is critical that the PUC maintains a high level of reliability and operational efficiency to meet the needs of the population.
2. To that effect, the corporation must regularly maintain and upgrade its distribution networks. This necessitates various forms of procurement to acquire goods, services, and infrastructure support required for its operations.
3. In view that the PUC is a public entity, it is required to follow the prescribed regulations stipulated by both the Public Procurement Act 2008, as amended and the Public Procurement Regulations, 2014 whilst conducting all its procurement activities.
4. Upon the request of the FPAC, an audit was carried out to confirm that PUC 's procurement activities were conducted in line with the regulations. The audit covered procurement activities from Jan 2020 to September 2023, period in which the PUC spent over SR4.9 billion in procurements.
5. Below are the main audit findings, conclusions and recommendations presented in this report.

Key Findings

6. **Procurement planning:** Audit confirmed that the Public Utilities Corporation submitted the required annual procurement plans to the Procurement Oversight Unit (POU) for the period under review. These plans, were duly approved and outlined planned procurements with corresponding cost estimates. However, the plans did not include over SR 27 million worth of actual procurements for the same period.

7. **Procurement requisitions:** Audit noted that procurement requisitions were properly documented in accordance with the Public Procurement Regulations. Reviewed requisitions met the prescribed requirements, such as having a statement of requirements, estimated value and budget provision for the procurement. Audit also noted that requisition requirements were equally satisfied for emergency procurements reviewed.
8. **Missing procurement records:** Overall Audit could satisfactorily review the procurements records for the selected projects except for one project where the complete project file for the Relocation of Central Pump Station project was missing. This project included 2 major procurements, i) consultancy services for the design and supervision for an actual sum of Euros 315,550 and ii) construction works at an actual value of SR 12.1 million. While some documents were retrieved, 4 key documents for the procurement of the consultancy services (the requisition, the evaluation report, the contract and certificate of completion) and the contract relating to the construction works remained unavailable. Audit additionally noted that 93% of the consultancy contract value was paid despite the absence of progress reports or documentation on the termination of the contract due to poor performance.
9. **Bidding process and contract awards:** PUC adhered to the bidding procedures outlined in the Public Procurement Regulations, 2014 in all sampled procurements which were conducted through either open or limited bidding. Compliance with the prescribed contract award procedures was also noted.
10. **Non-compliance with advance payment regulations:** Audit observed that in five procurements, PUC made advance payments totaling to approximately SR 6.8 million without having the required advance payment guarantees. In four cases, advance payments exceeded the 25% limit permissible for advance payment, with one case reaching 90%. Approval for these deviations were not documented.
11. **Non-compliance with cost variation approvals:** Audit noted that the PUC did not seek prior approval for cost variations incurred in two

procurements. In one instance, a cost variation of SR 680,475 was referred back to PUC for payment approval in view that it was submitted to the Procurement Oversight Unit (POU) after the completion of the project, contrary to procurement regulations.

12. Additionally, during the review of another project, Audit noted a cost variation amounting to SCR 751,459.99 which pertained to new works under an existing contract. This amount falls within the 7.5% internal approval threshold of the procuring entity and was approved internally by the CEO. While the financial value of the variation remained within the delegation limits, the nature of the change, being a modification of scope, should have been formally submitted to the National Tender Board (NTB) for approval in accordance with established procurement procedures.
13. **Cost overruns exceeding SR 7.7 million:** Audit noted cost overruns in four of the eight sampled projects. Collectively, the variances totaled to over SR 5 million. A further review of 11 extra completion certificates from 2020-2023 revealed additional cost overruns totaling SR 2.7 million. Contributing factors included changes in project design, additional works due to unforeseen ground conditions, and discrepancies in measurement of completed works.
14. **Significant time overruns in reviewed projects:** Audit reviewed the completion certificates of the 15 projects completed during the period under review and observed notable delays in 9 projects which ranged from 3 months to nearly 4 years. Aside from the impact of Covid-19, delays were primarily attributed to unforeseen site conditions, changes in project design, contract disputes and slow execution.
15. **PUC's Procurement Policy to be updated:** PUC's Procurement Policy established in 2021 has not been updated to reflect amendment to the Public Procurement Act enacted in December 2022. Additionally, the Policy did not include necessary provisions relating to advance payments.

Conclusion

16. Audit concludes that the Public Utilities Corporation (PUC) broadly complied with key provisions of the Public Procurement Act, 2008 as amended and the Public Procurement Regulations, 2014. Nonetheless, there is scope for the Corporation to improve upon, notably in the areas of minimizing time and cost overruns for projects implemented.

Recommendations

17. The PUC should strengthen its procurement planning and monitoring process to ensure better alignment with the approved procurement plans. This may ensure timely implementation of projects and limiting cost overruns which may be associated in price fluctuations should there be significant time lapses.
18. Pending the final decision of the POU regarding the challenge of the PUC adhering to the current provisions relating to advance payments, the PUC should ensure that all advance payments made have the required advance payment guarantees and that the total amount of advance payments does not exceed the prescribed 25% of the total contract price.
19. The PUC should additionally review its policy to include provisions that specifically address advance payments.
20. The PUC should ensure that approval for all deviations from approved project scope are sought and approved by the applicable approvals authority prior to execution.
21. The PUC should strengthen pre-construction site evaluations as this phase is crucial in providing valuable insights into the feasibility and potential risks such as environmental, geological, soil conditions amongst other issues that could be challenging for construction, hence allowing for more accurate scheduling and resource planning. A more comprehensive site assessment can also enable

more accurate cost projection and overall success of the project with minimal delays.

22. The PUC should review and update its Procurement Policy to reflect amendment to the Public Procurement Act enacted in December 2022. The review may also include necessary provisions relating to advance payments.

Introduction

Background

23. Established in 1986 following the merger of the Seychelles Water Authority and Seychelles Electricity Corporation Limited, the Public Utilities Corporation (PUC) is the sole provider for electricity, tap water and sewage services to the thousands of households and businesses in Seychelles.
24. The Public Utilities Corporation is a parastatal organization and operates under the guidance of the Ministry of Agriculture, Climate Change, and Environment. The corporation is led by a Chief Executive Officer (CEO) with the support of a Board of Directors who provides governance and stewardship for the corporation.¹
25. To maintain a reliable service, the PUC spends over billions of rupees yearly on goods and services which includes spares and other operational necessities. As part of its capital expenditures, PUC invests in machinery and also undertakes numerous civil and construction projects which primarily involves new infrastructures or maintaining and upgrading work on their distribution networks.
26. In order to meet its procurement needs, PUC works with both local and international suppliers and contractors.
27. Being a public sector organisation, PUC is required to adhere to the prescribed procedures of the Public Procurement Act, 2008, as amended, and the Public Procurement Regulations, 2014 when conducting any procurement activity.

¹ <https://www.puc.sc/about-us/>

28. The following table illustrates the value of PUC’s procurements, excluding fuel expenses, throughout the period under review.

PUC’s summary of procurements (Jan 2020- Sept 2023)

Period	Local SR' million	International SR' million	Annual procurement SR' million
2020	771.11	307.47	1078.58
2021	1055.73	233.47	1289.20
2022	1429.32	264.23	1693.56
2023	850.15	0.66	850.81
Totals	4106.31	805.83	4912.14
% of total procurement	84%	16%	

Source: PUC 2020-2023 figures

29. From period 2020- 2023, PUC engaged in procurements totaling to approximately SR 4.9 billion. This amount was allocated between local and international procurements as indicated in the table above.

30. Out of the SR 4.9 billion, a total of SR 246 million was awarded for 52 projects as listed in Appendix 1. These projects varied in scope and included small-scale project such as replacing old pipelines to major undertakings such as building pump stations and sewage systems.

Objectives of the special Audit

31. Following a request from the Finance and Public Accounts Committee (FPAC) of the National Assembly, the Office of the Auditor General (OAG) conducted an Audit to confirm whether PUC’s procurement activities are conducted in conformity with the Public Procurement Act 2008, as amended, and the Public Procurement Regulations, 2014.

Audit Scope and Methodology

32. In view that PUC's accounts are audited and certified annually by the Auditor General, the audit solely focused on PUC's procurement procedures for both local and international procurements with a value of SR150,000 or more undertaken by the corporation from January 2020 to September 2023.
33. Audit carried out meetings with top management, respective management team and other staff to establish the Corporation's procurement system. Document reviews and analysis were also carried out to verify PUC adherence to the Public Procurement Act 2008, as amended, and the Public Procurement Regulations, 2014.

System and Process Description

34. The procurement activities of the PUC are guided by its Procurement Policy which was established in 2021. The Policy governs all contracting and procurement activities within the Corporation and is binding for the Board of Directors, staff (including temporary employees), contractors, and consultants during their engagement with the Corporation.
35. The policy is intended to provide a guideline for the main requirements of the Public Procurement Act, 2008 and the Public Procurement Regulations, 2014 with the latter documents prevailing in the event of conflicts.
36. PUC's end-to-end procurement procedures for goods, works, and services is managed by the Procurement Department whereas the Project Management Unit (PMU) assumes full responsibility of the project-related procurements process from the contract management stage to the completion of the project.
37. The thresholds prescribed by the Public Procurement Act, 2008 as amended are illustrated in **Appendix 2**.

38. Figure A which follows outlines the procedures followed by the PUC when procuring goods, works and services whilst Figure B and C illustrate the steps followed when procuring projects and any consultancy-related services.

Figure A- PUC’s Procurement Procedure for Goods, Works and Services

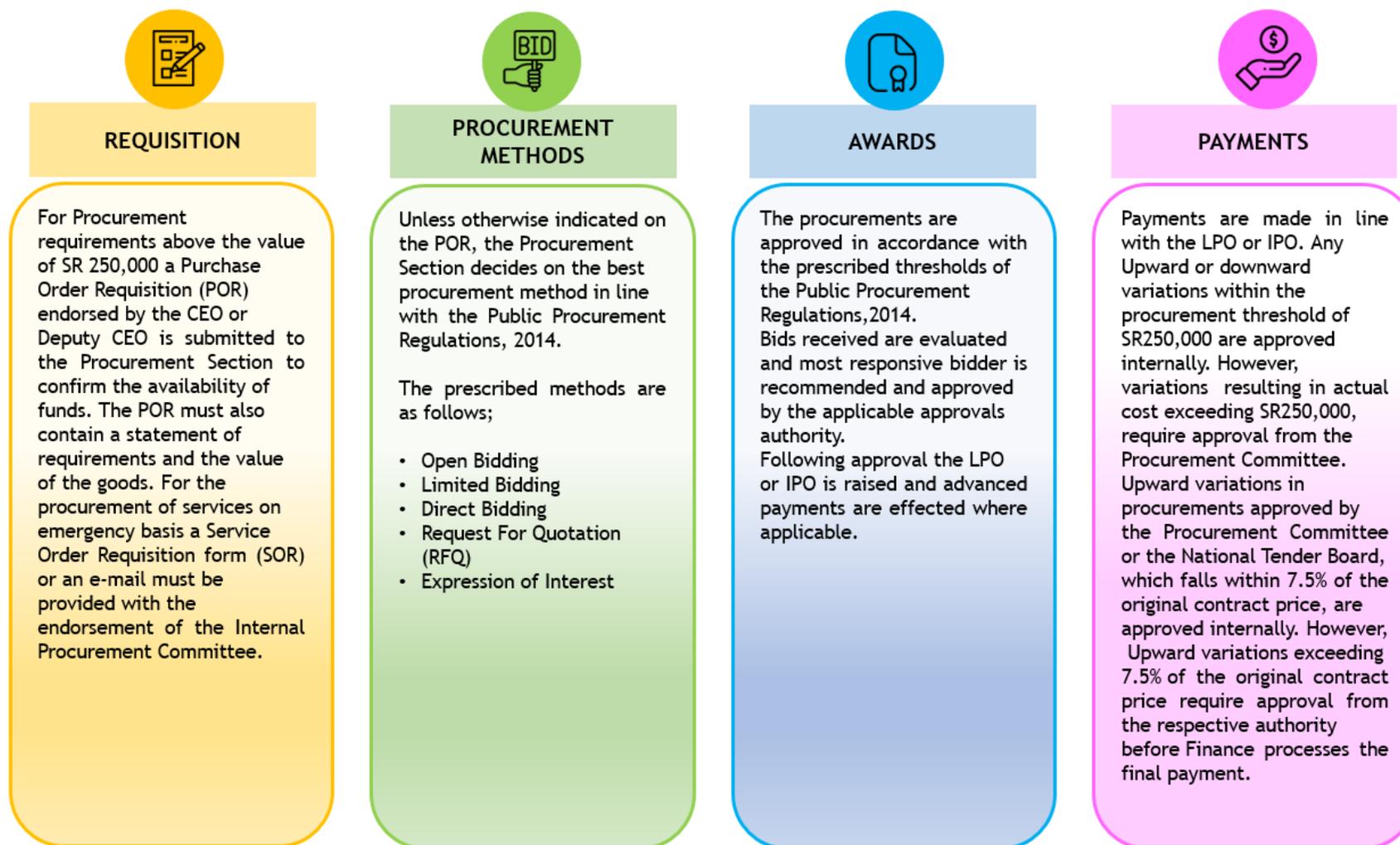


Figure B- PUC's Procurement Procedure for Projects

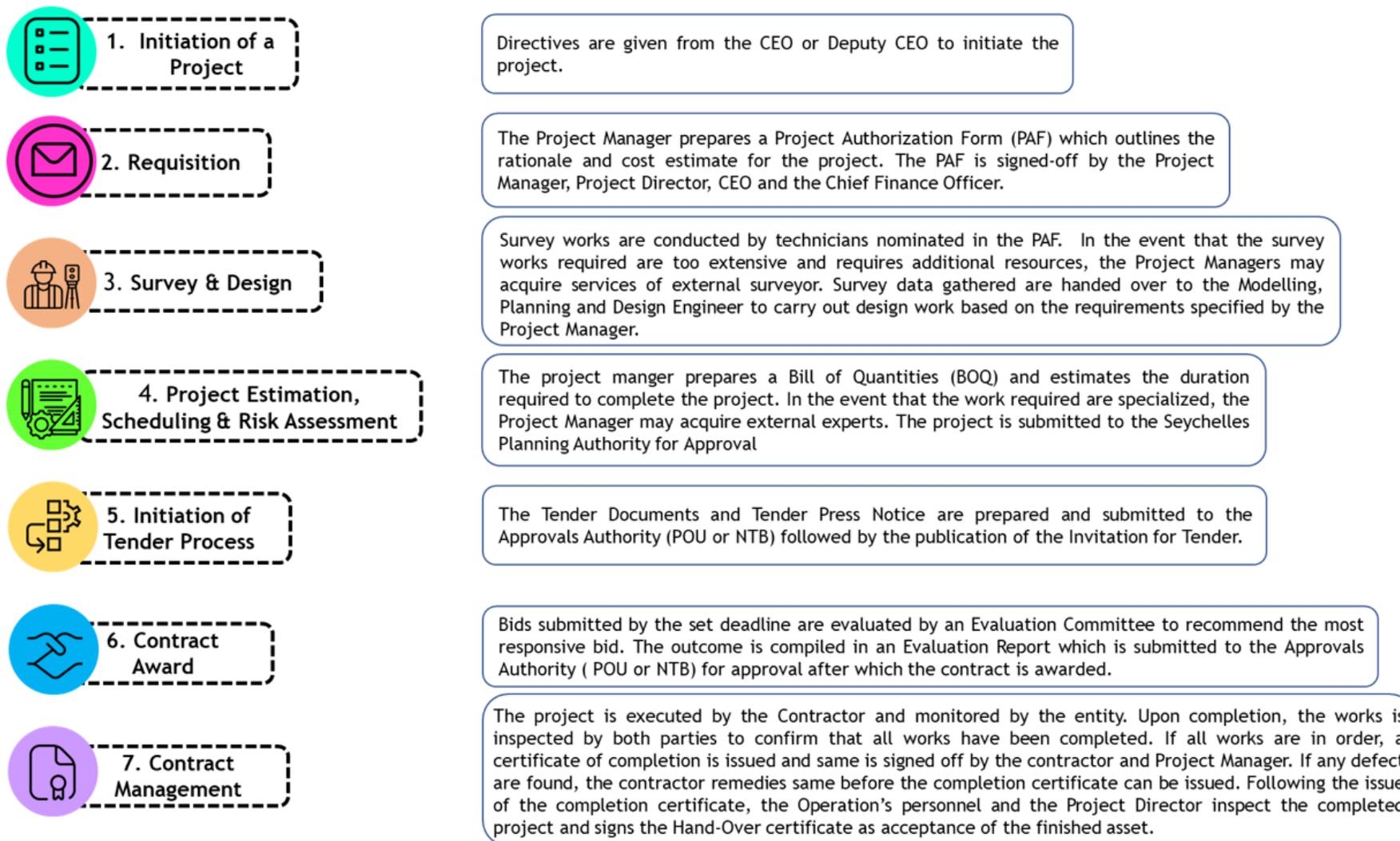
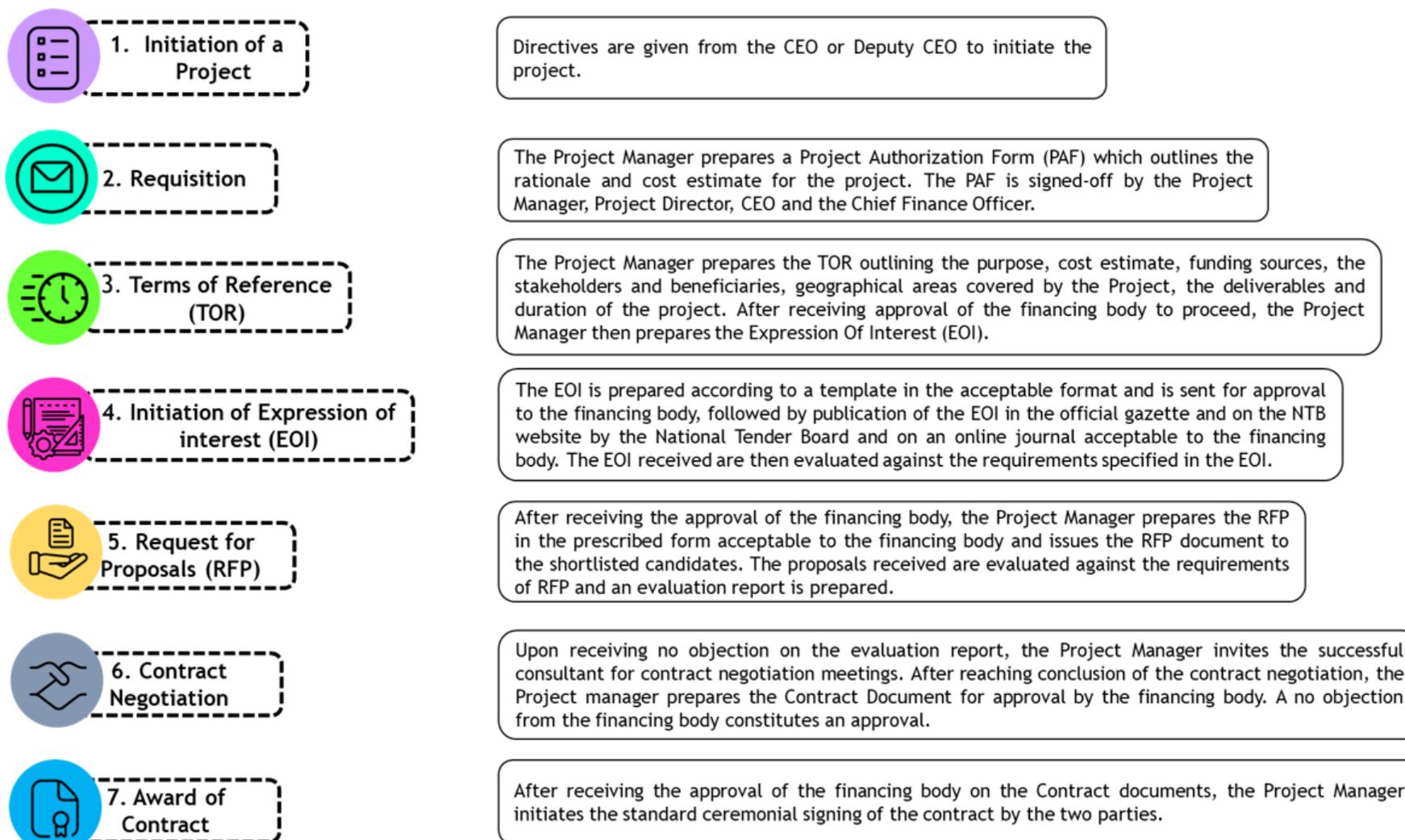


Figure C- PUC's Procurement Procedure for Consultancy Services



Audit Findings, Conclusions and Recommendations

39. This section of the report provides detailed observations from Audit’s review. The observations have been structured according to the various stages of the prescribed procurement process.

Procurement Planning

40. **Procurement plans approved and submitted:** The Public Procurement Regulations 24(1) stipulates that “A *procurement Unit, in consultation with a user department, shall prepare a proposed procurement plan for the procuring entity, for each financial year, containing information required by regulation 25*”. Audit observed that PUC fulfilled its obligation of submitting its annual procurement plans to the Procurement Oversight Unit for the period under review. These plans were duly approved by the CEO and included a comprehensive list of planned procurements with respective cost estimates.

41. Audit however made the following observations;

- I. **Implementation of four capital projects not featured on Procurement plans:** Audit noted that four out of a sample of eight projects were not found on the respective year’s procurement plan. The value of these projects totaled to R21.4m, refer to **Table 1** below for details.

Table1: Projects not sighted on procurement plan

Project Name	Designated procurement year	Procured Year	Project Value SR’ Million
Neptune Project - Mont-Fleuri to Plaisance	2019	2020	10.78
Belvedere & Beau-Vallon Coral Strand project	2020	2023	2.2
Construction of open shed at Ile Aurore	2022	2023	4.2
Beau-Vallon & Belombre Ducts	Not sighted	2022	4.2
		Total	21.38

- II. Similarly, Audit noted three procurements under goods, works and services where the total value of procurements not on plan amounted to SR 1.8M for the procurement of spares, repairs and vehicles. For the procurement of vehicle, the entity procured three full option model of the Toyota Urban Cruiser at a total value of SR1.185 M through the limited bidding method. This procurement was justified on the grounds of a vehicle shortage for in-house transportation given that in previous procurement for vehicles; 12 units of double cabs had to be reduced to eight units only due to increase in prices, at the onset of the covid-19 pandemic.
- III. Audit also compared the approved procurement plans for 2020-2023 against an additional sample of procurements undertaken during the period under review and identified nine other procurements which were not on the procurement plan having a combined value of SR3.8M as indicated **Table 2** below.

Table 2: Procurements which were not on the annual procurement plans submitted to POU for 2020-2023

Year	Description	Value SR
2023	Roof Replacement of Mirreles engine hall BSA Praslin Power Station-	407,048
	Fencing works at Salazie Treatment Works Praslin	426,594
	Non-Performing pipeline replacement at Eden Village Roche Caiman	804,350
2022	Construction of open trench bridge and erosion protection at Anse Boileau	430,221
	Roof renovation of PUC infrastructure at Glacis	459,402
	Construction of retaining wall at Fond B'Offay Treatment Plant	310,373
2021	Construction of La Digue Wastewater System-Consultancy Services for EIA for proposed Sea outfall	252,941
	Wind turbines Communication spares	228,539
	4 Stroke Suzuki Motor ×2 for Wind turbine	456,000
	Total	3,775,469

Conclusion

42. Audit concludes that the PUC complied with the Public Procurement Regulations 24 (1) regarding submission of its annual procurement plan. However, discrepancies were noted between the procurement plans and the actual procurements, indicating that there needs to be alignment between planning and procurement.

Recommendation

43. The PUC should strengthen its procurement planning and monitoring process to ensure better alignment with the approved plans. This may ensure timely implementation of projects and limiting cost overruns which may be associated in price fluctuations should there be significant time lapses.

Management Response

44. *Procurement plans are developed in the last quarter of the preceding year. Despite best efforts, it is not always possible to foresee all necessary procurements. Unplanned but necessary procurements may arise due to:*

1. *Unexpected breakdowns of critical assets*
2. *Rapid infrastructure deterioration*
3. *Damage from extreme weather*
4. *Legal and compliance obligations discovered during project implementation*
5. *Cost changes due to pandemic impacts*
6. *Required relocations linked to urgent infrastructure works (e.g., road widening)*

All procurements referenced in paragraphs 18(1) to 18(2) were duly approved by the relevant oversight body based on threshold limits. The omissions in the annual procurement plan are attributable to one or more of the six factors outlined above. Moreover, projects financed by loans (e.g., Mont Fleuri pipe replacement, La Digue sewerage, and those under the Neptune Project) were included in procurement plans submitted to the financing agencies.

45. **Requisitions properly documented:** In accordance with the Public Procurement regulations 28 (1), “*All procurement requirements shall be documented by the user department, using a procurement requisition in the format specified by the Procurement Oversight Unit, which shall include (a) a statement of requirements, (b) the estimated value of the goods, works or services and (c) details of funds budgeted for the requirement*”. Audit found that the requisition records of the sampled procurements was properly documented. Beyond the approval obtained from the signed procurement plans, procurements of goods, works and services were requisitioned either through PUC’s standard requisition form or was approved in e-mail by the respective approval authority.

46. The requisition of projects reviewed were also authorised through either a Full Project Authorisation Form (PAF) or a Project Review Form in the event that there were changes in the budget of approved projects. The PAF provides an overview of the projects which includes the rationale and estimated value.

47. Audit also reviewed a sample of three emergency procurements and found that the prescribed requisition process for direct bidding on the grounds of an emergency which is outlined in Public Procurement Regulations 109 had been followed.

Conclusion

48. The requisitions for the procurements reviewed were thoroughly documented and complied with the Public Procurement Regulations 28 (1) and Public Procurement Regulation 109 respectively.

Recommendation

49. Audit recommends that PUC continues to uphold and reinforce the existing practices in regards to procurement requisition.

Procurement Records

50. **Missing Procurement Records:** Public Procurement Regulations 17 states that “A *procuring entity shall keep all records arising from the procurement process*”. Audit selected a sample of 19 procurements and noted that the project file for the Relocation of Central Pump Station project was missing. This project included construction works at an actual value of SR 12.1M and consultancy services for its design and supervision at an actual value of Euros 315,550. Whilst the project file could not be located, the PUC was able to extract some of the key documents mostly from their payment files. However, the signed contract relating to the construction phase remained unavailable for audit’s review.
51. For the consultancy services, Audit noted that four key documents remained unavailable for Audit’s review; the requisition for the procurement, the evaluation report for the bids received, the contract and the certificate of completion. However, based on NTB’s approval for the consultancy procurement, Audit ascertained that the evaluation report was submitted for approval.
52. **Progress reports of monitoring of consultancy works not sighted:** Audit was also informed that the contract for the consultancy services was terminated due to unsatisfactory performance whereas payment records obtained show that Euros 292,389, representing 93% of the contracted amount had been paid. Audit did not sight any progress reports or other correspondences signifying at which stage concerns over non-performance were raised.

Conclusion

53. Audit concludes that the documentation of records for procurements reviewed were generally in compliance with Public Procurement Regulations 17 except for the unavailability of one project file and key documents for the

procurement of construction and consultancy works for the reconstruction of the Central Pump Station project.

Recommendation

54. The PUC should enhance its record-keeping practices to ensure that all procurement documents are archived and are easily retrievable.

Management Response

55. *We confirm that certain records have been misplaced due to staff movements and file exchanges between the Operations and Project Management teams. We have since strengthened our document management processes, including the introduction of digital archiving systems for all Project Management files.*

Bidding and Contract Award Processes

56. **Bidding Process and contract award found in order:** Audit confirmed that the bidding procedures outlined in Part VI, VII, VIII and IX in addition to the procedure to award contract outlined in Part X of the Public Procurement Regulations, 2014 were adhered to in all the selected projects where open bidding and limited bidding methods were followed. Audit's verifications were specifically in line with the below provisions;

- a. That the most appropriate method of procurement was used for each requirement in accordance with Regulations 35 (1) of the Public Procurement Regulations, 2014 and that
- b. That the prescribed procedure for the different modes of bidding had been followed as stipulated.
- c. That the prescribed procedure to award contract has been respected.

Conclusion

57. Audit concludes that the bidding and contract award procedures for procurements reviewed was conducted in accordance with the requisite provisions of the Public Procurement Regulations, 2014.

Recommendation

58. Audit recommends that PUC maintains its commitment to following the relevant provisions of the Public Procurement Regulations in all bidding and contract award processes.

Contract management

59. **Non-compliance with advance payment regulations:** In accordance with Public Procurement Regulations 132 (4), “*Any advance payment shall only be made against the provision by the supplier of an advance payment guarantee, covering the full amount of the advance payment...*”. Out of the 19 procurements reviewed, Audit observed that in five instances, advance payments were made without an advance payment guarantee. Altogether, close to SR6.8M or 49% of total contract value was paid out as advance payments without the provision of advance payment guarantees in the procurements of spares, vehicles and services.

60. A closer look into the individual advance payments made without advance payment guarantees, revealed a notable advance of over SR5 million in the procurement of eight Ford Ranger double cabs. Audit noted that the procurement was initially for 12 Ford Ranger Double Cabs and that the quantity of vehicles to be supplied under the contract was adjusted to eight units following price increase at the onset of the covid-19 pandemic. This adjustment led to a 5% cancellation charge of SR 244,000 for the four cancelled vehicles.

61. Furthermore, Audit noted that four out of the five advanced payments exceeded 25% of their respective total contract price further deviating from the Public Procurement Regulations 132 (3) which prescribes that “*...the total amount of an advance payment shall not exceed twenty-five percent of the total contract price.*” In one instance, 90% of the contracted value was paid out in advance for the procurement of spare parts where, 25% was paid as an initial advance and 65% was paid upon shipment.

62. Audit further noted that there was no approval from the competent authority to deviate from this provision and also provisions relating to advance payments are not included in PUC's Procurement Policy.

Conclusion

63. Whereas the PUC did not adhere to the provisions of the Public Procurement Regulations, 2014 concerning advance payments, the PUC's Procurement Policy also lacked the necessary provisions to guide the process relating to advance payments.
64. Adherence to the Regulations may minimize any potential risks of fraud, financial loss and even legal complications to the Corporation in the event that goods, services or works are not received.

Recommendation

65. The PUC should ensure adherence to Regulation 132(4) to ensure that all advance payments made have the required advance payment guarantees and Regulation 132(3) to ensure that the total amount of advance payments does not exceed 25% of the total contract price as stipulated by the Public Procurement Regulations, 2014.
66. Audit further recommends that PUC reviews its policy to include provisions that specifically address advance payments.

Management Response

67. *We acknowledge the challenge of maintaining compliance with advance payment limitations under the Act while ensuring continuity of critical services. Many key suppliers are unwilling to accept the 20% cap or transact under Letters of Credit. To manage this, PUC has:*
- 1. Increased usage of Letters of Credit*
 - 2. Required bank guarantees or insurance bonds for advance payments in project contracts and other procurements with high amounts*

3. *Initiated direct engagement with the Procurement Oversight Unit (POU) to develop a more practical and sustainable approach to such procurement challenges*

68. *Despite continued advocacy, some strategic suppliers remain unwilling to comply due to time constraints and unfavourable banking conditions. Consequently, PUC is at times left with no alternative but to negotiate terms that deviate from the Act to ensure the timely delivery of essential supplies*

69. **Requisite approval for cost variation not sought prior to work execution:** Audit noted that a cost variation of SR 680,475 was referred back to PUC by the Procurement Oversight Unit for a project completed in July 2023 in view that the request was submitted after the completion of the project. According to the Public Procurement Regulations 142 (2), where a variation results in a change in price, any additional funds shall be committed prior to the issue of the variation.

70. This project which involved trench excavation and laying of a sewerage pipeline in Mont-Fleuri was initially contracted for the sum of SR320,650. Due to additional costs incurred as a result of difficult ground conditions and an extended scope required to address unknown soakaways discovered along the pipeline route, a first variation, amounting to SR 308,375 representing an increase of 96% in contract value was approved in December 2022.

71. Approval for a second variation amounting to SR 680,475 was subsequently requested after it was found that the contractor's final claim which was based on the quantities measured on site exceeded the approved budget. According to the variation order, PUC had allowed the project to progress before their last engineering measurement with the aim of completing the project before mid of the year. This variation brought the total project cost to SR 1,309,500 (excl. VAT) representing an overall increase of 308% of the original awarded contract price as summarized in **Table 4**.

Table 4: Summary of variations submitted to the Procurement Oversight Unit (POU)

	Nature of additional works	Cost SR excl. VAT	Status
Variation 1	Additional shoring/Trench support, propping works, relocating works, demolition works + additional quantities for earthworks	308,375	Approved by civil works committee on 5/12/2022
Variation 2	Additional quantities for earthworks, imported fill, deeper and manual excavation, removal of coconut trees roots	680,475	Submitted & referred back to PUC on 27/7/2023
	Total Variation	988,850	
	Original Awarded Value	320,650	
	Total Project Value submitted to POU for variation	1,309,500	

Following the completion of the project, the completion certificate indicated that the actual price of the project was SR 1,176,150 thus having a variance of SR 547,125 from the approved project value.

<p><i>Initial Awarded Value -SR 320,650</i> <i>Approved Variation (1) -SR 308,375</i> <i>Approved project cost- SR 629,025</i> <i>Actual cost -SR 1,176,150</i> <i>Variance - SR 547,125</i></p>
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72. Audit noted that following the response of the POU, the variation of SR 547,125 was approved by the PUC’s Internal Procurement Committee.

73. Audit also noted that the PUC is yet to update its Procurement Policy with the revised thresholds as per the Public Procurement (amendment) Act, 2022.

74. In another case, where PUC was awarded a contract to replace non-performing water pipeline on the Mont-Fleuri and Plaisance network as part of network rehabilitation under “Project Neptune” in August 2016, Audit noted that PUC did not seek the approval of the National Tender Board (NTB) to process new

procurements under the signed contract. The contract was awarded for the sum of SR10.8m in November 2016.

75. Audit noted that the PUC incurred a cost variation amounting to SR751,460 which was approved internally by the Chief Executing Officer (CEO) in September 2022, as it fell within PUC's 7.5% internal variation approval threshold. The variation covered components, listed below, which Audit noted was not part of the initial scope of the contract;

- Laying of two distribution pipes from Hermitage which crosses the Botanical Gardens and
- Laying of pipes which will cater for the Providence Hermitage desalination transfer line

Conclusion

76. Section 142 (2) of the Public Procurement Regulations was not observed by the PUC as approval of cost variations for procurements which were not part of the initial scope of the project was not sought from the National Tender Board (NTB).

Recommendation

77. The PUC should ensure that approval for all deviations from approved project scope are sought and approved by the applicable approvals authority prior to execution of the same.

Management Response

78. *PUC's Project Management Team proceeded with critical works under the Mont Fleuri and Plaisance pipe replacement contract due to the following urgent needs:*

- *Persistent bursts and rapid deterioration of asbestos pipelines along the Botanic Gardens, disrupting water supply to central and northeast Mahé;*
- *Sudden demands by SLTA for pipeline relocations along Bois de Rose Avenue to facilitate roadworks*

These additional works were similar in nature to the original scope and added tangible value. While NTB should have been consulted, the CEO's approval was based on the urgency and operational necessity, not threshold limits. Given the POU's limitations under the Act to process retrospective requests, the matter was referred to PUC's Top Management for payment approval.

Cost and time overruns

79. **Cost overrun of over SR 7.7m:** Audit noted large variances of up to 308% between the awarded and actual price in four out of the eight projects reviewed. These variances collectively totaled to over SR 5 million, as summarised in **Table 5** below.

Table 5: Cost overrun in reviewed projects

Year	Project	Estimated Value SR	Awarded Value SR	Actual value SR	Variance Awarded vs Actual SR
2020	Relocation of central pump station	8,703,860	9,418,194	12,178,834	2,760,640
2023	Pipeline replacement project- Mont Flueri	580,525	320,650	1,176,150	855,500
2023	Pipeline replacement project- Belvedere & Coral Strand	1,571,526.32	1,367,650	2,285,945	918,295
2023	Construction of shed on ile Aurore - WIP	3,860,165	4,288,570	4,773,574	485,004
Total					5,019,439

80. In its review, Audit identified three primary factors contributing to these variances:

- Incorporation of additional equipment and miscalculation in initial contract amount in the relocation of central pump station project.
- Change in the project design in the construction of an open shed on Ile Aurore.
- Additional and extra works in the pipeline replacements projects principally linked with soil obstruction.

- Discrepancies in the measurement of completed works in 1 pipeline replacement project. Refer to **Appendix 3** for detailed account of cost overrun observed.

81. A review of an extra 11 completion certificates relating to other projects completed between 2020 and 2023 revealed a total cost overrun of approximately SR 2.7 million, summarised in **Table 6** below.

82. When combined with the previously identified cost overruns, the total cost overrun across all completed projects amounts to SR 7.7 million.

Table 6: Cost overrun in reviewed project completion certificates

Project	Year of completion	Initial contract price	Agreed Actual Cost	Variance
Construction of staff facilities at Ile Aurore	2020	412,850	443,404	30,554
Construction of carpentry workshop	2020	720,817	785,344	64,527
Extension of gravity sewer network at Kashugy Beau Belle	2021	2,806,441	4,615,397	1,808,957
Providence Desalination pipeline	2021	5,475,575	6,303,810	828,235
			Total	2,732,273

83. Furthermore, Audit noted that 15 projects were completed between 2020-2023. Audit reviewed the completion certificates and observed delays in the agreed and actual completion dates in nine projects which represents 60% of the total number of completed projects. Delays observed ranged from three months to years with the most notable delay, nearing almost four years relative to the relocation of the central pump station. **Table 7** summarises the delays in projects reviewed and **Appendix 4** provides PUC's justifications for the delays noted.

Table 7: Time overruns in projects completed between 2020 and 2023

Project name	Completion date as per contract	Actual completion date	Variance
Relocation of central pump station	September 2016	August 2020	3 years and 11 months
Extension of gravity sewer network at Kashugy Beau-Belle	July 2020	May 2021	14 months
Extension and refurbishment of sewerage office building at New Port	August 2019	July 2020	11 months
Construction of archive building, storage room + open shed at Maison Malavois	November 2020	October 2021	11 months
Pipeline replacement project- Mont Fleuri	November 2022	July 2023	8 months
Construction of staff facilities at Ile Aurore	April 2020	November 2020	7 months
Construction of shed on ile Aurore - WIP	April 2024	November 2024	7 months
Providence Desalination Pipeline	October 2019	March 2020	5 months
Pipeline replacement project- Belvedere & Coral Strand	July 2023	October 2023	3 months

84. Based on Audit's review, aside from the impact of the covid-19 pandemic, delays noted from the variations orders were most commonly due to unforeseen site conditions and changes in design whereas for the relocation of central pump station project delays were incurred as a result of a contract dispute and slow rate of progress.

Conclusion

85. Based on the reviewed projects, Audit concludes that the planning of the project did not consider all aspect relating to the design of the project.

86. Audit also concludes that variations in reviewed projects typically relates to cost incurred to address soil obstruction.

87. Despite external factors such as the Covid-19 pandemic, issues of unforeseen site conditions and design changes suggest improvement in project planning to mitigate delays in project implementation in the future.

Recommendation

88. The PUC should strengthen pre-construction site evaluations as this phase is crucial in providing valuable insights into the feasibility and potential risks such as environmental, geological, soil conditions amongst other issues that could be challenging for construction, hence allowing for more accurate scheduling and resource planning. A more comprehensive site assessment can also enable more accurate cost projection and overall success of the project with minimal delays.

Management Response

89. *Cost overruns continue to be more prominent, significant, and often unavoidable in civil works projects involving ground excavation for the installation of pipes or cable ducts. In such cases, it is nearly impossible to provide accurate estimates during the preparation of the bill of quantities, primarily due to the difficulty in assessing the geotechnical conditions along the underground route. This remains a major challenge, particularly when seeking approval for increased quantities during project execution, given that these civil contracts are FIDIC-based and operate on a “measure and pay” principle.*

90. *Time overruns also continues to be more prominent, significant, and often unavoidable- similar to cost overrun, the deferment or withdrawal of previously granted wayleave permissions by landowners continues to be a persistent impediment and contributing factor to delays.*

Appendix 1: Projects initiated between 2020- 2023

	Description	Amount
1	Rehabilitation of 450mm water pipeline transmission network from Rochon to La Gogue	2,322,540.00
2	Construction of pump house at Dame Le Roi, Baie Lazare	630,087.59
3	Extension of filter houe and construction of staff facilities at Mt Posee treatment works	381,639.00
4	Construction of archive building, storage room and open shed at Malavois	3,945,700.08
5	Installation of electrical ducts alongside of Bois de Rose Avenue	436,044.01
6	Sewer river crossing on bridge at Roche Caiman	768,936.86
7	Pipe Laying Work from Mt Fleuri to Plaisance Under Project Neptune	4,161,890.03
8	Providence desalination pipeline	288,225.81
9	33 kV cable South Mahe via Mt Posee - construction of 33 kV cubicles and retaining wall at Providence, Roche Caiman and Pte Au Sel	1,010,234.06
10	Raw water transfer from Anse Major to Dan Bernard Belombre Lot 1	2,155,042.50
11	Extension of gravity sewer network at Kashugy Beau Belle	2,173,925.00
12	Trench excavation and laying of electrical ducts and water pipes from BSA Praslin to Marie Jeanne Estate Junction	3,982,726.00
13	Construction of pump house on pillars at Upper Bodamier	438,670.38
14	Extension of electricity house building and construction of new canteen	646,510.74
15	Refurbishment of treatment works on Mahe and Praslin - construction of pressure filter house at Mt Plaisir	377,942.53
16	Lower Mont Buxton pipeline replacement	1,654,936.25
17	New 33 kV substation (RCI) at Power station C Roche Caiman	5,116,115.40
18	33 kV cable installation along Mt Posee road from Bon Espoir to Turtle Bay substation	335,800.00
19	Upper Mt Plaisir water supply - construction of pump house Dan Lafous	530,698.09
20	Construction of pump house on pillars at Maldives, Anse Etoile	389,862.08
21	Trench excavation and electrical duct laying from Port substation to PSB switching room	549,720.13
22	Construction of new central sewerage pump station	3,174,735.63
23	3.3 kV cable installation at Mare Aux Cochons	373,750.00
24	Rehabilitation of 450mm water pipeline transmission network from Rochon to La Gogue	2,632,259.59
25	Construction of 33 and 11 kV cubicles at Mt Posee and Anse Royale	496,544.13
26	Renovation of PUC infrastructure on Praslin (Cote d'Or)	342,672.69
27	Construction of open trench bridge and erosion protection at Anse Boileau	430,220.60
28	Roof renovation of PUC infrastructure at Glacis	459,402.00
29	33 kV cable south Mahe via Mt Posee - construction of 33 and 11 kV cubicles at Takamaka	492,393.66
30	Construction of 33kV and 11kV cubicles at Anse La Mouche and Anse Parnel	871,301.64
31	Construction of retaining wall at Fond B'Ofay Treatment Plant	310,373.50
32	Construction of La Digue Sewerage System - NP07/Phase B/WO2/Lot 1 North	79,314,456.39
33	Construction of La Digue Sewerage System - NP07/Phase B/WO2/Lot 2 South	54,895,406.14
34	Construction of new warehouse and refurbishment of existing warehouse and staff facilities Rochon	8,928,536.06
35	Civil works associated with laying of cable duct at Beau Vallon and Belombre	5,355,550.00
36	Fencing works at Providence desalination plant	231,741.10
37	Water Supply for La Gogue Land Bank at Anse Etoile	1,475,766.25
38	Rehabilitation of water supply network, establishment of DMAs and PMAs and NRW reduction - Mt Fleuri to Plaisance	864,221.54
39	Pipeline replacement - Boise de Rose bridge and road widening	913,734.63
40	Fencing works at PUC's desalination plant at Providence (sea side)	291,956.25
41	Emergency works for excavation of trench and installation of ducts at Mt Fleuri Hospital	251,969.60
42	Renovation of PUC infrastructure No 2 House at Cote D'Or Praslin	340,697.28
43	Roof replacement of Mirrlees engine hall BSA Praslin power station	407,048.25
44	Construction of RC security tower at PSC	410,377.50
45	Fencing works at Salazie Treatment works Praslin	426,593.94
46	Pipe laying works excavation & earth works, pipe laying works Reinstatement and pipe laying works miscellaneous	451,536.00
47	Construction of open shed at Ile Aurore	493,185.55
48	Belvedere non-performing pipeline replacement	723,378.75
49	Minor extension of sewerage network at Mt Fleuri next to Min of Education	723,378.75
50	Non-performing pipeline replacement at Eden Village Roche Caiman	804,350.25
51	Belvedere non-performing pipeline replacement	824,233.75
52	Construction of New Roche Caiman No 3 Pump Station and New Le Rocher Pump	45,989,823.44
		245,998,841.40

Appendix 2: Procurement Threshold

(a) Threshold for Goods & Services & Works

Previous Threshold ²	New Threshold ³	Approval Authority
Not exceeding SR 150,000	Not exceeding SR 250,000	Accounting Officer (PS/CEO)
Exceeding SR 150,000 but not exceeding SR 750,000	Exceeding SR 250,000 but not exceeding SR 850,000	Procurement Committee
Exceeding SR 750,000	Exceeding SR 850,000	National Tender Board

(b) Threshold Consultancy Services

Previous Threshold	Threshold	Approval Authority
Not exceeding SR 50,000	Not exceeding SR 75,000	Accounting Officer (PS/CEO)
Exceeding SR 50,000 but not exceeding SR 150,000	Exceeding SR 75,000 but not exceeding SR 250,000	Procurement Committee
Exceeding SR 150,000	Exceeding SR 250,000	National Tender Board

² Public Procurement Regulations, 2014 (S.I 7 of 2014)

³ Public Procurement (Amendment) Act, 2022

Appendix 3: Justifications provided for cost overruns

Project Name	Justifications
Relocation of Central Pump Station	<p>-The original contract sum was altered to include purchase of bigger set of pump, new control panel and associated accessories including cables, new Siemens flow meter, and new mobile generator following recommendations of an Integrated and Comprehensive Sanitation Master Plan which was completed after the award of the project.</p> <p>-Miscalculation in initial contract which was later corrected and approved by the NTB.</p>
Pipeline replacement project- Mont-Fleuri	<p>-The initial scope was to install and connect new pipes to extend the sewage network and it was awarded at SR 320,650.</p> <p>-According to the variation order, during execution, it was found that the ground was loose and marshy, requiring gentle slide slopes, trench, and stability support.</p> <p>-The variation order further states that there was a need to have greater excavation in order to place the pipe lower than all the connecting points thus brought in additional works and a first variation in the project cost amounting to SR 308,375.</p> <p>-After completion, discrepancies in the contractor's and PUC's engineer's measurement resulted in a 2nd variation which added a further costs of SR 680,475.</p> <p>-To that effect the project's actual cost escalated to SR 1,176,150.25, representing a 103% variance from the estimated value.</p> <p>-Audit also noted that the project was awarded 11% above estimated price.</p>
Pipeline replacement project- Belvedere & Coral Strand	<p>-The initial scope was to replace old pipes in Belvedere and Beau Vallon and the project was awarded at SR 1,367,650.</p> <p>-Two variation orders were also issued for this project as a result of additional and extra work done by the contractor which included;</p> <ol style="list-style-type: none"> a. Urgent repair of road surface due to the washing away of laid backfill materials which caused deep holes on the road. b. Removal of all clay and replacement with imported fill mixed with concrete to prevent erosion c. Saw cut concrete found beneath the tarmac d. Increased scope as the project was shifted into the road footpath.
Construction of open shed- Ile Aurore	<p>-This project initiated to address the lack of storage space for weather-sensitive water department materials. The project is still on-going and the key factors contributing to these overruns included several variations and additional works as follows;</p> <ol style="list-style-type: none"> a. Repositioning of the Structure to accommodate future projects and provide better wind protection. This change in location and roof design led to both increases and reductions in the total awarded value. b. Revised Usage Plan to include the electricity department and protect sensitive equipment from flooding. This floor level was raised and a perimeter parapet wall was introduced. c. Increased Building Footprint by 1 meter on both long sides at the ground and first-floor levels. d. Increased Column Height to cater for the increased clear height required to operate and manipulate switch gears and transformers. <p>-Audit also noted that there was extra works in this project which was awarded through direct bidding. There were many ductile iron pipes and wooden poles at the new location and given that Benoiton Construction had already mobilized for the awarded contract, PUC found it more feasible for the same contractor to undertake the relocation works which amounted to SR 249,000.</p>

Appendix 4: Justifications provided as to the time overruns

Reason for delay	Projects affected
Impact of covid-19	<ol style="list-style-type: none"> 1) Extension and refurbishment of sewerage office building at New Port 2) Construction of staff facilities at Ile Aurore 3) Construction of archive building, storage room + open shed at Maison Malavois 4) Extension of gravity sewer network at Kashugy Beau-Belle
Changes in design	<ol style="list-style-type: none"> 1) Construction of staff facilities at Ile Aurore 2) Construction of archive building, storage room + open shed at Maison Malavois 3) Construction of shed on ile Aurore
Unforeseen site condition	<ol style="list-style-type: none"> 1) Providence Desalination Pipeline 2) Pipeline replacement project- Mont Fluéri 3) Pipeline replacement project- Belvedere & Coral Strand