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FOREWORD

I am pleased to present this Information Systems Audit Report on Public Debt Management Systems. Article 229 of the Constitution of Kenya, 2010 mandates the Auditor-General to undertake financial, compliance and performance audits. Further, Section 7(1)(a) of the Public Audit Act, 2015 requires the Auditor-General to give assurance on the effectiveness of internal controls, risk management and overall governance at national and county governments. The Audit of Information Systems used in the management of Public Debt was conducted in line with this mandate.

The integrity, security, and efficiency of information systems are paramount to an organization's success. As technology continues to evolve rapidly, ensuring robust IT governance and risk management practices becomes increasingly critical. This audit report aims to: provide a comprehensive evaluation of the Public Debt Management information systems, identify areas of control weaknesses and their impact on data and reports generated from the system, and suggest areas of improvement.

The audit entailed examination of IT policies, procedures, and controls, with particular focus on data security, system functionality and reliability, and compliance with regulatory standards. The overall aim is to offer insights and recommendations that will assist in minimizing IT related risks, enhance operation of the Public Debt Management Information Systems, and support the achievement of the strategic objectives of the Public Debt Management Office.

The report is submitted to Parliament in accordance with Article 229(7) of the Constitution of Kenya, 2010 and Section 39(1) of the Public Audit Act, 2015. I have also submitted copies of the report to the Principal Secretary, The National Treasury and the Chief of Staff and Head of the Public Service.

AUDITOR-GENERAL

29 October, 2024

DATE: Auditor-General's Information Systems Audit Report on Public Debt Management Systems THE-TABLE:





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List of Abbreviations

Abbreviations	Description	
AFD French Development Agency		
AUA	Africa Unit of Account	
BCP	Business Continuity Plan	
CAD	Canadian Dollar	
CBK	Central Bank of Kenya	
CFS Consolidated Fund Services		
CHF Swiss Franc		
CNY	Chinese Yuan	
СОВ	Controller of Budget	
CPs	Conditions precedent	
CC DDMC	Commonwealth Secretariat - Debt Recording and Management	
CS-DRMS	System	
DRP	Disaster Recovery Planning	
DSSI Debt Service Suspension Initiative		
EUR	The Euro	
FS	Financial Statement	
GBP	British Pound Sterling	
GDP	Gross Domestic Product	
GIMIS	Government Investments Management Information System	
GoK	Government of Kenya	
ICT	Information and Communications Technology	
IDA	International Development Association	
IFMIS	Integrated Financial Management Information System	
IPSAS	International Public Sector Accounting Standards	
JICA	Japan International Cooperation Agency	
JPK	Japanese Yen	
KRW	South Korean Won	
PA	Payment Authority	
PADES Payment Advise Data Entry System		
PDMO	Public Debt Management Office	
SOE	State-Owned Enterprises	
VPN	Virtual Private Network	
XDR	Special Drawing Rights	



Definition of Terms

Term	Meaning		
Balance Record	The balance record is a balance considered to be Disbursed		
	Outstanding Debt (DOD) from the date of entry, removing the need to		
	separately record disbursements under the associated loan key. It		
	serves as the basis for calculating principal repayments, interest		
	payments, and the government's total debt stock.		
Condition	Specific requirements that must be fulfilled before a contract can be		
Precedent	considered effective. These conditions ensure that all necessary legal,		
	financial, administrative and regulatory preparations are in place before		
	the financing arrangement proceeds		
Converted	Loans arising from older loans whose terms have been changed as a		
Loans	result of restructuring, currency conversion or debt swap		
Government	An information system used by the Government Investment and Public		
Investment	Enterprises Department of The National Treasury to monitor State-		
Management	Owned Enterprises (SOEs). The system tracks amount on-lent to SOEs		
Information	under a subsidiary loan agreement		
System (GIMIS)			

1. EXECUTIVE SUMMARY

Introduction and Background

- 1.1. Article 229 of the Constitution of Kenya, 2010 mandates the Auditor-General to undertake financial, compliance and performance audits. Further, Section 7(1)(a) of the Public Audit Act, 2015 requires the Auditor-General to give assurance on the effectiveness of internal controls, risk management and overall governance at national and county government. Section 34 of the Public Audit Act, 2015 mandates the Auditor-General to conduct periodic audits upon request or at the Auditor-General's own initiative, with a view to evaluating the effectiveness of risk management, control and governance processes in public entities. The Audit of Information Systems used in the management of Public Debt was conducted in line with this mandate.
- 1.2. According to Article 214(2) of the Constitution of Kenya, 2010, public debt means all financial obligations attendant to loans raised or guaranteed and securities issued or guaranteed by the National Government. Government raises public debt as resources to finance fiscal deficit, which occurs when government budgeted expenditure exceeds budgeted revenue. Public debt may be owed to domestic residents, as well as to foreign lenders.
- 1.3. The responsibility for management of public debt is vested in the Public Debt Management Office (PDMO) at The National Treasury.
- 1.4. The Directorate is organized into three (3) Technical Departments:
 - Resource Mobilization (Front office), responsible for undertaking domestic and foreign borrowing, loan negotiations in consultation with the Attorney-General, liaison with implementation agencies to ensure fulfillment of conditions precedent, processing government guarantees, and management of withdrawal of loan funds to development projects;
 - ii. Debt Policy, Strategy and Risk Management (Middle office), responsible for preparation and review of the Medium-Term Debt Management Strategy, analysis of public debt sustainability, analysis of portfolio risks and costs, establishment of a debt risk management framework, review of public debt



- management policy and guidelines and preparation of statutory debt reports including the annual debt management report;
- iii. Debt Recording and Settlement (Back Office), responsible for maintenance of a comprehensive and reliable database for public debt and grants, maintenance of a public debt registry, monitoring disbursement of loans and grants, processing and settlement of debt service, and preparation of financial statements on debt and grants related transactions.
- 1.5. The Public Debt Management Office was using three (3) information systems for debt recording and management: The Commonwealth Secretariat Debt Recording and Management Systems (CS-DRMS), Commonwealth Meridian and Payment Advice Data Entry System (PADES). CS-DRMS and Commonwealth Meridian were used for debt recording and management while PADES was used for generation of payment authority documents necessary for processing debt-related payments. Commonwealth Meridian was meant to replace the CS-DRMS, but at the time of audit, the two systems were running in parallel.

Audit Scope, Objectives and Limitations

- 1.6. The overall objective of the audit was to determine the effectiveness of the design, implementation and operation of public debt management information systems controls, compliance with laws, regulations, directives and best practices and the impact of any control deficiency on reported public debt.
- 1.7. The specific objectives were to:
 - Determine the adequacy and effectiveness of information processing controls and related general controls for information systems used in the processing and management of public debt.
 - Determine the impact of control deficiency identified on the accuracy and completeness of reported public debt and contingent liabilities.
 - iii. Determine the impact of control deficiency on compliance with relevant laws, regulations, directives, policies and best practices.
 - iv. Confirm the accuracy and completeness of migration from CS-DRMS to Commonwealth Meridian.



- 1.8. The audit entailed review of Information Systems used in the management of public debt. Public debt data and financial information for the financial year 2022/2023 were used to assess the impact of control deficiency identified on accuracy and completeness of public debt and contingent liabilities and on compliance with laws and regulations.
- 1.9. The Public Debt Management Office did not provide access to CS-DRMS and Commonwealth Meridian test environment which was needed to test application controls. This limitation was mitigated by using data analysis to test controls.

Approach and Methodology

- 1.10. The audit involved review of processes at PDMO, review of Public Debt Management Systems controls, analysis of data maintained by both CS-DRMS and Commonwealth Meridian and comparison of records maintained by PDMO with those maintained by implementing agencies.
- 1.11. The main evidence gathering methodologies applied during the audit included document review, data analysis and interviews with key staff from PDMO and implementing agencies.

Summary of Audit Findings

The key audit findings are as follows:

I. Information Technology Controls

1.12. The audit identified deficiencies in the Information Technology (IT) controls which may have impacted negatively on reliability of data maintained by the systems.

Weaknesses in Business Continuity Planning

1.13. The Public Debt Management Office did not have an approved Business Continuity Plan/Disaster Recovery Plan (BCP/DRP). Further, even though backups were being run, there was no evidence that they were tested for restoration. This implies that PDMO may be unable to recover and continue offering services within acceptable timeframes in event of disasters and/or other disruptions.



Inadequate Information Technology Security Controls

1.14. There were security controls in Information Technology operating environment that were found to be inadequate. This exposes the Public Debt Management Office systems to risks, including unauthorized access to sensitive data, data breaches, and potential data loss which can lead to financial losses, legal repercussions, and damage to reputation. These weaknesses were partly attributed to lack of security policies and procedures.

Non-Effective CS-DRMS Validation Controls

- 1.15. Review of the CS-DRMS and Commonwealth Meridian and analysis of data revealed the following weaknesses in validation controls
 - i. There were gaps in loan agreement numbers related to loan records in CS-DRMS. In addition, there was one loan number 20212022304 in the Meridian system that had 11 characters instead of the maximum of 10. This is an indication that the system was not configured to validate correctness of loan agreement numbers, posing risks to data validity, accuracy, and completeness of data maintained in the system.
 - ii. There were disbursements and payments that were made against instruments indicated in CS-DRMS as not-effective. There was also no link between the effective date recorded in the CS-DRMS and the effectiveness status. This implies that the system is not configured to enforce control of ensuring disbursements and payments are not made against loan agreements in which conditions precedent have not been met.
 - iii. There were disbursements reflected in CS-DRMS as disbursed after terminal date of disbursement. This implies the disbursement date in CS-DRMS is not an effective control to ensure disbursement are not made after terminal date.

Uncontrolled Migration from CS-DRMS to Commonwealth Meridian

1.16. Migration from CS-DRMS to Commonwealth Meridian commenced in September 2020. Full deployment/ go-live date was initially set for 31 October 2020, but this was changed several times. It was noted that as at December 2023, the new system was still not fully implemented. The two systems were running in parallel, with CS-DRMS taking precedence as the primary data



source for debt reporting. Further review of the records provided and analysis of data maintained by the two system established the following:

- i. The set of data that were migrated, workflow designs, module test results and user acceptance reports were not provided by PDMO, an indication of weaknesses in project management which in turn affects the success rate of a project.
- Comparison between records maintained by the two systems established variances between disbursement records, payment records and instrument records.

II. Reliability of CS-DRMS

1.17. Analysis of data maintained in CS-DRMS established the following anomalies that affect the reliability of data maintained by the system.

Payments Based on Unsupported Balance Records

- 1.18. There were payments that were made based on balance records as follows:
 - i. There were 14,094 principal and interest payments amounting to Kshs.67,803,302,321 for standard loans and 5,261 principal and interest payments totalling Kshs.21,570,280,819, for converted loans or tranches of converted loans as at 30 June, 2023 that were paid based on instruments or loan tranches under which balance records were used to compute payments due to lenders.
 - ii. There were seven (7) loans or loan tranches with principal repayment of Kshs.777,277,336 which were indicated to have negative total disbursements totalling to Kshs.616,543,752 in CS-DRMS.
 - iii. There were eight (8) loans that had principal repayment records exceeding loan amounts disbursed by a total of Kshs.1,332,421,059. Of the eight (8) records, seven (7) had already matured at the time of audit.

Variance Between Bank Statements and CS-DRMS Payment Records

1.19. Comparison of data on loan payments maintained in CS-DRMS for the year ended 30 June, 2023 with the public debt bank statement established the following:



- There were instances where Loan Payments Records in CS-DRMS could not be traced in Bank Statement and Payments in Bank Statement could not be traced in CS-DRMS
- ii. There were 17 payments in the bank statement that were less by a total of Kshs.78,993,794 than corresponding payment records in the public debt recording system (CS-DRMS).

Variance Between Payments in CS-DRMS and Financial Statements

1.20. Comparison of Payment records in CS-DRMS with financial statements for the year ended 30 June, 2023 established a variance of Kshs.3,457,749,926.30 between interest payments on foreign borrowings from the public debt recording system (excluding interest recorded for guaranteed debt), and interest payments on foreign borrowings in Note 4 to the Financial Statements. Similarly, there was a variance of Kshs.4,104,454,664.17 between repayments of foreign lending and on-lending from the public debt recording system, (excluding the principal recorded for guaranteed debt), and repayments of foreign lending and on-lending in Note 5 to the Financial Statement.

III. Differences in Records Maintained by PDMO and by Implementing Entities

- 1.21. Comparison of records maintained by Public Debt Management Office and those maintained by sampled implementing entities established variances which may lead to inaccurate reporting of loan balances and repayment schedules. Additionally, the misalignment can result in ineffective tracking of debt obligations, mismanagement of funds, and non-compliance with financial regulations.
- 1.22. The misalignment was noted with guaranteed loans, non-guaranteed loans and on-lent loans.
- 1.23. Some of the implementing agencies that had differing records included:
 - i. Kenya Electricity Generating Company
 - ii. Kenya Power and Lighting Company
 - iii. Kenya Railways Corporation
 - iv. Kenya Urban Roads Authority



- v. Kenyatta National Hospital,
- vi. Machakos Level 5 Hospital
- vii. Port Reitz Level 4 Hospital
- viii. Kenya Airports Authority
- ix. Kisumu County Government
- x. Nairobi County Government
- xi. Kenya Airways
- xii. Kenya Petroleum Refineries Limited
- xiii. Lake Basin Development Authority

IV. Lack of Value for Money

- 1.24. During verification of sampled loans, it was noted that value for money was not realized in some of the projects financed by proceeds from public debt, as described below:
 - i. A machine for clinical waste disposal installed at the Port Reitz Sub-County Hospital was not functioning, because the Kenya Power and Lighting Company (KPLC) had disconnected power due to accumulated power bills. The hospital Management indicated that the machine was consuming a lot of power, compared to revenue generated by the hospital. Further, the hospital did not produce sufficient clinical waste for disposal by the machine. This is an indication that a feasibility study was not done.
 - ii. Verification of the utilization of the loan from the credit purchase agreement between Nairobi City Council (now Nairobi City County Government) and Somati Vehicles NV, Belgium for the supply of firefighting vehicles, ambulances, personal protection equipment sets, breathing apparatus sets, communication systems, fire stations related equipment, and training financed by KBC Bank NV and the Kingdom of Belgium through a mixed credit valued at Euros10,000,000 established the following:
 - a) Out of the 29 vehicles received from Somati Vehicles NV, Belgium under the project, 13 were not in use at the time of the audit due to defects. The County Chief Officer for Disaster Management and Coordination stated that the cost of repair was too high.



b) A container containing a communication system and a firefighting command car, Toyota Landcruiser, arrived at the Port of Mombasa on 09 June, 2020. However, the Nairobi County Government did not clear the goods in time, leading to accruing demurrage and storage fees. As of 30 May, 2022, the goods had incurred line demurrage fees of USD 29,770, excluding other fees such as penalties and surcharges from Kenfreight.

V. Reliability of Reports Generated from Public Debt Systems

- 1.25. There are various reports that are based on the data from Public Debt Management Systems, among them the External Public Debt Register and the Annual Public Debt Management Report.
- 1.26. The External Public Debt Register is maintained at the back-office, the section of PDMO responsible for Debt Recording and Settlement, while the Annual Debt Management Report is prepared by the middle-office, the section that deals with Debt Policy, Strategy and Risk Management. Records in the CS-DRMS maintained by the Back Office acted as the base records for preparation of the two reports.
- 1.27. It was however, noted that closing balances in the financial year 2021/2022 for the Annual Debt Management Report differed with the closing balance reflected in the External Public Debt Register, by a difference of Kshs.78,563 Million. Further, the closing balances in each of the reports in the financial year 2021/2022 also differed with the opening balances in the financial year 2022/2023.
- 1.28. The variances are an indication that the sections within PDMO might have been working in silos. Arising from inaccuracies in reporting, coupled by unreliability of systems used in processing and management of public debt, the accuracy and completeness of public debt could not therefore be ascertained.

VI. Non-Compliance Issues

1.29. The following additional non-compliance issues were noted:



- 1.30. The responsibility for processing of disbursements of loans or grants despite being included in the delineation of the Back-Office roles in the Debt and Borrowing Policy, was being undertaken by Resource Mobilization/Front Office. The officers in this unit were carrying out various tasks related to processing of disbursements after a loan is signed and effective.
- 1.31. Payment of commitment fees on undisbursed amounts forms part of loan terms in some loan agreements. The purpose of commitment fees, charged as a percentage of the undisbursed amount, is to ensure that the borrower draws the loan amounts within reasonable timelines. It was noted that by 30 June, 2023, commitment fees amounting to Kshs.806,383,056 had been paid for eight (8) loans contracted between 2014 and 2022, from which no disbursements had been made. Out of this amount, Kshs.102,685,196 was paid in the financial year 2022/2023.
- 1.32. Review of loan agreements, Payment Authority (PA), and analysis of data maintained by CS-DRMS revealed instances of failure to comply with timeliness in loan agreements resulting to the following:
 - i. During the year ending 30 June, 2023, the Government had delayed in settlement of principal and interest amounts of various loan instruments and attracted penalties and default interest of **Kshs.6,662,242.85**.
 - ii. Review of sampled loan agreements and invoices from lenders established that twelve (12) loans continued to incur commitment fees totalling Kshs.524,791,472.42 after the terminal date of disbursement. The twelve (12) loans did not have an addendum to extend the availability period.
- 1.33. It was established that the legal debt limit of Kshs.10 trillion as at 30 June, 2023 had been exceeded contrary to Regulation 26(1)(c) of the Public Finance Management (National Government) Regulations, 2015 which states that the public debt shall not exceed ten trillion shillings. This non-compliance can partly be attributed to failure to utilize the functionalities within the Commonwealth Meridian system.



1.34. The absolute debt limit defined in Regulation 26(1)(c) of the Public Finance Management Act remained in force until 2 November 2023, when the Public Finance Management (Amendment) Act introduced subsections 2A and 2D to section 50 of the Public Finance Management Act. Section 50(2A) sets the debt ceiling at 55% of GDP in present value terms, while section 50(2B) allows the national government, in exceptional circumstances, to exceed the threshold by not more than 5%.

Conclusions

- 1.35. The audit identified IT control weaknesses including inadequate IT contingency planning and inadequate IT security controls. Further, there were weaknesses in input validation controls. The Public Debt Management Office is therefore, exposed to risk data breaches, unauthorized access and operational disruptions. This might ultimately affect the reliability of data maintained by the Debt Management Systems, reliability of reports generated from the systems and compliance with laws, regulations, directives and best practices.
- 1.36. The identified IT control weaknesses, including inadequate control during migration from Commonwealth Secretariat Debt Recording and Management System to Commonwealth Meridian, may have contributed to inaccuracies in reporting and unreliability in the systems used for recording, processing and managing public debt. This undermines the accuracy, completeness, transparency, and accountability of financial information, posing risks to fiscal management and public trust.
- 1.37. The audit identified instances of non-compliance with laws, regulations, directives, policies, and best practices related to public debt management. Notably, there was non-compliance with the public debt limit in force as at 30 June, 2023, and timelines in loan agreements. In addition, processing of disbursements of loans or grants was being done by the Front-office instead of Back-office contrary to Paragraphs 62 to 65 of the Debt and Borrowing Policy. The noncompliance may be attributable to several factors. While the Commonwealth Meridian System is configurable around the delivery to key stakeholders like the Ministry of Finance, Debt Management Office and the



Central Bank of Kenya, it was noted that Policy and Planning, Disbursement and Receipts/Payments, Reporting, Evaluation and Analysis, and Contingent

Liability Management modules were not fully utilized. Commonwealth Meridian system, if utilized, can assist in tracking compliance requirements.

1.38. The audit established that migration from Commonwealth Secretariat Debt Recording and Management System to Commonwealth Meridians system was not adequately managed as evidenced by failure by Public Debt Management Office to maintain key documentation and data including workflow designs, module test results and user acceptance reports. This could have resulted to loan instruments not being recorded in the Commonwealth Meridian System, and variances between Instrument, Disbursement, principal and interest payment records in Commonwealth Secretariat Debt Recording and Management System and Commonwealth Meridian.

Recommendations

- 1.39. In view of the findings and conclusions of the audit, the following are recommendations for implementation by The National Treasury.
- 1.40. In order to ensure reliability of data and reports generated from the Public Debt Management Systems, The National Treasury should:
 - i. Implement security controls, including enhanced access controls, regular system audits, and advanced threat detection and response mechanisms. Investing in staff training on cybersecurity best practices and establishing a culture of security awareness will further bolster defenses. Implementing these measures will strengthen the overall security, protect sensitive data, ensure compliance with regulatory standards, and enhance the reliability and integrity of the IT infrastructure.
 - ii. Fast-track the process of migrating to Commonwealth Meridian System so as to leverage on enhanced functionalities and avoid the shortcomings of Commonwealth Secretariat Debt Recording Management System. Further, The National Treasury in collaboration with the relevant entities should establish seamless interfaces and standardized protocols for data exchange between the Public Debt Management Office systems,



Integrated Financial Management Information System and Central Bank of Kenya Domestic systems.

- 1.41. To enforce compliance with set laws, regulations, directives, policies and best practices, The National Treasury should fully implement the Commonwealth Meridian System and utilize its key functionalities. Further, The National Treasury should implement monitoring and reporting mechanisms to promptly detect and address compliance issues, alongside staff training on compliance obligations.
- 1.42. In order to minimize unnecessary financial commitments and penalties payable due to failure by the government to draw the loan amounts within reasonable timelines or delay in making payments to Donors, The National Treasury should:
 - i. Renegotiate terms with lenders to reduce or eliminate commitment fees and penalties where possible, and ensuring that future agreements are structured to avoid such costs:
 - ii. Implement more rigorous financial planning and cash flow forecasting to help align borrowing needs more accurately with project timelines; and
 - iii. Enhance oversight and approval processes for new debt agreements in order to ensure that all financial obligations are scrutinized for costeffectiveness.
- 1.43. In order to minimize commitment fees payable due to avoidable circumstances, The National Treasury, in collaboration with key stakeholders, should develop measures to ensure that action is taken on the responsible Ministries Departments and Agencies, Offices and individuals.



2. INTRODUCTION AND BACKGROUND

2.1. Introduction

2.1.1. Article 229 of the Constitution of Kenya, 2010 mandates the Auditor-General to undertake financial, compliance and performance audits. Further, Section 7(1)(a) of the Public Audit Act, 2015 requires the Auditor-General to give an assurance on the effectiveness of internal controls, risk management and overall governance at national and county government. In addition, Section 34 of the Public Audit Act, 2015 mandates the Auditor-General to conduct periodic audits upon request or at the Auditor-General's own initiative, with a view to evaluating the effectiveness of risk management, control and governance processes in public entities. The Audit of Information Systems used in the Management of Public Debt was conducted in line with this mandate.

2.2. Background

- 2.2.1. According to Article 214(2) of the Constitution of Kenya, 2010, Public Debt means all financial obligations attendant to loans raised or guaranteed and securities issued or guaranteed by the National Government. Government raises public debt as resources to finance fiscal deficit, which occurs when government budgeted expenditure exceeds budgeted revenue. Public debt may be owed to domestic residents, as well as to foreign lenders.
- 2.2.2. The responsibility for management of public debt is vested in the Public Debt Management Office (PDMO) at The National Treasury
- 2.2.3. The Public Debt Management Office is established under Section 62 of the Public Finance Management Act, 2012. The functions of the office are to:
 - i. Implement the government's debt management policy,
 - Maintain a reliable database of loans taken by the National Government, county governments and their entities, and loans guaranteed by the National Government,
 - iii. Prepare and update the annual medium-term debt management strategy,
 - iv. Prepare and implement the National Government borrowing plan, including servicing of outstanding debts,

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- v. Acting as the principal in the issuance of government debt securities on behalf of The National Treasury,
- vi. Monitor and evaluate all borrowing and debt-related transactions to ensure that they are within the guidelines and risk parameters of the debt management strategy,
- vii. Process the issuance of loan guarantees, including assessment and management of risks in national government guarantees,
- viii. Upon request, assist county governments in debt management and borrowing, and,
- ix. Transact in derivative financial instruments in accordance with best international practices benchmarked to the debt management offices of other governments that are internationally respected for their practices.
- 2.2.4. The Directorate is organized into three (3) Technical Departments,
 - Resource Mobilization (Front office), responsible for undertaking domestic and foreign borrowing, loan negotiations in consultation with the Attorney-General, liaison with implementation agencies to ensure fulfillment of conditions precedent, processing government guarantees, and management of withdrawal of loan funds to development projects;
 - ii. Debt Policy, Strategy and Risk Management (Middle office), responsible for preparation and review of the Medium-Term Debt Management Strategy, analysis of public debt sustainability, analysis of portfolio risks and costs, establishment of a debt risk management framework, review of public debt management policy and guidelines and preparation of statutory debt reports including the annual debt management report;
 - iii. Debt Recording and Settlement (Back office), responsible for maintenance of a comprehensive and reliable database for public debt and grants, maintenance of a public debt registry, monitoring disbursement of loans and grants, processing and settlement of debt service, and preparation of financial statements on debt and grants related transactions.
- 2.2.5. In 2022-2023 financial year, The Public Debt Management Office was using three (3) information systems for debt recording and management: The Commonwealth Secretariat - Debt Recording and Management Systems (CS-Auditor-General's Information Systems Audit Report on Public Debt Management Systems



DRMS), Commonwealth Meridian and Payment Advice Data Entry System (PADES). CS-DRMS and Commonwealth Meridian were used for debt recording and management while PADES was used for generation of payment authority documents necessary for processing debt-related payments. Commonwealth Meridian was meant to replace the CS-DRMS, but at the time of audit, the two systems were running in parallel.

2.2.6. Some of the limitations in CS-DRMS that led to migration to Commonwealth Meridian included CS-DRMS not being configured to incorporate varying business-day calendars, relevant in computation of interest due to diverse lenders. In addition, the information system did not have the capability to incorporate varying interest calculation practices of different lenders.

2.3. Public Debt Statistics

Public Debt Trend

2.3.1. There has been a significant and steady increase in public and publicly guaranteed debt over the past decade, as shown in Figure 1. Starting at Kshs.2.4 trillion in 2013-14 financial year, Kenya's debt level has more than tripled to reach Kshs.10.3 trillion as at June 2023. This rise highlights a growing trend in the nation's debt accumulation, with periods of both moderate and accelerated debt growth.

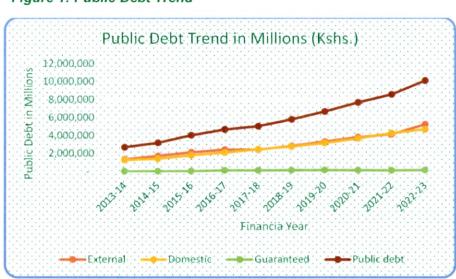


Figure 1: Public Debt Trend

Source: The National Treasury Annual Public Debt reports 2013-2023

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Composition of Public Debt

2.3.2. The Kshs.10.3 trillion as at June 2023 was made up of external debt stock of Kshs.5.4 trillion (53%) and domestic debt stock of Kshs.4.8trillion (47%) as shown in **Figure 2**. This indicates that slightly more than half of Kenya's debt was owed to external creditors, highlighting the country's exposure to international financial markets and exchange rate fluctuations.

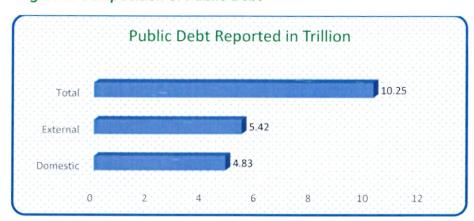


Figure 2: Composition of Public Debt

Source: The National Treasury Annual public debt reports 2022-2023

Public and Publicly Guaranteed External Debt by Source

2.3.3. Kenya's external debt, as at June, 2023, was predominantly owed to multilateral creditors, accounting for 49% of the total debt, which amounts to Kshs.2.7trillion, bilateral creditors held 23% of the debt, amounting to Kshs.1.3 trillion, while commercial creditors accounted for 28%, with a debt of Kshs.1.5 trillion, as shown in Figure 3.

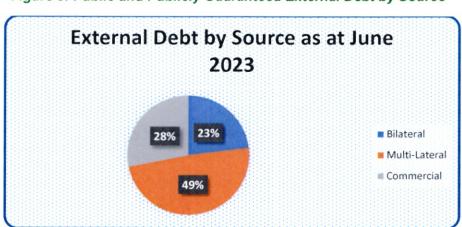


Figure 3: Public and Publicly Guaranteed External Debt by Source

Source: External Debt Register as at 30 June 2023.

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2.3.4. The composition of Kenya's debt by creditor type has evolved over time. Before 1980, multilateral debt was the sole component at 100%. Bilateral debt emerged from 1980s while commercial bank debt emerged between 2010-2020 as shown in Figure 4.

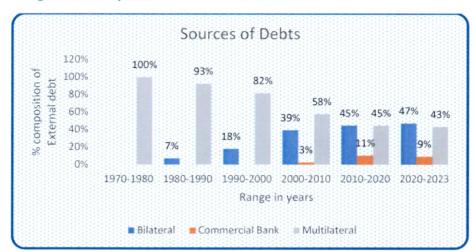


Figure 4: Composition of External Debt

2.3.5. This change in composition of debt has an impact on the finance cost. Interest rates vary significantly across these debt types: for example, some bilateral loans were offered at concessional rates of less than 2%, multilateral loans ranged from 3.3% to 6.3%¹, while commercial loans, based on the latest issued Eurobond was were at 9.75%².

Disbursed Loans per Major Currencies

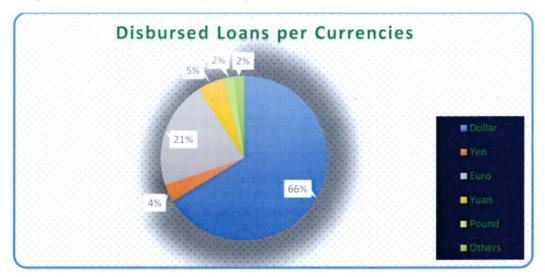
2.3.6. Kenya's external public debt at 30 June, 2023 stood at Kshs.5.45 trillion. The external debt, being predominantly in foreign currencies, is particularly sensitive to changes in exchange rates, as evidenced by the recent depreciation of the local currency against major currencies. Further, the dominance of USD in the currency structure exposes Kenya to increased exchange rate risks.

¹ As a blend economy, Kenya is eligible for both concessional loans from the International Development Association (IDA) and non-concessional loans from the International Bank for Reconstruction and Development (IBRD) at interest rates between 3.3% to 6.3% based on number of years.

² The Kenya Government successfully issued a new six-year Eurobond of USD 1.5 billion at a coupon rate of 9.75 percent, with a yield of 10.3 percent. CBK Weekly Bulletin February 16 2024.



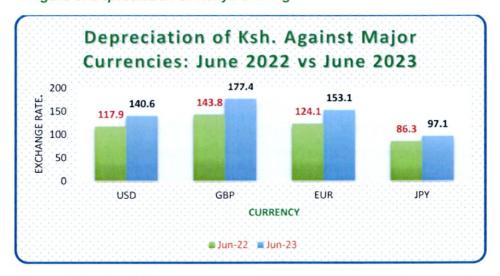
Figure 5: Disbursed Loans per Major Currencies



Source: External Debt Register as at 30 June 2023.

2.3.7. Between June 2022 and June 2023, the local currency's depreciation against these major currencies increased the debt servicing burden. The 19.2% depreciation of Kenya Shilling against the US Dollar (USD), 23.4% against the Euro (EUR) and British Sterling Pound (GBP), and 12.5% against the Japanese Yen (JPY) underscore the heightened cost of repaying foreign-denominated debt. This depreciation exacerbates Kenya's public debt burden. This highlighting potential concerns regarding debt sustainability.

Figure 6: Depreciation of Kenya Shilling



Source: Central Bank of Kenya



Public Debt as a Percentage of Gross Domestic Product

- 2.3.8. Gross Domestic Product is the total monetary value of all goods and services produced within a country's borders over a specific period.
- 2.3.9. The data on Kenya's debt to Gross Domestic Product (GDP) ratio from 2014 to 2023 reveals a consistent and significant upward trend. Starting at 41.9% in 2014, the ratio increased steadily each year, reaching 73.3% by 2023. This notable rise indicates that Kenya's debt has been growing at a faster rate than its GDP.
- 2.3.10. An increasing debt-to-GDP ratio indicates that Kenya's debt is growing faster than its economy, which can raise concerns about fiscal sustainability and the government's ability to repay its debt. This can lead to higher borrowing costs as investors demand higher interest rates to compensate for increased risk, potentially exacerbating the debt burden. This can also lead to austerity measures, reduced public spending, or higher taxes, which can hinder economic growth and adversely affect public services and welfare.

Public Debt (% of GDP) from 2014 to 2023 53.9 PERCENTAGE YEARS

Figure 7: Public Debt as a Percentage of GDP

Source: Public Debt (% of GDP) for Kenya from 2014 to 2023 IMF



Public Debt Repayment Time by Creditor Type

- 2.3.11. The time given to repay public debt has on average varied significantly over the decades. From 1970-1980, multilateral debt had an average repayment time of 50 years. During 1980-1990, bilateral and multilateral debts averaged 43 and 48 years, respectively. In 1990-2000, these decreased to 30 and 43 years. The 2000-2010 period introduced commercial debt with a 23-year repayment time, while bilateral and multilateral debts averaged 30 and 38 years. From 2010-2020, these times further reduced to 24 years for bilateral debt, 14 years for commercial bank debt, and 35 years for multilateral debt. Recently, from 2020-2023, the averages were 26 years for multilateral debt, 17 years for bilateral, and 16 years for commercial bank.
- 2.3.12. The introduction of commercial loans from 2000 onward presents risks due to shorter repayment periods and higher interest rates, increasing debt servicing costs and financial strain. This highlights the need for careful debt management to mitigate potential financial vulnerabilities.

Average Loans repayment in Years 2020-2023 2010-2020 Years in Decades 2000-2010 1990-2000 1980-1990 1970-1980 20 Number of Years 60 10 1970-1980 1980-1990 1990-2000 2000-2010 2010-2020 2020-2023 Multilateral 50 26 48 43 38 35 Commercial Bank 23 16 14 Bilateral 43 30 30 24 17

Figure 8:Debt Repayment Time by Creditor Type

Source: CS-DRMS database as at 30 June 2023.



2.4. Audit Scope, Objectives and Methodology

Audit Objectives

2.4.1. The overall objective of the audit was to determine the effectiveness of the design, implementation and operation of public debt management information systems controls, compliance with laws, regulations, directives and best practices and the impact of any control deficiency on reported public debt.

2.4.2. The specific objectives were to:

- Determine the adequacy and effectiveness of information processing controls and related general controls for information systems used in the processing and management of public debt.
- ii. Determine the impact of control deficiency identified on the accuracy and completeness of reported public debt and contingent liabilities.
- iii. Determine the impact of control deficiency on compliance with relevant laws, regulations, directives, policies and best practices.
- iv. Confirm the accuracy and completeness of migration from Commonwealth Secretariat Debt Recording Management System (CS-DRMS) to Commonwealth Meridian.

Audit Scope and Limitations

- 2.4.3. The audit entailed review of Information Systems used in the management of public debt. Public debt data and financial information for the financial year 2022/2023 were used to assess the impact of control deficiency identified on accuracy and completeness of public debt and contingent liabilities and on compliance with laws and regulations.
- 2.4.4. The following table describes the extent to which the objectives were addressed.



Table 1: Audit Scope

Ot	pjective	Audit Scope
1)	Determine the adequacy and	Reviewed input, processing and
	effectiveness of information processing	output controls over Debt
	controls and related general controls for	Management Systems, database
	Information systems used in processing	security and operating system
	and management of public debt.	security and related IT general
		Controls
2)	Determine the impact of control deficiency	The control weaknesses identified
	identified on the accuracy and	were assessed for their impact on
0,	completeness of reported public debt.	the reported public debt and
3)	Determine the impact of any control	contingent liabilities.
	deficiency identified on the accuracy and	
4	completeness of contingent liabilities.	
4)		Assessed compliance with:
	regulations, directives, policies and best	a) Public Finance Management
	practices.	Act, 2012
		b) Public Finance Management
		(National Government) Regulation, 2015
		c) Debt and Borrowing Policy,
		2020
		d) Contract documents with
		lenders
		e) World Bank IMF Guidelines
		for Public Debt
		Management, 2014
		f) Debt Recording and
		Settlement Department -
		Back Office Operation
		Manual, 2019
5)	Confirm the accuracy and completeness	Reviewed documents and
	of migration from the Commonwealth	compared data between the two
	Secretariat Debt Recording Management	systems
	System (CS-DRMS) to the	
	Commonwealth Meridian.	

2.4.5. The Public Debt Management Office did not provide access to test environment which was needed to test application controls. This limitation was mitigated by using data analysis to test controls.



Audit Methodology

- 2.4.6. The audit involved review of processes at PDMO Headquarters, review of Public Debt Management Systems controls, analysis of data maintained by both CS-DRMS and Commonwealth Meridian and comparison of records maintained by PDMO with those maintained by implementing agencies.
- 2.4.7. The main evidence gathering methodologies applied during the audit included document review, data analysis and interviews with key staff from PDMO and implementing agencies.

Document Review

- 2.4.8. The audit team reviewed various documents including: -
 - The Constitution of Kenya, 2010
 - ii. The Public Finance Management Act, 2012
 - iii. The Public Finance Management (National Government)Regulations, 2015
 - iv. Debt and Borrowing Policy, 2020
 - v. Public Debt Management Office's operations procedures
 - vi. The Debt Management Performance Assessment (DeMPA) Methodology, 2021
 - vii. 2014 World Bank IMF Guidelines for Public Debt Management
 - viii. CBK agency agreement
 - ix. Agreement with commonwealth secretariat
 - x. Sampled loan records physical (AC) files
 - xi. Loan invoices from the respective lenders.
 - xii. Payment Authority physical recording files between July 2022 to June 2023
 - xiii. CFS Public debt Annual Report and Financial Statements for the year ended June, 2023.
 - xiv. 2022 Annual Borrowing Plan
 - xv. Annual public debt reports
 - xvi. List of funded projects and respective implementing agencies.



System Review and Walkthrough Test

- 2.4.9. Read only access to the debt management systems were granted. This access was used to test and validate the existence, adequacy and effectiveness of some of the application controls.
- 2.4.10. A walk-through test involved tracing transactions from initiation, through the entire accounting process to ensure that the controls are functioning as intended. Information system review was used to evaluate the effectiveness, security, and reliability of deployed IT infrastructure and data processing.

Data Analysis

- 2.4.11. Data from CS-DRMS was extracted and analyzed and exceptions noted. The data analysis exceptions formed the basis of verification with records maintained by implementing agencies.
- 2.4.12. The following sets of data were analyzed:
 - i. Public external loans data from 1963 to 2023;
 - ii. External loan disbursement data from 1963 to 2023;
 - External loan repayment data (Principal, interest, commitment fees and other charges/fees) from 1963 to 2023;
 - iv. Undisbursed loan balances (committed undisbursed loans) as at June 2023;
 - v. Payment authority records between July 2022 to June 2023;
 - vi. Consolidated Fund Services public debt bank statement;
 - vii. External debt registers for the year ending 30 June, 2023;
 - viii. Records of non-guaranteed loans from State Owned Enterprises;
 - ix. State Owned Enterprises data from Government Investment Management Information System (GIMIS); and
 - x. Records of Payment Authorities (PA's) from Payment Advise Data Entry System (PADES).

Interviews

2.4.13. The audit team interviewed officers from the PDMO and implementing agencies as a way of obtaining audit evidence or clarifying on audit issues. The officers interviewed are as shown in **Annexure 1.**



Verification of Findings

- 2.4.14. The audit team carried out field verifications of projects and loans records maintained by seventeen (17) entities drawn from county and national government entities, as listed below. The entities were selected based on results of preliminary data analysis.
 - i. Kenya Railways Corporation
 - ii. Rural Electrification Authority
 - iii. Nairobi County Government
 - iv. Kenya Urban Roads Authority
 - v. Coast Water Services Board
 - vi. Ministry of Health Level 5 Hospitals Machakos Hospital Level 5, Kenyatta National Hospital and Port Reitz Hospital level 4
 - vii. Mombasa County Government
 - viii. Kenya Petroleum Refineries Limited
 - ix. Machakos County Government
 - x. Kenya Airways
 - xi. Kenya Airports Authority
 - xii. Lake Victoria North Water Works Development Agency
 - xiii. Lake Basin Development Authority
 - xiv. Kisumu County Government
 - xv. South Nyanza Sugar Company Limited

2.5. Report Structure

- 2.5.1. This report is organized as follows:
 - i. Executive Summary
 - ii. Detailed Findings
 - iii. Conclusion and Recommendations
 - iv. Listing of appendices
- 2.5.2. The report should be read in its entirety in order to comprehend fully the approach to and findings of our work. The appendices referenced in the report will be provided in soft copy. The report has covered analysis and facts as



understood with the aim of informing the National Treasury Management of the risks identified regarding the protection of Information Assets used in the management of Public Debt. Recommendations on mitigation measures have been made.



3. DETAILED FINDINGS

The audit reviewed both general and application controls and accessed impact of these controls on data maintained by Public Debt Management systems and on reports generated there from.

3.1. Information Technology Controls

3.1.1. Regulation 110(1) of the PFM (National Government) Regulations, 2015 requires an Accounting Officer for a national government entity to institute appropriate access controls needed to minimize breaches of information confidentiality, data integrity and loss of business continuity. Regulation 102(2) requires an Accounting Officer to take all reasonable precautions to guard against damage, destruction of or falsification of any financial record required to be kept by the provisions of the Public Finance Management Act and Regulations. Review of IT general controls revealed the following weaknesses:

I. Inadequate IT Contingency Planning

3.1.2. It was noted that the Public Debt Management Office did not have a Business Continuity and Disaster Recovery Plan (BCP/DRP). This is despite the office running critical mission systems for debt recording and management. Further, even though PDMO was backing up its data, no evidence was provided to confirm whether testing of the backups was being done. Failure to have a BCP/DRP in place exposes PDMO to several risks such as: Prolonged down time in event of a disaster; Data loss; Financial loss; and Loss of trust from lenders; among other risks.

II. Inadequate IT Security Controls

3.1.3. A review of Information Technology (IT) security controls of sampled databases and servers were found to be inadequate. This exposes the Public Debt Management Office to risks, including unauthorized access to sensitive data, data breaches, and potential data loss which can lead to significant financial losses, legal repercussions, and reputation damage. These weaknesses were partly attributed to lack of security policies and procedures.



III. Non-Effective CS-DRMS Validation Controls

3.1.4. Validation controls are essential for ensuring data integrity, minimizing errors, and enhancing user experience by validating user input against predefined criteria before processing. A review of CS-DRMS revealed weaknesses in validation controls, as detailed below:

i. Gaps in Loan Agreement Numbers

- 3.1.5. Loan agreement numbers in CS-DRMS were used to uniquely identify each loan in the system. Analysis of the loan agreement records from the CS-DRMS revealed there were three hundred and seventeen (317) gaps in loan agreement numbers. Refer to Appendix A I.
- 3.1.6. These gaps may indicate controls were inadequate or non-existent, posing risks to data integrity, accuracy, and consistency. This can lead to duplication, misalignment, and loss of traceability of loan records which compromises the reliability of data-driven decisions, increases the possibility of errors, and make reconciliations difficult to perform.
- 3.1.7. In addition, there was one loan number 20212022304 for the project "DSSI Food Agency Japan for Loan 2001301 and 2004313" in the Meridian system that had eleven (11) characters instead of the maximum of ten (10). The same project was recorded under loan number 2022304 in CS-DRMS.
- 3.1.8. Upon enquiry, it was established that loan numbers were manually generated. This is prone to errors and reduces accountability.

ii. Loan Agreements Effectiveness Status in CS-DRMS not Working as Intended

3.1.9. Loan agreements were marked as either effective or not-effective. Effective means the loan met condition precedents necessary for its disbursement while not-effective means, the loan had not met some or all conditions precedent in their loan agreements, hence no disbursement should be made. It was however established that 13,037 disbursements associated with 178 unique loan instruments were made between the years 2000 and 2023 against instruments indicated in CS-DRMS as not-effective. Refer to Appendix A-II.



Similarly, there were 6,849 payment records in CS-DRMS, totaling Kshs.344,597,895,370.75 that were made against these loan instruments. Refer to Appendix A-III.

3.1.10. It was further noted that there was no link between the effective date recorded in the CS-DRMS and the effectiveness status. This implies that disbursements and payments can be made against loan agreements in which conditions precedent have not been met, resulting in breach of contractual requirements.

iii. Terminal date of disbursement in CS-DRMS not Working as Intended

3.1.11. Each loan agreement record in CS-DRMS indicates the terminal date of disbursement, which refers to a contractual date after which disbursements will no longer be made to the borrower without an addendum to the loan agreement. Comparison of Disbursement dates from disbursement records with terminal dates of disbursements in CS-DRMS established there were 6,539 disbursements reflected as disbursed after terminal date of disbursement. This implies the disbursement date in CS-DRMS is not an effective control to ensure disbursement are not made after terminal date. Refer to Appendix A - IV.

iv. Uncontrolled Migration from CS-DRMS to Commonwealth Meridian

- 3.1.12. Migration from CS-DRMS to Commonwealth Meridian commenced in September 2020. Between November and December 2020, the new system (Commonwealth Meridian) was to be integrated with the Central Bank of Kenya System. The final milestone was set to be from January to March 2021, where the Commonwealth Meridian system ought to have been integrated with IFMIS. However, a review of the records provided revealed the following:
 - i. As at December 2023, the new system was still not fully implemented. The two systems were running in parallel, CS-DRMS taking precedence as the primary source for debt reporting. There was therefore no value for money on the GBP 12,500 (Approximately Kshs.1,800,000) charged as an Annual Maintenance and support service.
 - ii. The set of data that were migrated, workflow designs, module test results and user acceptance reports were not provided by PDMO, an indication of Auditor-General's Information Systems Audit Report on Public Debt Management Systems



weaknesses in project management which in turn affect the success rate of a project. It was therefore not possible to ascertain the validity and completeness of data migrated to Commonwealth Meridian.

- 3.1.13. CS-DRMS and Commonwealth Meridian were running in parallel. They two system were therefore expected to hold similar data. Further, comparison between records maintained by the two systems established the following:
 - Variance Between Disbursement Records in CS-DRMS and Commonwealth Meridian System
- 3.1.14. The total number of disbursement records in CS-DRMS as at 30 June, 2023 was 30,799 associated with 1,717 unique records (based on loan number, tranche ID and disbursing currency), while Commonwealth Meridian had 28,891 disbursement records linked to 1,464 unique records. Analysis of the two data sets showed the following: -
 - There were two hundred and twenty-two (222) disbursement records in Commonwealth Meridian and not in CS-DRMS. Refer to Appendix A – V.

Further analysis of the 222 disbursement records established that:

- Ninety (90) disbursement records were not migrated to a corresponding tranche number in Commonwealth Meridian as referred to by the last three digits in Meridian's 10-digit convention;
- One hundred and twenty-nine (129) records had a mismatch of either tranche, currency or both, between the CS-DRMS and Commonwealth Meridian records; and
- Three (3) disbursement records in Commonwealth Meridian were not among the records provided for audit in the CS-DRMS disbursements.
- ii. The naming convention for tranches in Commonwealth Meridian was not used in one hundred and eighty-nine (189) disbursement records Appendix A VI(a)
- iii. There were 170 loan-related disbursement records in CS-DRMS not in Commonwealth Meridian. Refer to Appendix A – VI(b), respectively. Further analysis of the 170 disbursement records established that:



- Seven-five (75) disbursement records which according to management predate the Balance Record date in Commonwealth Meridian. The management did not provide evidence to support how the balances were arrived at.
- Eight (8) disbursement records which according to management were under Debt Relief instruments with enhancements which were disbursements in CS-DRMS but in Commonwealth Meridian, no enhancements were recorded as disbursements. However, management did not explain why the liability arising from enhancement disbursement were not recorded in Commonwealth Meridian.
- According to management, the remaining eighty-seven (87) disbursement were matured instruments hence not migrated. However, it was noted that there were matured loans that were yet to be migrated.
- iv. Out of the 1,231 disbursements that matched in the two systems (based on loan number, tranche ID and disbursing currency), the amount disbursed for 992 records did not have a variance between the two systems. The balance of the 239 loan disbursement records had either positive or negative variances. Refer to Appendix A - VII.
- 3.1.15. Further, a comparison of loans' disbursement records from CS-DRMS and Commonwealth Meridian system for the year ending 30 June, 2023 (based on loan disbursing currency) revealed that the disbursements were made in eight (8) currencies. Of the eight (8) loan currencies, only three (3) reconciled between the two systems, as shown in the table 2. Refer to Appendix A VIII and A IX.

Table 2: Disbursement records per currency

Currency	Commonwealth Meridian	CS-DRMS	Variance
Euro	1,265,465,770.17	1,270,095,486.61	(4,629,716.44)
Kenyan Shillings	125,000,000.00		125,000,000.00
Kuwaiti Dinars	161,900.02	161,899.92	0.10
UAE Dirhams	2,145,835.93	2,145,835.93	0.00
US Dollars	2,405,017,785.63	2,407,174,342.16	(2,156,556.53)
Won	8,069,638,520.00	8,069,638,520.00	0.00
Yen	22,808,083,419.77	23,233,000,509.00	(424,917,089.23)
Yuan Renminbi	472,688,234.86	454,243,778.75	18,444,456.11



- 3.1.16. It was also noted that the Kshs.125,000,000 loan recorded in Commonwealth Meridian was for loan number 2015034, which had disbursed a total of Kshs.125,000,000 and USD 5,473,325.99. However, in CS-DRMS, the same loan number 2015034 was indicated to have been disbursed in USD currency only of USD 1,907,037.7 and USD 4,621,950.
- 3.1.17. This shows inconsistencies in the migration of data, which may impair the traceability and audit trail of the records migrated from the old to the new system.
 - ii. Variance Between Payment Records in CS-DRMS and Commonwealth Meridian System
- 3.1.18. The total number of payment records relating to external debt in CS-DRMS for the year 2022-23 were 3,640, associated with 961 unique loan records, (based on loan number, tranche ID and paying currency), while Commonwealth Meridian had 4,045 payment records linked to 1,051 unique loan records. Further, analysis of the two data sets revealed the following:
 - i. There were 314 unique loan records in Commonwealth Meridian that were not in CS-DRMS while 224 records were in CS-DRMS and not in Commonwealth Meridian. Refer to Appendix A - X and A - XI respectively.
 - ii. There were 737 loan payment records in both systems, out of which, 349 records did not have variances based on payment currency and tranche identification number. The balance of the 388 loan disbursement records had positive and negative variances as illustrated in Appendix A XII.
 - The management in their response indicated that the variance was caused by loans that had matured but were yet to be migrated to the new system. However, it was noted that there were matured loans that were yet to be migrated.
- 3.1.19. To demonstrate the variance in monetary terms, comparison between payment and disbursement records for the month of June 2023 was done. It was established that CS-DRMS had total payment amounting to Kshs.30,551,158,861, while payments as per Commonwealth Meridian was Kshs.27,381,142,016, resulting to a variance of Kshs.3,170,016,844.



iii. Variance Between Instrument Records in CS-DRMS and Commonwealth Meridian System

- 3.1.20. Comparison of the records in CS-DRMS and Commonwealth Meridian established that there were 1,237 loan instrument records in both systems. Of the 1,237 records, eight hundred and five (805) had no variance based on instrument currency while the remaining four hundred and thirty-two (432) records had positive and negative variances. Refer to Appendix A XIII.
- 3.2. Failure to Integrate Public Debt Management Systems with other Key Systems
- 3.2.1. Annex I of The National Treasury Strategic Plan for the period 2018/2019 to 2022/2023, outlines the Implementation Matrix focusing on Strategic Objective 1.5. These objective mandates the Public Debt Management Office (PDMO) to enhance the efficiency and effectiveness of the Government Debt Market. Within this objective, strategy 1.5.3 specifically necessitates the establishment of a system dedicated to tracking debt management activities. The anticipated result of implementing the system was to achieve an operational analytical and web-based debt management system integrated with IFMIS, operating at full capacity within the five-year strategic plan.
- 3.2.2. It was noted that the implementation plan delineated a timeline for Commonwealth Meridian in the following financial years; system development in 2018/2019, testing in 2020/2021, rollout in 2021/2022, and full system functionality, including integration with IFMIS and the Central Bank of Kenya Systems by 2022/2023. However, at the time of audit, the system was still in the implementation/testing phase, therefore it had not integrated public debt management systems with other key systems. Consequently, the system had not attained full operational status. PDMO was thus not within the strategy timelines.

3.3. Under-Utilization of Debt Management Systems

3.3.1. At the time of audit, the Public Debt Management Office was using both CS-DRMS and Commonwealth Meridian systems for management of Public Debt.



According to the Commonwealth Secretariat, the Commonwealth Meridian System is configured around the delivery to key stakeholders like the Ministry of Finance, Debt Management Office and the Central Bank of Kenya. The Commonwealth Meridian modules included; Policy and Planning, Portfolio Management, Disbursement and Receipts/Payments, Reporting, Evaluation and Analysis, and Contingent Liability Management, among others. It was however noted that some of these system capabilities were either not utilized or partly utilized as described below:

The Policy and Planning Module

- 3.3.2. The Policy and Planning Module was not being fully utilized. The module deals with recording and monitoring instruments linked to Acts of Parliament and the Annual Borrowing Plan, a function within the middle office (Debt Policy, Strategy, and Risk Management). This functionality if utilized would monitor and enforce compliance with:
 - i. Debt mix from the approved medium-term debt strategy,
 - ii. Debt ceiling as guided by law, and
 - iii. Sources of debt as defined in the annual borrowing plan.
- 3.3.3. Failure to utilize the system may increase the risk of non-compliance.

Contingent Liability Management Modules

3.3.4. The Contingent Liability Management Modules was not being utilized. The module deals with recording loan guarantee details, management of claims and risk analysis, a function within the front office (Resource Mobilization). This omission hinders the ability to assess and manage fiscal risks from both implicit and explicit contingent liabilities.

Disbursement Module

3.3.5. It was observed that the Front Office (Resource Mobilization) did not utilize the system modules to record loan disbursement to projects and instead maintained records manually in Excel. This makes it difficult to link loan amount with the project it was intended for. This practice undermines the accuracy, completeness, transparency, and accountability of financial information, posing substantial risks to fiscal management and public trust.

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3.4. Failure to Maintain Domestic Debt Data in CS-DRMS

- Pursuant to Sections 50(9) and 63(e) of the Public Finance Management Act, 3.4.1. 2012, The National Treasury on 12 February, 2016 entered into an agency agreement with the Central Bank of Kenya. The purpose of the agency agreement was to define the agency role of CBK in relation to domestic debt. Apart from the roles and responsibilities of CBK defined in clause 5 and 6 of the agreement, clause 8 required CBK to perform the functions of the Registrar of National Government Securities defined in section 55 of the PFM Act. One of the roles of The National Treasury, indicated in clause 4.8 of the agency agreement was to maintain a domestic debt data in the debt database (CS-DRMS). Section 63(b) of the PFM Act also charges the Public Debt Management Office with maintaining a reliable debt data base for all loans taken by the National Government. This function is also captured in paragraph 65(e) of the Debt and Borrowing Policy, 2020, which includes maintenance of a comprehensive and reliable debt database for public debt among the Back-Office functions, in line with international best practice for public debt management.
- 3.4.2. At the time of audit, it was found that PDMO received monthly domestic debt reports from the Central Bank of Kenya, pursuant to clause 10 of the Agency Agreement, which it incorporated into reports like the CFS-Public Debt Annual Report and Financial Statements, Annual Public Debt Management Report, Summary Statement of Public Debt and Monthly Debt Bulletins. However, PDMO did not fulfil the requirement of clause 4.8 as it did not have a comprehensive set of domestic debt data in CS-DRMS or Commonwealth Meridian systems. As at 30 June, 2023, there were only two (2) loans in CS-DRMS, that were considered domestic debt, while in the Commonwealth Meridian system, there were 855 domestic debt security instruments (Bills and Bonds). The CBK site, however had 1,342 treasury bills (among these, there were issues with 91-day, 182-day and 364-day tenors, resulting in total issues of unique tenor of count 3,652) issued from January 1997 to June 2023 and 94 Treasury Bond (with total 266 issue or re-issue dates).



3.4.3. Further, PDMO did not demonstrate how verification of the data received from CBK is done, since CS-DRMS and Commonwealth Meridian systems were not integrated with CBK domestic debt systems, and PDMO did not have access, in form of a portal to CBK domestic debt systems.

3.5. Reliability of CS-DRMS

The CS-DRMS was the primary system used by PDMO for recording, analysing and reporting public debt. A review of the system and analysis of data established the following audit issues that affect its reliability:

I. Payments Based on Unsupported Balance Records

- 3.5.1. Analysis of public debt records maintained in CS-DRMS established that there were payments that were made based on balance records as described below:
 - i. There were 14,094 principal and interest payments amounting to Kshs.67,803,302,321 recorded in CS-DRMS as of 30 June, 2023 that were paid based on instruments or loan tranches under which loan balance records were used (instead of using actual disbursement balances) to compute payments due to lenders. Refer to Appendix B - I.
 - ii. There were **5,261** principal and interest payments totalling **Kshs.21,570,280,819**, with respect to converted loans or tranches of converted loans under which loan balance records were used instead of disbursements to determine payments due to creditors. Refer to **Appendix B II.**
 - The management did not provide evidence to support how the balance records were arrived at. In this circumstance, the accuracy and completeness of the balance records and the principal and interest paid based on these balance records could not be ascertained.
 - iii. There were seven (7) loans or loan tranches with a principal repayment of Kshs.777,277,336 which were indicated to have negative total disbursements totalling to Kshs.616,543,752 in CS-DRMS (Using the exchange rate prevailing as at 30 June, 2023). Refer to Appendix B III.
 - According to the management, the negative total disbursement amounts in CS-DRMS were disbursement reversals recorded after recording of the



- balance records. However, an explanation was not provided on the circumstances that can lead to a reversal of a balance record.
- iv. There were eight (8) loans that had principal repayment records exceeding loan amounts disbursed by a total of **Kshs.1,332,421,059**. Of the eight (8) records, seven (7) had already matured at the time of audit. Refer to **Appendix B IV**.

II. Variance Between Bank Statements and CS-DRMS Payment Records

- 3.5.2. When an invoice or bill is received from a lender, its details are captured into the CS-DRMS, then the payment process takes place outside the CS-DRMS system. At the end of each month, reconciliation between approved Payment Authority documents (PAs) requisitions to the Central Bank of Kenya (CBK) and the actual payment indicated in the bank statements is done. This is necessitated by exchange rate differences between date of requisition and date the lenders are paid by the bank. The recording section then uses the banks statements and reconciliations to update the actual repayments under each contract in the debt management systems.
- 3.5.3. Comparison of data on loan payments maintained in CS-DRMS for the year ended 30 June, 2023 with the public debt bank statement established the following:
 - i. There were instances where Loan Payments Records in CS-DRMS could not be traced in Bank Statement and Payments in Bank Statement could not be traced in CS-DRMS as demonstrated in Appendix B - V.
 - ii. There were 17 payments in the bank statement that were less by a total of Kshs.78,993,794 than corresponding payment records in the public debt recording system (CS-DRMS). Refer to Appendix B - VI.

III. Variance Between Payments in CS-DRMS and Financial Statements

- 3.5.4. Payment records in CS-DRMS and financial statements were compared and the following was established: -
 - Interest payments on foreign borrowings from the public debt recording system, excluding interest recorded for guaranteed debt, amounted to Kshs.151,220,567,779.70 while Note 4 to the Financial Statements



- reflected Kshs.154,678,317,706, resulting in an unreconciled variance of Kshs.3,457,749,926.30. Refer to Appendix B VII.
- ii. Repayments of foreign lending and on-lending from the public debt recording system, excluding the principal recorded for guaranteed debt, amounted to Kshs.242,066,663,828.17, while Note 5 to the Financial Statements reflected Kshs.237,962,209,164, resulting in a variance of Kshs.4,104,454,664.17. Refer to Appendix B VIII.

3.6. Comparison of PDMO and Implementing Agencies Records

3.6.1. Sampled loan records in CS-DRMS were compared with records maintained by implementing entities. The following was established: -

a) Kenya Electricity Generating Company and Kenya Power and Lighting Company

3.6.2. Balances of six (6) out of the nine (9) KENGEN GOK guaranteed loans differed from the balances in PDMO's debt register or the balances reported in the Annual Public Debt Management Report, or both. Further, one (1) loan disclosed in KENGEN Financial Statements for the year ending 30 June, 2023 was not traced in the external debt register/CS-DRMS instrument data, indicating that CS-DRMS data might be incomplete. The seven (7) loans are as listed in Table 3.

Table 3: Kenya Electricity Generating Loans Not Captured in Debt Register

Name	Lender	Outstanding Principal in KENGEN Records (Kshs.)	Outstanding Debt in Annual Debt Report (Rounded off) (Kshs.)	Variance (Kshs.)
 Sondu Miriu Hydropower Project 	JICA	1,312,325,000	1,148,000,000	164,325,000
Sondu Miriu Hydropower Project Sang'oro Power Plant	JICA	3,296,129,000	3,227,000,000	69,129,000
Olkaria 1 Unit 4 and 5 Geothermal Power Project	JICA	18,669,222,000	14,938,000,000.00	3,731,222,000
4. Rehabilitation and Expansion of the Hydropower Plant Kindaruma	KfW	598,158,000	947,000,000.00	(348,842,000)
Rehabilitation and Upgrade of the Geothermal Plant Olkaria	KfW	2,394,772,000	1,916,000,000	478,772,000
DSSI II (JICA KP20, KP21, KP23, KP24 & KP26)	JICA	1,272,395,000	1,413,000,000	(140,605,000)
 DSSI I (JICA KP20, KP21, KP23, KP24 & KP26) 	JICA	1,136,101,000	Not reported	



3.6.3. Further, comparison of data maintained by KENGEN, and PDMO established that there was a variance in on-lent loans from GOK to KENGEN. The amount also differed with that recorded by Government Investment Management Information System (GIMIS), as shown in **Table 4**.

Table 4: Variance between records maintained by The National Treasury and KENGEN

Name	Loan Currency	Outstanding Principal in Loan Currency from KENGEN FS	Disbursed Amount from GIMIS in Loan Currency (GOK to KENGEN)	CS-DRMS Disbursed Amount in Loan Currency (Creditor to GOK)
Japan International Cooperation Agency Loan (KE-P31) Olkaria V	JPK	29,858,758,936.00	29,913,050,780.00	28,581,513,270.00
EIB Olkaria 1 Unit 6	EUR	69,127,564.00	70,697,852.63	28,868,904.09

3.6.4. Further, as at 30 June, 2023, three (3) GOK-guaranteed loans shown in Table 5 were recorded in CS-DRMS and reported in the Annual Debt Management Report as belonging to the Kenya Power and Lighting Company. However, the loans were confirmed to have been guaranteed to KENGEN.

Table 5:Errors in Annual Debt Management report

Loan Number	Name	Lender	Loan Currency	Outstanding Principal (Kshs.) in KENGEN Records	Outstanding Debt as per CS-DRMS
KE P20	Kipevu 1 - Mombasa Diesel Generating Power Plant	JICA	JPK	825,196,000.00	825,000,000
KE P21	Sondu Miriu Hydropower Project	JICA	JPK	1,312,325,000.00	1,148,000,000
KE P23	Sondu Miriu Hydro Power II	JICA	JPK	7,049,343,000.00	7,049,000,000



b) Kenya Railways Corporation

- 3.6.5. The Kenya Railways Corporation (KRC) had two (2) loans from the Exim Bank of China for Mombasa-Nairobi and Nairobi-Naivasha Standard Gauge Railway (SGR) Projects. As of 30 June, 2023, the amount recorded in the Annual Public Debt Management Report was Kshs.569,329,600,000, while the amount in Kenya Railways Financial Statement was Kshs.617,215,835,910, hence a variance of Kshs.47,886,235,910.
- 3.6.6. Further, the insurance cost for the Nairobi-Naivasha SGR Project was recorded in CS-DRMS under instrument number 2015023 as USD 122,699,754. However, the amount specified in the loan agreement maintained by the Kenya Railways was USD 137,594,098, resulting to a variance of USD. 14,894,344.

c) Kenya Urban Roads Authority

3.6.7. Disbursement notices for credit purchase loans for the Nairobi ITS Establishment and Junctions Improvement Project and for Establishment of the Bus Rapid Transit Line 5 indicated initial disbursements of USD 822,562.50 and USD 841,800, respectively. However, these loans were captured in CSDRMS under loan keys 2021004 and 2021005 as USD 823,385.06 and USD 842,641.79, respectively, resulting in a variance of USD 822.56 and USD 841.79.

d) Kenyatta National Hospital, Machakos Level 5 Hospital and Port Reitz Level 4 Hospital

3.6.8. In CS-DRMS, the lender country for the Clinical Waste Disposal Machine Loan, instrument number 2013016, was captured as Italy and BNP PARIBAS FPORTIS Bank of Belgium was captured as the creditor. However, documentation from the three (3) sampled hospitals and project signage indicated that the lender country was Belgium.

e) Kenya Airports Authority

3.6.9. The Kenya Airports Authority (KAA) had a record of advance agreement for the preparation of the proposed Kenya Aviation Modernization Project-KAMP of USD 5 million, between the International Development Association (IDA) - World Bank and GOK. This loan was signed for activities to be carried out by



KAA. The financial statements for KAA for the year ended 30 June, 2023 disclosed **Kshs.452,665,000** as the amount borrowed under the contract. The agreement was signed by the CS, The National Treasury. The loan was however, not captured in CS-DRMS and there was no evidence that the loan was being serviced by either The National Treasury or KAA.

3.6.10. Further, there were no provisions in the agreement for the reassignment of the funds to KAA, nor was there a subsidiary loan agreement signed by the KAA's accounting officer, meaning that this was not an on-lend to KAA. In addition, there was no direct agreement between KAA and IDA. As a result, the Annual Debt Report 2022/23 incorrectly classified the balance under non-guaranteed public debt (direct loan) under contingent liabilities.

f) Kisumu County Government

3.6.11. According to the Credit Facility Agreement between the Government of Kenya (GOK) and French Development Agency (AFD) for the Kisumu Urban Project, disbursements to the project were to be made in three ways: refinancing of expenses incurred by the City of Kisumu, direct payments to contractors, and payment of advances through a cash expenditure fund. It was noted that the statement of financial position for the Kisumu County Government as of 30 June, 2023 reflected €36.026 million as the amount disbursed, while CS-DRMS records showed €34.613 million, hence a variance of €1.413 million.

g) Nairobi County Government

3.6.12. A credit purchase agreement between the Nairobi City County and Somati Vehicles NV, Belgium for the supply of firefighting vehicles, ambulances, personal protection equipment sets, breathing apparatus sets, communication systems, fire stations related equipment, and training financed by KBC Bank NV and the Kingdom of Belgium, through a mixed credit had goods and services valued at 10,000,000 euros. The lender delivered the goods up to the port of Mombasa as per the agreement terms and provided funds to cater for service costs incurred for the construction of fire stations. However, CS-DRMS recorded disbursements totaling Kshs.10,250,432.04 euros under loan keyS 2015018 and 2015017 for KBC Bank NV and the Kingdom of Belgium, respectively, creating a variance of 250,432.04 euros.



h) Kenya Airways

- 3.6.13. Records from CS-DRMS indicated that GOK guaranteed the Kenya Airways a loan amounting to USD 750,000,000 recorded under loan number 2017064. The guarantee comprised of guarantees in favour of local banks for USD 225,000,000 and a guarantee in favour of Exim Bank USA for USD 525,000,000.
- 3.6.14. The Public Debt Management Office Statement of External Debt for the financial 2022/2023 indicated balance of year an opening USD 710,431,445.55. However. Kenva Airways had data from USD 710,465,172, resulting to variance of USD 33,726.45. Further, the PDMO's Statement of External Debt for the financial year 2022/2023 recorded a principal repayment of USD 82,608,570.35, under the Kenya Airways guarantee, which matched with repayments documented in CS-DRMS. However, the Payment Authority Recording Book and the Controller of Budget Settlement Register had an additional payment of USD 12,259,658.26, which was made on 20 April, 2023 (under PA 129678 dated 30 March, 2023). Therefore, the total principal repayments in the financial year 2022/2023 amounted to USD 94,868,228.61 and not USD 82,608,570.35 as reported in PDMO's Statement of External Debt for the financial year 2022/2023.

i) Kenya Petroleum Refineries Limited (KPRL)

3.6.15. Kenya Petroleum and Refinery Limited disclosed under Note 30 its Financial Statement a short-term loan of Kshs.1,634,945,544, from the Government of Kenya, acquired between the year 2014 and 2018. The loan remained unpaid and was classified as a short-term loan in the company's books. However, this loan was not reported in the Annual Public Debt Report for the financial year 2022/2023.

i) Lake Basin Development Authority (LBDA)

3.6.16. As of June 30, 2023, the Lake Basin Development Authority (LBDA) had a contingent liability of Kshs.2.5 billion (excluding accrued interest and default interest). The liability arose from a guarantee it had made against a loan that was borrowed by Erdemann, the contractor constructing the Lake Basin Development Authority Mall. The loan was due for repayment by November



15, 2016, and had been accruing interest and default interest since then. The contingent liability was however not reported in the Annual Public Debt Report.

3.7. Lack of Value for Money

- 3.7.1. Paragraph 45 of the Public Debt and Borrowing Policy, 2020 require, The National Treasury to conduct completion rate analysis from time to time for projects funded by Public Debt. Further, The National Treasury is required to recommend to the Cabinet Secretary to take appropriate measures for project loans that are not being absorbed due to action or inaction of the implementing entities of debt-funded projects. This is aimed at enhancing absorption of funds by the implementing entities of debt funded projects.
- 3.7.2. During verification of sampled loans, it was noted that value for money was not realized in some of the projects financed by proceeds from public debt, as described below:
 - i. A machine for clinical waste disposal installed at the Port Reitz Sub-County Hospital was not functioning, because the Kenya Power and Lighting Company (KPLC) had disconnected power due to accumulated power bills. The hospital Management indicated that the machine was consuming a lot of power, compared to revenue generated by the hospital. Further, the hospital did not produce sufficient clinical waste to be disposed by the machine. This is an indication that a feasibility study was not done.
 - ii. Verification of the utilization of the loan from credit purchase agreement between Nairobi City County and Somati Vehicles NV, Belgium for the supply of firefighting vehicles, ambulances, personal protection equipment sets, breathing apparatus sets, communication systems, fire stations related equipment, and training financed by KBC Bank NV and the Kingdom of Belgium through a mixed credit valued at Euros10,000,000 established the following:
 - a. Out of the 29 vehicles received from Somati Vehicles NV, Belgium under the project, 13 were not in use at the time of the audit, due to defects. The County Chief Officer for Disaster Management and Coordination stated that the cost of repair was too high.



b. A container containing a communication system and a firefighting command car, Toyota Landcruiser, arrived at the Port of Mombasa on 09 June, 2020. However, the Nairobi County Government did not clear the goods in time, leading to accruing demurrage and storage fees. As of 30 May, 2022, the goods had incurred line demurrage fees of USD 29,770, excluding other fees such as penalties and surcharges from Kenfreight.

3.8. Reliability of Reports Generated from Public Debt Systems

- 3.8.1. Regulation 194(h) of the Public Finance Management (National Government) Regulations, 2015 requires the Public Debt Management Office to keep timely, comprehensive, and accurate records of outstanding Government debt, guarantees and lending in an appropriate database. Further, Regulation 200(1) requires the Cabinet Secretary to, not later than three months after the end of each financial year, submit an annual report to Parliament on public debt. In addition, Regulation (2) spells out the information to be included in the report as: Review of the previous year's financing of budget deficit; composition of external debt; publicly guaranteed debt; on-lent loans and contingent liabilities; debt strategy and debt sustainability; outlook for the medium term; and any commitment fees.
- 3.8.2. The Public Debt Management Office maintains an External Public Debt Register and prepares an Annual Public Debt Management Report. The External Public Debt Register is maintained at the Back-office, the section of PDMO responsible for Debt Recording and Settlement, while the Annual Debt Management Report in prepared by the Middle-office, the section that deals with Debt Policy Strategy and Risk Management.
- 3.8.3. Records in the CS-DRMS maintained by the back-office acted as the base record for the External Public Debt Register and the Annual Public Debt Management Report. It was however noted that closing balances in the financial year 2021/2022 for the Annual Debt Management Report differed with the closing balance reflected in the External Public Debt Register, by a difference of Kshs.78,563 Million. Further, the closing balances in each of the



reports in the financial year 2021/2022 also differed with the opening balances in the financial year 2022/2023, as shown in **Table 6**.

Table 6: Differences in Closing and Opening Balances

Financial Year		Annual Debt Management Report (in Millions of Kshs.)	External Public Debt Register (in Millions of Kshs.)
Closing Balance FY2021-2022	External debt excluding guaranteed debt	4,154,591	4,076,028
	Guaranteed external debt	145,357	145,357
	Total	4,299,948	4,221,385
Opening Balance FY 2022-2023	External debt excluding guaranteed debt	4,305,835	4,184,253
	Guaranteed external debt	151,244	148,282
	Total	4,457,079	4,332,535

3.8.4. The variances are an indication that the sections within PDMO might have been working in silos. Arising from inaccuracies in reporting, coupled by unreliability of systems used in processing and management of public debt, the accuracy and completeness of public debt could not therefore be ascertained.

3.9. Other Non- Compliance Issues

The following additional non-compliance issues were noted: -

I. Responsibility for Processing of Disbursements of Loans or Grants

- 3.9.1. Section 64(1) of the Public Finance Management Act, 2012 requires the Cabinet Secretary for matters relating to finance to ensure that the Public Debt Management Office has the resources and skills to manage debt and borrowing, according to international best practices for liability management.
- 3.9.2. Paragraph 4 of the National Treasury's Debt and Borrowing Policy, 2020 states that PDMO is required to have clear roles and responsibilities, processes and procedures in the conduct of public debt management operations guided by the relevant laws and best practices. Paragraphs 62 to 65 of the Debt and Borrowing Policy define 3 functional units within the PDMO "with clearly demarcated functions as an operational risk management strategy" Front



Office, Middle Office and Back Office. Resource Mobilization is the Front Office, Debt Policy Strategy and Risk Management is the Middle Office and Debt Recording and Settlement is the Back Office. Among the listed functions of the Back Office is to process disbursement of loans and grant.

- 3.9.3. Despite this being included in the delineation of the Back-Office roles in the Debt and Borrowing Policy, it was observed during audit that there was a Disbursement Unit under Resource Mobilization/Front Office. The officers in this unit were carrying out various tasks related to processing of disbursements after a loan is signed and effective as illustrated below.
- 3.9.4. Where the lenders disbursed invoice amounts directly to contractors in foreign currency (Direct Method), the disbursement desk under front office were performing the following settlement related tasks, despite there being a functional Settlement Unit under the Back Office.
 - Processing of requests for disbursement from MDAs. This entailed confirming the MDA's budget, and preparing drawdown document required by the lender. The drawdown document indicates transfer instructions and the amounts to be transferred.
 - ii. Submission of supporting documents to the lender through lender portals or physical delivery.
- 3.9.5. Where disbursements were channelled through a designated account in the loan currency in the Central Bank of Kenya, opened as a requirement in the loan contract (Revenue Method). The disbursement desks under front office were performing the following settlement related tasks, despite there being a functional Settlement Unit under the Back Office.
 - Processing of request for disbursement from MDAs. This entailed, verifying presence of budget and appropriation of funds for the project;
 - ii. Submission of utilization documents to the lender; and
 - iii. Giving instructions for transmission of the funds from designated bank account at CBK to the exchequer account.



II. State Owned Enterprises Experiencing Financial Distress

- 3.9.6. According to the Annual Public Debt Report for the financial year 2022/2023, the Government of Kenya had Guaranteed debt totaling to Kshs.170,229 million. The debt was guaranteed to the Kenya Power and Lighting Company (KPLC), Kenya Port Authority (KPA), KenGen and Kenya Airways. Similarly, State Owned Enterprises (SOEs) were reported to have non-guaranteed debt amounting to Kshs.111,805 million, while on-lent loans amounted to Kshs.983,204 million.
- 3.9.7. A review of records maintained at PDMO and at State Owned Enterprises established that many of the enterprises were experiencing financial distress; as measured by negative cash flows, debt to equity ratio, negative working capital and net losses as shown in table

Table 6: SOE in Financial Distress

Entity	Loan Amount (Kshs. Million)	Surplus/Deficit Amount (Kshs.)	Working Capital	Debt to Asset Ratio	Cash Flow
Coast Water Services	10.071	(040,000,540)			
Board	19,974	(210,926,513)			
Kenya Railways Corporation	569,330	(33,596,298,735)			
Lake Victoria North Water Works Development Agency	10,717	(88,603,184)	(1,964,072,167)		
Rural Electrification Authority	13,578	(4,830,533,000)			
Lake Basin Development Authority	2,000	(291,534,860)	188,383,123	150	277,098,655
South Nyanza Sugar Company Limited	253	(467,043,000)	(7,076,880,000)	2	66,343,000
Kenya Airways		(23,581,000,000)	(75,603,000,000)	3	9,503,000,000
Kenya Petroleum Refineries Limited	1,939,201,651	(464,558,307)	(3,231,631,310)	11	(719,926,102)

- 3.9.8. In addition, the record maintained at the PDMO relating to these loans were either incomplete or inaccurate.
- 3.9.9. With many of these state corporations experiencing financial distress, the government risks assuming the burden of paying loans that might be defaulted. Further, with incomplete and inaccurate records, the government may not be in a position to effectively develop strategies to mitigate the risks.



3.9.10. This non-compliance can partly be attributed to failure to utilize the functionalities within the Commonwealth Meridian system.

III. Payment of Commitment Fees on Undisbursed Loans

- 3.9.11. Payment of commitment fees on undisbursed amounts forms part of loan terms in some loan agreements. The purpose of commitment fees, charged as a percentage of the undisbursed amount, is to ensure that the borrower draws the loan amounts within reasonable timelines.
- 3.9.12. It was noted that by 30 June, 2023, commitment fees amounting to Kshs.806,383,056 had been paid for eight (8) loans contracted between 2014 and 2022, from which no disbursements had been made. Out of this amount, Kshs.102,685,196 was paid in the financial year 2022/2023. Refer to Appendix C I.
- 3.9.13. During the audit verification exercise, it was established that payment of commitment fees occurred due to several reasons, including; fraud allegation leading to the project being stopped, delays in project implementation by contractors due to unsettled costs by the Government of Kenya (GOK), contracts that had not yet been declared effective due to delays by the government or implementing agents in fulfilling Conditions Precedent (CPs), and slow and reduced disbursement of GOK counterpart funds.

I. Failure to Comply with Timelines in Loan Agreements

3.9.14. Section 68(2) (d) of the Public Finance Management Act, 2012 states that an accounting officer shall ensure that all contracts entered by the entity are lawful and are complied with. Further, Section 62(3)(a) and 63(a) of the Public Finance Management Act include minimizing the cost of public debt management and borrowing among the objectives and functions of the Public Debt Management Office. Similarly, Paragraph 46 of the Debt and Borrowing Policy dated June 2020 requires the absorption capacity of the implementing entity to match the disbursement profile of the loan to minimize commitment charges that accrue on undisbursed loan balances.



- 3.9.15. Review of loan agreements, Payment Authority (PA) and analysis of data maintained by CS-DRMS revealed the following:
 - i. Payment Authority records held by The National Treasury's Public Debt Settlement for the year ending 30 June, 2023 revealed that the Government had delayed in settlement of principal and interest amounts of various loan instruments and attracted penalties and default interest of Kshs.6,662,242.85. Refer to Appendix C - II.
 - ii. Further, review of forty-two (42) loan agreements and invoices from lenders established that twelve (12) loans continued to incur commitment fees totalling Kshs.524,791,472.42 after the terminal date of disbursement. The twelve (12) loans did not have an addendum to extend the availability period. Refer to Appendix C III.

IV. Breach of Public Debt Limit Set by Parliament

3.9.16. Debt totals reported in the Annual Public Debt Management Report and the External Public Debt Registers were compared to the debt ceiling defined in law. It was established that the legal debt limit of Kshs.10 trillion as at 30 June, 2023 had been exceeded contrary to Regulation 26(1)(c) of the Public Finance Management (National Government) Regulations, 2015 which states that the public debt shall not exceed ten trillion shillings.

Table 7: Debt Totals as of June 2023 in Millions of Kenya Shillings

Debt Totals as of June 2023			
	Source of Debt Data		
Debt Category	Annual Public Debt Management Report in Millions of Kshs.	External Public Debt Register in Millions of Kshs.	
External Public and Public Guaranteed Debt	5,616,790	5,446,561	
Domestic Debt	4,832,113	4,818,378	
Total Public and Public Guaranteed Debt	10,448,903	10,264,939	

3.9.17. This non-compliance can partly be attributed to failure to utilize the functionalities within the Commonwealth Meridian system.



3.9.18. The absolute debt limit defined in Regulation 26(1)(c) of the Public Finance Management Act remained in force until 2 November 2023, when the Public Finance Management (Amendment) Act introduced subsections 2A and 2D to section 50 of the Public Finance Management Act. Section 50(2A) sets the debt ceiling at 55% of GDP in present value terms, while section 50(2B) allows the national government, in exceptional circumstances, to exceed the threshold by not more than 5%.



4. CONCLUSIONS

- 4.1 The audit identified IT control weaknesses including inadequate IT contingency planning and inadequate IT security controls. Further, there were weaknesses in input validation controls. The Public Debt Management Office is therefore, exposed to risk data breaches, unauthorized access and operational disruptions. This might ultimately affect the reliability of data maintained by the Debt Management Systems, reliability of reports generated from the systems and compliance with laws, regulations, directives and best practices.
- 4.2 The identified IT control weaknesses, including inadequate control during migration from Commonwealth Secretariat Debt Recording and Management System to Commonwealth Meridian, may have contributed to inaccuracies in reporting and unreliability in the systems used for recording, processing and managing public debt. This undermines the accuracy, completeness, transparency, and accountability of financial information, posing risks to fiscal management and public trust.
- 4.3 The audit identified instances of non-compliance with laws, regulations, directives, policies, and best practices related to public debt management. Notably, there was non-compliance with the public debt limit in force as at 30 June, 2023, and timelines in loan agreements. In addition, processing of disbursements of loans or grants was being done by the Front-office instead of Back-office contrary to Paragraphs 62 to 65 of the Debt and Borrowing Policy. The noncompliance may be attributable to several factors. While the Commonwealth Meridian System is configurable around the delivery to key stakeholders like the Ministry of Finance, Debt Management Office and the Central Bank of Kenya, it was noted that Policy and Planning, Disbursement and Receipts/Payments, Reporting, Evaluation and Analysis, and Contingent Liability Management modules were not fully utilized. Commonwealth Meridian system, if utilized, can assist in tracking compliance requirements.
- 4.4 The audit established that migration from Commonwealth Secretariat Debt Recording and Management System to Commonwealth Meridians system was not adequately managed as evidenced by failure by Public Debt Management



Office to maintain key documentation and data including workflow designs, module test results and user acceptance reports. This could have resulted to loan instruments not being recorded in the Commonwealth Meridian System, and variances between Instrument, Disbursement, principal and interest payment records in Commonwealth Secretariat Debt Recording and Management System and Commonwealth Meridian.



5. RECOMMENDATIONS

- 5.1. In view of the findings and conclusions of the audit, the following are recommendations for implementation by The National Treasury.
- 5.2. In order to ensure reliability of data and reports generated from the Public Debt Management Systems, The National Treasury should:
 - i. Implement security controls, including enhanced access controls, regular system audits, and advanced threat detection and response mechanisms. Investing in staff training on cybersecurity best practices and establishing a culture of security awareness will further bolster defenses. Implementing these measures will strengthen the overall security, protect sensitive data, ensure compliance with regulatory standards, and enhance the reliability and integrity of the infrastructure.
 - ii. Fast-track the process of migrating to Commonwealth Meridian System so as to leverage on enhanced functionalities and avoid the shortcomings of Commonwealth Secretariat Debt Recording Management System. Further, The National Treasury in collaboration with the relevant entities should establish seamless interfaces and standardized protocols for data exchange between the Public Debt Management Office systems, Integrated Financial Management Information System and Central Bank of Kenya Domestic systems.
- 5.3. To enforce compliance with set laws, regulations, directives, policies and best practices, The National Treasury should fully implement the Commonwealth Meridian System and utilize its key functionalities. Further, The National Treasury should implement monitoring and reporting mechanisms to promptly detect and address compliance issues, alongside staff training on compliance obligations.
- 5.4. In order to minimize unnecessary financial commitments and penalties payable due to failure by the government to draw the loan amounts within reasonable timelines or delay in making payments to Donors, The National Treasury should:



- Renegotiate terms with lenders to reduce or eliminate commitment fees and penalties where possible, and ensuring that future agreements are structured to avoid such costs;
- ii. Implement more rigorous financial planning and cash flow forecasting to help align borrowing needs more accurately with project timelines;
 and
- iii. Enhance oversight and approval processes for new debt agreements in order to ensure that all financial obligations are scrutinized for cost-effectiveness.
- 5.5. In order to minimize commitment fees payable due to avoidable circumstances, The National Treasury, in collaboration with key stakeholders, should develop measures to ensure that action is taken on the responsible Ministries Departments and Agencies, Offices and individuals.



6. ANNEXURE

Staff Interviewed

No	Designation	Department
1	Finance Officer	South Nyanza Sugar Company
2	General Manager Finance and ICT	Rural Electrification and Renewable Energy Corporation (REREC)
3	Ag. Manager Finance and Accounts	Rural Electrification and Renewable Energy Corporation (REREC)
4	Accounts Assistant	Rural Electrification and Renewable Energy Corporation (REREC)
5	Superintendent	Port Reitz
6	Deputy head of disbursement unit	PDMO- Resource mobilization
7	Resource Mobilization officer	PDMO- Resource mobilization
8	Desk office world bank - Europe	PDMO- Resource mobilization
9	Desk office Africa Development Bank	PDMO- Resource mobilization
10	Ag. Head of	PDMO – Debt recording and settlement
11	Senior Debt Management Officer	PDMO - Debt recording and settlement
12	Head of debt settlement Unit	PDMO - Debt recording and settlement
13	Debt Management Officer	PDMO - Debt recording and settlement
14	Deputy Director	PDMO – Debt policy strategy and risk management
15	Economist	PDMO – Debt policy strategy and risk management
16	Finance Officer	Nzioa Sugar Company
17	Head	Nairobi City County
18	Head, Fleet Management	Nairobi City County
19	Head, Ambulances	Nairobi City County
20	Chief officer	Mombasa County
21	Deputy Director Accounting services	Machakos L5 Hospital
22	Chief Officer, Medical Services	Machakos L5 Hospital
23	Public Health Officer	Machakos L5 Hospital
24	In charge, Public Health Officers	Machakos L5 Hospital
25	CEC, Finance	Machakos County
26	PA to CEC, Lawyer	Machakos County
27	Chief Officer Finance	Machakos County



No	Designation	Department	
28	Head of Accounting Services	Machakos County	
29	Finance Officer	Lake Victoria South Water Works Development Agency	
30	Finance and Accounts	Lake Victoria North Water Works Development Agency	
31	Finance and Accounts	Lake Victoria North Water Works Development Agency	
32	Head of Corporate Services	Lake Basin Development Authority	
33	Senior Accountant	Lake Basin Development Authority	
34	Senior Director, Corporate Services	Kenyatta National Hospital	
35	Head of Projects	Kenyatta National Hospital	
36	Accounts	Kenyatta National Hospital	
37	Engineer	Kenyatta National Hospital	
38	Head of Finance	Kenyatta National Hospital	
39	Head of debt section	Kenya Petroleum Refineries Limited	
40	Finance officer	Kenya Petroleum Refineries Limited	
41	Ag. Head Finance	Kenya Railways Corporation	
42	Accounts Manager	Kenya Railways Corporation	
43	Senior Accountant	Kenya Railways Corporation	
44	Finance	Kenya Petroleum Refineries Limited	
45	Treasury and Corporate	Kenya Airways	
46	Treasury and Corporate (Loan Management)	Kenya Airways	
47	Treasury and Corporate	Kenya Airways	
48	Finance officer	Kenya Airports Authority	
49	CEC, Finance	County Government of Kisumu	
50	Chief Officer, Finance	County Government of Kisumu	
51	Director, Budget	County Government of Kisumu	
52	Head of finance	Coast Water Works Development Authority	
53	Principal Accountant	Coast Water Works	
54	Accountant	Coast General Hospital	



7. APPENDICES

The appendices referenced in the report and which are listed below will be provided in soft copies:

No	Appendix	Title	
1	Appendix A - I	Gaps in Loan ID Numbers	
2	Appendix A-II	Disbursements Against Loan Agreements Indicated as Not Effective	
3	Appendix A-III	Payments Against Loan Agreements Indicated as Not Effective	
4	Appendix A-IV	Disbursements After Terminal Date of Disbursement	
5	Appendix A-V	Disbursement records in Meridian not in CS-DRMS	
6	Appendix A-Vla	Disbursement Record in Meridian not Conforming to Naming Convention	
7	Appendix A-VIb	Disbursement records in CS-DRMS not in Meridian	
8	Appendix A-VII	Negative and Positive difference between Meridian vs CS- DRMS	
9	Appendix A-VIII	CS-DRMS Disbursement Records 2022-23	
10	Appendix A-IX	Meridian Disbursement Records 2022-2023	
11	Appendix A-X	Payment Records in Meridian and Not in CS-DRMS	
12	Appendix A-XI	Payment Records in CS-DRMS and Not in Meridian	
13	Appendix A-XII	Difference Between Meridian vs CS-DRMS Payment Records	
14	Appendix A-XIII	Negative and Positive difference between Meridian vs CS- DRMS Instrument Amounts	
15	Appendix B-I	Payments in CS-DRMS With Balance Records instead of Disbursements	
16	Appendix B-II	Conversions-Related Payments in CS-DRMS Without Disbursements	
17	Appendix B-III	Principal Payments Against Negative Disbursements	
18	Appendix B-IV	Principal Repayment Exceeding Loan Amounts Disbursed	
19	Appendix B-V	Loan Payments Records in CS-DRMS Not in Bank Statement, Payments in Bank Not in CS-DRMS and Payments in Bank Higher than in CS-DRMS Amounts	
20	Appendix B-VI	Payments in Bank Lower than CS-DRMS Amounts	
21	Appendix B-VII	Recalculated (CS-DRMS) Interest Payments on Foreign Borrowings	
22	Appendix B-VIII	Recalculated (CS-DRMS) Repayments of Foreign Lending & On-Lending	
23	Appendix C-I	Instruments with Zero Disbursement and Commitment Fees	
24	Appendix C-II	Penalties on Late Payments	
25	AppendixC-III	Payment of Commitment Fees Beyond Availability Period	
25	AppendixC-III:	Payment of Commitment Fees Beyond Availability Period	



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Office of the Auditor-General Kenya



