



**PERFORMANCE AUDIT REPORT
ON
NATIONAL DATA CENTRE
WITH CLOUD SERVICES**

**NATIONAL TELECOMMUNICATION
CORPORATION**

AUDIT YEAR 2021-22

AUDITOR-GENERAL OF PAKISTAN

PREFACE

Articles 169 and 170 of the Constitution of the Islamic Republic of Pakistan, 1973 read with Sections 8 and 12 of the Auditor-General's (Functions, Powers and Terms and Conditions of Service) Ordinance, 2001, require the Auditor-General of Pakistan to conduct audit of accounts of receipts & expenditure from the Consolidated Fund and Public Account of the Federation and each province and the accounts of any authority or body established by the Federation or a Province. Performance Audit of the project titled "National Data Centre with Cloud Services" executed by National Telecommunication Corporation under the controlling Ministry of Information Technology & Telecommunications was conducted accordingly.

The Directorate General Audit, Postal and Telecommunications Services conducted Performance Audit of the project titled "National Data Centre with Cloud Services" during April, 2022 with a view to reporting significant findings to stakeholders. Audit examined the economy, efficiency and effectiveness aspects of the project. In addition, Audit also assessed, on test check basis whether the management complied with applicable laws, rules and regulations in managing the project. The Audit Report indicates specific actions that if taken will help the management to realize the objectives of the project. Audit observations included in this report have been finalized in light of the discussions in the DAC meeting held on 19.05.2022.

The Audit Report is submitted to the President of Pakistan in pursuance of Article 171 of the Constitution of the Islamic Republic of Pakistan, 1973, for causing it to be laid before both houses of the Parliament.

Islamabad
Dated: 25.10.2022

Sd/-
(Muhammad Ajmal Gondal)
Auditor-General of Pakistan

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Abbreviations & Acronyms

ADP	Annual Development Plan
AGP	Auditor General of Pakistan
BoQ	Bill of Quantity
CRM	Customer Relationship Management Systems
DAC	Departmental Accounts Committee
DDoS	Distributed Denial of Service
DR	Disaster Recovery
DRS	Disaster Recovery Site
DWP	Development Working Party
ERP	Enterprise Resource Planning
FAC	Final Acceptance Certificate
FAT	Final Acceptance Test
FCF	Federal Consolidated Fund
GFR	General Financial Rules
GST	General Sales Tax
HR	Human Resource
MOU	Memorandum of Understanding
MoIT&T	Ministry of Information Technology & Telecommunication
MTDF	Medium Term Development Framework
NDC	National Data Centre
NICL	National Insurance Company Limited
NTC	National Telecommunication Corporation
LoI	Letter of Intent
PAC	Provisional Acceptance Certificate
PAO	Principal Accounting Officer
PAM	Performance Audit Manual
PAT	Provisional Acceptance Test
PC	Planning Commission
PPRA	Public Procurement Regulatory Authority
PPRs	Public Procurement Rules
P&TS	Postal & Telecommunication Services
SLA	Service Level Agreement
SOP	Standard Operating Procedure
VDI	Virtual Desktop Infrastructure

EXECUTIVE SUMMARY

The Directorate General Audit, Postal and Telecommunications Services conducted Performance Audit of the project titled “National Data Centre with Cloud Services” executed by National Telecommunication corporation during April, 2022. The main objectives of conducting Performance Audit of National Data Centre were to examine efficiency, economy and effectiveness of the project relating to procurement, contract, HR management, outstanding receivables and time & cost overrun of the project. Performance Audit was conducted as per guidelines provided in Performance Audit Manual and instructions issued by the Auditor-General of Pakistan in line with the INTOSAI Auditing Standards. The performance audit team examined the record of the project for the financial years 2015-16 to 2020-21.

The project of National Data Centre with Cloud Services was not part of Public Sector Development Programme. It was reported to be self-finance project of NTC and approved in its annual development programme. The project was conceived to meet the current and future requirements of NTC’s customers in line with modern trends in the industry. NTC was already providing such services to its designated customers since 2001-02 from its existing data centre with limited capacity.

The project was planned to meet the growing demand of NTC customers based on the latest technologies. PC-I of the project was approved by Development Working Party (DWP) with a cost of Rs 399.500 million on 6th July, 2015. NTC used its resources for the execution of the project.

There were certain flaws observed in different areas of project viz-a-viz contract, asset, financial & organization management,

procurements, monitoring & evaluation and overall implementation of the project.

As per Manual for Development Projects, feasibility report was required to be prepared before PC-I but the same was not prepared by NTC management. This state of affairs caused cost overrun of project and weak internal controls regarding conception of the project. There were certain violations observed in contract agreement and financial management. The issues in overall implementation of the project were also highlighted including incidents of violations of PPRA Rules, 2004. Further, the planned revenues as set in PC-I were not achieved in early years of the project. Moreover, there were found certain shortcomings in project documentation like PC-IV, completion reports, PAC, FAC etc. which affected the credibility of record.

As per PC-I, all the planned services promised by NTC were not provided to its customers. The customers/clients were generally not satisfied due to low standard of services of NDC which was not justifying the tariff charged by NTC, as the rates of products offered by NDC were on higher side as compared to market.

KEY AUDIT FINDINGS AND RECOMMENDATIONS

a) Key Audit Findings

- i. Feasibility report was not prepared for establishment of NTC Data Centre with Cloud Services.
- ii. NTC exceeded the limit of 15% of the total cost of the project and cost was overrun by 35.28% but PC-I was not revised. The PC-IV of the project was prepared without including the GST amount. The management did not follow the PPRA Rules for awarding contracts and procurements. Assets were procured against the specifications mentioned in BoQ of contract agreement. NTC management kept on incurring

expenditure after the closure of the project. Moreover, expenditure incurred on the project was not fully capitalized.

- iii. NTC did not arrange foreign training of project related personnel to improve their competency and capacity building.
- iv. NTC did not achieve the targeted revenue of National Data Centre. The management failed to recover the outstanding amount from its customers for the services provided to them during the financial year 2016-17 to 2020-21.

b) Recommendations

- i. Feasibility report needs to be prepared and completion of project documents in accordance with Manual of Development Project should be ensured. Moreover, PC-IV is required to be revised and approved from the competent forum.
- ii. Management needs to strengthen the internal controls, monitor achievement of planned targets, control expenditure and maintain the record properly for ensuring value for money, efficiency and effectiveness throughout the project.
- iii. Contract management needs to be improved in accordance with PPRA Rules.
- iv. All the expenditure incurred on the project should be capitalized to reflect true & fair view of the financial statements.
- v. Trainings for project personnel should be conducted as per agreement.
- vi. Management needs to conduct inquiries to investigate the matters as pointed out by audit, to fix responsibility. The outstanding amount of recovery may be expedited.

1. INTRODUCTION

National Telecommunication Corporation (NTC) was established on 1st January, 1996 under the Pakistan Telecommunication (Reorganization) Act, 1996. The Corporation is a corporate body, managed by a Management Board consisting of a chairman (Now Managing Director) and two other members, to be appointed by the Federal Government. NTC is working under the administrative control of the Ministry of Information Technology and Telecommunications (MoIT&T).

NTC prepares budget and submits it for approval of the Federal Government before 1st June every year. Any surplus over receipt in a Financial Year is to be remitted to the FCF and any deficit from actual expenditure is to be made-up by the Federal Government. The accounts of NTC are maintained in a form and format as the Federal Government may determine in consultation with the Auditor-General of Pakistan. In addition to the audit by the Auditor-General of Pakistan, its accounts are also audited by external auditors.

NTC's main function is to provide telecommunication services to its designated customers which include Federal and Provincial Governments, Defence Services or other Government agencies and institutions as the Federal Government may determine.

The project "National Data Centre with Cloud Services" was executed by National Telecommunications Corporation and was designed to establish on the ground that NTC had a small data centre with limited capacity, which could not cope with increasing demand data/ICT services. The said project was far important due to upcoming trends and demand for data centre services as the same was not available for public sector organizations. This data centre provided a secured data repository for Government / public sector with ease of accessibility from anywhere in the world with security and reliability.

According to NTC, the project was planned and the need assessment was based on the trends in the technology. The requirements of existing customers were worked out and accordingly the equipment of Data centre was designed keeping in view the present and future requirement. The cost estimation was based on market / tender rates for such items.

PC-I of the project was approved by Development Working Party (DWP) which was formulated in compliance of MoIT&T letter dated 31.01.2005, with a cost of Rs 399.500 million on 6th July, 2015. NTC used its resources for the execution of the project.

1.1 Project Objectives

The main objectives of project as per PC-I included development of infrastructure for hosting (virtual hosting, hardware co-location) for data and co-location of data hosting machines, application hosting (customer applications on unified infrastructure), on demand services (DR Solution, Backup Solution, Storage on Demand), Hosted Business Solution (Email & Collaboration, Unified Communications, Video Conferencing, Customer Relationship Management Systems), Enterprise Resource Planning (ERP), Data Centre's Backup and Disaster Recovery Solution, Web Portal, Website Development and Application Development, Email System, Video Conferencing System and Provision of Intranet service.

1.2 Time Phasing

The date of commencement of the project was 16th July, 2015 and date of completion was 8th August, 2016.

1.3 Capital Cost approved by DWP

The PC-I was approved with the cost of Rs 399.500 million.

1.4 Source of Funding and Life of the Project

The project was established using NTC's funds. The estimated life of project was ten (10) years. However, it may be pointed out that NTC has to deposit all its surplus (excluding authorized working capital) in FCF at the end of the year. Therefore, investment in this project though claimed to be from its sources has its bearing on the amount to be deposited in FCF.

2. AUDIT OBJECTIVES

The main objectives of conducting Performance Audit of National Data Centre are the audit of efficiency, economy and effectiveness of the data centre by examining the issues relating to procurement, contract and HR management, backup/disaster recovery facilities, volume of clientage, expansion of the project, data security, outstanding receivables and time and cost overrun of the project.

3. AUDIT SCOPE AND METHODOLOGY

The Performance Audit of project titled "National Data Centre with Cloud Services" covered last five years period from 2016-17 to 2020-21 by visiting NTC Headquarters, Islamabad.

The audit formulated the audit observations by examination of contract agreements, PC-I & PC-IV, documents relating to local & foreign procurements, accounts & store record, information from other sources like data available on internet. The fundamental approach of the audit was to focus on the performance/financial aspects and compliance with relevant rules and regulations. Performance Audit was conducted as per guidelines provided in Performance Audit Manual (PAM) of the Auditor General of Pakistan, PPRs, NTC Service Regulations and agreements.

4. AUDIT FINDINGS AND RECOMMENDATIONS

4.1 Organization and Management

The project team comprised of officers from the NTC. Director General (Technical) was assigned to work as Project Director for most of the project duration. Other members included Director (Data), Divisional Engineer (Data Com), Assistant Divisional Engineer (Data) and Assistant Manager Network (Data).

As per PC-1, required total technical personnel was not hired for the operation of Data Centre. However, services of some staff were hired on contract basis and deficiency was catered far by utilizing existing staff of NTC.

4.1.1 Non-preparation of feasibility report of National Data Centre project –Rs 399.500 million

According to para 1.53 chapter I of Manual for Development Projects, the PC-II is required to conduct surveys and feasibility studies, with respect to larger projects, intending to obtain full technical justification for undertaking the project before resources are committed and invested. Further, the defined project idea is carefully developed, and a project plan is prepared in accordance with the PC-I. Moreover, para 3.33 of Chapter-3 of Guidelines for Project Management, it is mandatory that the projects in Infrastructure Sector and Production Sector costing Rs 300.00 million and above should undertake proper feasibility studies before the submission of PC-I.

During the Performance Audit of the National Data Centre for the years 2015-16 & 2016-17, it was observed that PC-I of the project was prepared without preparation of feasibility report (PC-II). The purpose of a feasibility report was to evaluate the feasibility of different solutions or project paths and choose the best option. In the absence of feasibility

report the calculations for cost and time remained flawed resulting in cost overruns and frequent changes in scope of work.

Audit pointed this to the management in April, 2022. It was replied that NTC planned the Data Centre with the PC-I at a cost of Rs 399.500 million. Feasibility report was not prepared as the cost of project was less than Rs 500 million.

The reply was not acceptable as the project was approved in July, 2015 whereas the limit for feasibility report from Rs 300 to Rs 500 million was enhanced in November, 2015 by the Ministry of Planning, Development & Reform.

DAC in its meeting held on 19th May, 2022 directed the management to produce the record to audit for verification.

Audit recommends immediate implementation of DAC directives.

4.1.2 Non-conducting of foreign training for NTC employees by the contractor

As per clause 11.2 of contract agreement made between NTC and M/s Inbox Business Technologies (Pvt.) Ltd for supply, installation, testing and commissioning of NTC Data Centre Islamabad dated 25.03.2016, the contractor shall provide foreign training to 08 NTC people for 15 working days for all the components of Data Centre System. The training must be comprehensive enough that the NTC personnel trained should be able to install, configure, commission, manage, maintain and operate all the components of the Data Centre system.

During the Performance Audit of the National Data Centre for the years 2015-16 & 2016-17, it was observed that foreign training for eight (08) NTC officers/officials for 15 days was not arranged by the contractor. Due to non-arrangement of training, the capability to run the technical

equipment installed in National Data Centre was compromised, creating difficulties in smooth running of project.

Violation of contract agreement resulted in non-arrangement of trainings of personnel of project and the capability to run the technical equipment installed in National Data Centre was compromised, besides project staff was deprived of obtaining high level training.

Audit pointed this out to the management in April, 2022. It was replied that local training for capacity building were conducted for smooth operations of data centre therefore, foreign training was not conducted and amount reserved for training was deducted from the contractor's payments.

The reply was not acceptable as due to non-providing the foreign training, the people engaged in the project were deprived-off the said training.

DAC in its meeting held on 19th May, 2022 directed the management to provide all relevant record relating to savings, re-appropriation and expenditure thereof to audit for verification.

Audit recommends that the management should ensure compliance of all contractual obligations from the contractors including training of the NTC staff.

4.1.3 Non-availability of marketing mechanism for NTC Data Centre

As per Sl. No. 5 (2) of PC -1 Form (Infrastructure Sectors) regarding relationship with sector objectives, the project will drive all other sectors/sub-sectors linked with engines of the Federal and Provincial Governments to develop on fast track for facilitating Government

functionaries and the citizens access to the information through a Platform of Electronic Government.

During the Performance Audit of the National Data Centre for the years 2015-16 & 2016-17, it was observed that many Government organizations were not availing services from NTC Data Centre. As per record, NTC management approached 151 departments for shifting their websites to National Data Centre but no positive response was received from the concerned. The reason was that NTC did not have a proper marketing and business development team who could introduce their product in detail to the clients. Further NTC did not have any comprehensive strategy for marketing and business development plans as it was providing the services to its designated customers only in traditional way.

Audit pointed this out to the management in April, 2022. It was replied that being Government organization, there was no independent marketing mechanism for business development. However, a letter for subscription of services of National Data Centre was issued by MoIT&T to all concerned departments.

The reply was not acceptable because the department could not introduce their products in detail to attract the customers as there was no mechanism for marketing in the department. Only writing a letter for subscription of services was insufficient to serve the purpose.

DAC in its meeting held on 19th May, 2022 directed the management to provide the relevant record to audit for verification.

Audit recommends that the organization can benefit from spending such a huge investment if its services are utilized by most of the government departments. This can be achieved through effective marketing and proper service delivery. Otherwise, the achievement of return on its investment would remain a distant dream.

4.1.4 Non-conducting of Internal Audit of NTC Data Centre Project

According to Rule 13 of GFR Vol-I, every controlling officer must satisfy himself not only that adequate provisions exist within the departmental organization for systematic internal checks calculated to prevent and detect errors and irregularities in the financial proceedings of its subordinate officers and to guard against waste and loss of public money and stores but also that the prescribed checks are effectively applied. For this purpose, each Head of the Department will get the account of his office and those of the subordinate disbursing officers if any inspected at least once in every financial year. The results of the inspections should be incorporated in the form of an inspection report copy of which should be endorsed to Audit, the head of the Department should after his scrutiny of the report communicate to Audit a copy of his remarks thereon and any orders issued in that connection. Moreover, DAC in its meeting held on 26th & 27th December, 2016 directed the NTC management that the audit plan of internal audit be provided to audit well in time before execution of internal audit. Further the internal audit reports may be shared with audit.

During the Performance Audit of the National Data Centre for the years 2015-16 & 2016-17, it was observed that the project of NTC Data Centre was completed in August, 2016 and operational since then but NTC management did not conduct the internal audit of the project. It is worth mentioning here that Internal Audit Wing of NTC consists of qualified / experienced officers and staff. Despite the availability of an elaborate internal audit wing, no internal audit report for the said project was generated for NTC management / Board.

Audit pointed this out to the management in April, 2022. It was replied that pre-audit was carried out internally and internal audit plan/report for the year 2020-21 would be shared with audit shortly.

The reply was not acceptable as clear instructions to conduct internal audit were issued by the DAC in its meeting held in December, 2016 but no internal audit was conducted.

DAC in its meeting held on 19th May, 2022 took serious notice of non-observance of its directives dated 26th & 27th December, 2016 and directed the management to conduct internal audit and share the report with audit under report to PAO.

Audit recommends immediate implementation of DAC directives.

4.2 Financial Management

NTC prepares its budget including Annual Development Plan (ADP), for each financial year and submits it for the approval of the Federal Government before 1st June every year. The project was approved by DWP on 6th July, 2015. The funds were allocated in ADP 2015-16. Actual expenditure incurred on the project was depicted in the annual financial statements. No separate account of the project was maintained.

4.2.1 Un-authorized expenditure over & above PC-I cost–Rs 140.953 million

According to para 11 of approved PC-I of project titled “NTC Data Centre with Cloud Services” the capital cost of the project against different heads was Rs 399.500 million and as per PC-IV, the project was completed on 8th August, 2016 with the cost of Rs 420.081 million. Further, according to para 6.13 of Manual for Development Projects 2019, if the project cannot be completed with a 15 percent increase in the cost, the executing agency should immediately prepare the revised PC-I and submit it for approval of the competent forum.

During the Performance Audit of the National Data Centre for the years 2015-16 & 2016-17, it was observed that NTC executed the

project with the cost of Rs 399,500,000 as per PC-I which was completed with the cost of Rs 420,081,000 as per PC-IV. It was observed that an amount of GST of Rs 66,071,161 was not included in the project cost of Rs 420,081,000. Further, an amount of Rs 54,301,000 spent on the same project during 2019-20 was not included in the project cost. Resultantly, the total cost of the project came to Rs 540,453,161 which crossed the limit of 15% of the total cost of the project. The detail is as under:

(Amount in Rupees)

Description	Amount Rs
Project total cost as per PC-IV	420,081,000
Add GST	66,071,161
Expenditure incurred during 2019-20	54,301,000
Total cost incurred	540,453,161
Total approved cost as per PC-I	399,500,000
Difference between PC-IV and PC-I	140,953,161
Cost Overrun	35.28%

Non-adherence to manual of development projects resulted in a cost overrun of the project which showed ill-planning on the part of the NTC management.

Audit pointed this out to the management in April, 2022. It was replied that the project was completed with the cost of Rs 420,081,000 against the approved PC-I for Rs 399,500,000. Accordingly, PC-IV of the project was issued. The GST was not included in PC-IV, which was not part of the capitalized asset as per policy whereas, the payment of Rs 54,301,000 was made against Disaster Recovery Site (DRS) Project Lahore.

The reply was not acceptable as the amount of GST was included in the bid amount and accordingly the work was awarded to the contractor. Moreover, the documentary evidence of Rs 54.301 million related to DRC project was not provided.

DAC in its meeting held on 19th May, 2022 directed the management to produce the relevant record relating to the actual expenditure incurred on the project to audit for verification.

Audit recommends immediate implementation of DAC directives.

4.2.2 Variation in two completion reports -Rs 72.053 million

According to Para 1.55 of Manual of Development Projects, PC-IV form is required to be submitted at the time when the project is adjudged complete. Further, as per Rule 88 of GFR Vol-I, the authority administering a grant is ultimately responsible for watching the progress of expenditure on public service under its control and for keeping the expenditure within the grant.

During the Performance Audit of the National Data Centre for the years 2015-16 & 2016-17, it was observed that two completion reports having two different costs were available on record. As per first completion report attached with PC-IV (Annexure-A) dated Nil, the project was completed at the cost of Rs 420,080,705. However, when GST of Rs 66,071,161 was added, the project cost came out to be Rs 486,151,866. Another completion report of the same project was also issued on 16th July, 2017 with the cost of Rs 414,098,720 (including GST of Rs 57,914,462). There was a difference in both completion reports of Rs 72,053,146.

This state of affairs created doubts about the credibility of completion reports and other connected record and rendered all the figures in completion reports unreliable.

Non-adherence to manual for development projects and GFR resulted in ambiguous completion reports of the project and affected the credibility of the documents/record of project.

Audit pointed this out to the management in April, 2022. It was replied that the project was completed with the cost of Rs 420 million and completion report was issued accordingly.

The reply was not acceptable as two separate completion reports of same project were issued with a difference of Rs 72.053 million. Further, the allocation under head capital during the year 2019-20 was also obtained after issuance of completion report.

DAC in its meeting held on 19th May, 2022 directed the management to probe into the matter and provide comprehensive reply to audit under intimation to PAO.

Audit recommends that matter may be investigated for preparation of two different completion reports besides fixing the responsibility on those at fault.

4.2.3 Non-capitalization of Data Centre cost – Rs 152.609 million

International Accounting Standard 16 property, plant & equipment outlines the accounting treatment for most types of property plant and equipment. Property, Plant & Equipment is initially measured at their cost, subsequently measured either using a cost or revaluation model and depreciated so that their depreciable amount is allocated on systemic basis over its useful life. Further, para 7.2.4.3 of Accounting Policies and Procedures Manual (APPM) stipulates that the annual accounts are an annual summary of the overall financial position of each Government at the end of the financial year. This shall include, for each Government, a statement of assets and liabilities including comparison with last year's actual.

During the Performance Audit of the National Data Centre for the years 2015-16 & 2016-17, it was observed that out of the expenditure incurred on the project, an amount of Rs 152,609,256 was not capitalized

long after completion of the project. The project was completed on 8th August, 2016, but the amount of Rs 152.609 million was depicted in the balance sheet as work in progress till the financial year 2019-20. It was also observed that the depreciation cost on this capital amount was not started to be charged. As per financial statements, these amounts were incurred during the following years.

Sl. No.	Year	Expenditure Incurred (Amount in Rupees)
1	2017-18	3,006,787
2	2018-19	95,300,970
3	2019-20	54,301,499
Total		152,609,256

Non-compliance of international accounting standards as well as non-capitalization of assets resulted in understatement of assets.

Audit pointed this out to the management in April, 2022. It was replied that the project was completed with the cost of Rs 420 million and completion report was issued accordingly. An amount of Rs 3,006,787 and Rs 95,300,907 was capitalized in financial year 2021-22 whereas the amount of Rs 54,301,499 was related to DRS project Lahore.

The reply was not acceptable as no documentary evidence in support of reply was provided.

DAC in its meeting held on 19th May, 2022 directed the management to provide the record relating to capitalization, to audit for verification.

Audit recommends that inquiry may be conducted at the Ministry level to identify the reasons for delayed capitalization of the project costs.

4.2.4 Irregular expenditure in excess of PC-I -Rs 87.032 million

According to Sl. No. 07 of PC-I of National Data Centre with Cloud Services regarding component wise financial phasing, projected expenditure of each item required in the project was made and got approved from Board of Directors (BoDs) as well as Development Working Party (DWP).

During the Performance Audit of the National Data Centre for the years 2015-16 & 2016-17, it was observed that an expenditure of Rs 311.532 million was incurred on account of computing, storage & security equipment (Firewalls, Anti DDoS, Load Balancer), cloud platform & management software, civil & electric works etc against provision of PC-I for Rs 224.500 million. Hence, an expenditure of Rs 87.032 million was irregularly incurred over and above the approved cost in the said items. The detail is as under:

(Rupees in million)

Sl. No.	Item Description	Cost as per PC-I	Actual Expenditure	Excess	%age excess
1	Computing, storage & security equipment (Firewalls, Anti DDoS, Load Balancer)	120.500	149.684	29.184	24.22
2	Cloud platform and management software	40.000	59.619	19.619	49.00
3	Cooling and Power System/Engine Generator System	56.000	92.057	36.057	64.39
4	Civil works	8.000	10.172	2.172	27.15
Total		224.500	311.532	87.032	

Non-adherence to PC-I resulted in excess expenditure and poor project management. Due to financial indiscipline, the excess expenditure was incurred violating the PC-I.

Audit pointed this out to the management in April, 2022. It was replied that as per guidelines of Planning Commission, the project was to be revised only when the cost exceeded 15% of PC-I cost.

The reply was not acceptable as the increase in cost meant increase in scope of the item which required revision in PC-I.

DAC in its meeting held on 19th May, 2022 directed the management to provide all relevant record relating to savings and re-appropriation to audit, for verification.

Audit recommends that the enhanced scope in these items of work should be got re-appropriated from the competent authority. Audit also recommends that due care is exercised in preparation of estimates to avoid any significant change in scope of the project items.

4.2.5 Variation in cost, revenue& completion time in PC-I & PC-IV

As per PC-I for establishment of National Data Centre with Cloud Services, 09 items namely network equipment, cloud platform & management software computing storage and security equipment software & licenses, civil works, stores & spares, cooling & power system, DR site establishment and miscellaneous items were included with the total cost of Rs 399,500,000 containing projected expenditure under each item.

During examination of PC-I & PC-IV of project namely “National Data Centre with Cloud Service” of NTC Headquarter, Islamabad, it was observed that an expenditure of Rs 420.081 million was depicted in PC-IV against projected expenditure of Rs 399.500 million as per PC-I. The following shortcomings were noticed:

- a) Item wise detail of expenditure as mentioned in PC-I was not found available in PC-IV of the project. Due to this the examination of actual expenditure incurred under each item of PC-I could not be authenticated.
- b) Date of completion i.e., 29th July 2016 as per PC-IV was not depicted in PC-I. Moreover, actual date of commencement i.e., 15th August, 2016 as appeared in PC-IV was not justified as the project was completed on 8th August, 2016.
- c) Actual revenue of Rs 123.340 million against the estimated revenue of Rs 158.900 million for the year 2016-17 was shown at Sl. No. 16 of PC-IV, whereas, actual revenue of Rs 15.612 million was generated as per record.
- d) The approval of PC-IV was also not found available in the record.

This state of affairs showed that the figures for PC-IV of the project were unreliable.

Improper supervision of NTC management caused deficiencies in PC-IV of the project.

Audit pointed this out to the management in April, 2022. It was replied that item wise detail of expenditure was available. Typing errors of dates were found which were corrected. The revenue of Rs 123.340 million committed by the departments were not realized in financial year 2016-17 due to non-availability of funds that were received in subsequent year.

The reply was not acceptable as there were many deficiencies found in PC-IV. Moreover, no documentary evidence in support of reply was received.

DAC in its meeting held on 19th May, 2022 directed the management to revise the PC-IV and get it verified from audit.

Audit recommends immediate implementation of DAC directives.

4.2.6 Mismanagement in establishment of Disaster Recovery Site at Islamabad - Rs 5.000 million

According to Sl. No. 07 (C) of PC-I of NTC Data Centre with Cloud Services regarding component wise financial phasing, projected expenditure of each item required in the project was made and got approved from Board of Directors (BoD) as well as Development Working Party (DWP). Further, in general 75-100 miles distance is recommended as a good starting point for determining the right distance for Disaster Recovery Site Solution as per research.

During the Performance Audit of the National Data Centre for the years 2015-16 & 2016-17, it was observed that an amount of Rs 5,000,000 was allocated for DR Site Establishment and DR arrangement as per PC-I. The Disaster Recovery Site was established in its regional office Islamabad at very short distance of about 02 to 03 kilometres away from the main Data Centre situated in Islamabad, contrary to above recommended distance. The DR Site at regional office has now been discontinued which showed poor planning after allocation of an amount of Rs 5,000,000 for the purpose. The DR Site established in the same city caused low rate of customers due to lack of confidence which resulted in less generation of revenue than projected in PC-I in early years after completion of project.

Poor planning of management for establishment of DRS in same city caused low rate of customers, insecure data repository as well as wastage of expenditure.

Audit pointed this out to the management in April, 2022. It was replied that as an interim arrangement, the secondary enterprise storage of NDC was placed at NTC regional headquarter which was subsequently shifted to DRS at Lahore. This interim arrangement was done to save the allocated amount in PC-I.

The reply was not acceptable as record relating to savings, re-appropriation and utilization of allocated amount were not provided to audit.

DAC in its meeting held on 19th May, 2022 directed the management to provide all the relevant record relating to savings, re-appropriation and expenditure thereof to audit for verification.

Audit recommends immediate implementation of DAC directives.

4.3 Procurement and Contract Management

The method of procurement and contract management implemented by the National Telecommunication Corporation for execution of the National Data Centre project was required to be made in accordance with Public Procurement Rules, 2004. However, audit observed that the work was awarded to 2nd lowest bidder namely M/s Inbox Business Technology. Moreover, the PPRA Rules were violated and negotiation on cost of work was made after awarding the contract which was prohibited. The contractual obligations were not fulfilled by the vendor / management.

4.3.1 Loss due to award of work to 2nd lowest bidder -Rs 39.818 million

According to Rule 38 of Public Procurement Rules, 2004, the bidder with the lowest evaluated bid, if not in conflict with any other law, rules, regulations or policy of the Federal Government, shall be awarded the procurement contract, within the original or extended period of bid validity.

During the Performance Audit of the National Data Centre for the years 2015-16 & 2016-17, it was observed that tender for establishment of NTC Data Centre was floated on print media on 11th July, 2015 as per “Single Stage-Two Envelopes” bidding procedure in accordance with PPRA Rule 36 (b). At first stage, six firms shortlisted for technical

evaluation and out of those six, three firms viz M/s DWP Technologies, M/s Inbox Business Technologies and M/s Techaccess were technically qualified. The financial proposals of the said bidders were opened on 01.02.2016. M/s DWP Technologies offered lowest rates i.e. 359.682 million but his bid was rejected on the plea that bid security period was 120 days instead of 180 days as required. In this regard, the matter was referred to PPRA for guidance but without receipt of any opinion from PPRA, the work was awarded to 2nd lowest bidder namely M/s Inbox with the cost of Rs 399.500 million. Thus, NTC was deprived-off the most economical rates and a loss of Rs 39.818 million was sustained due to non-awarding of work to lowest bidder.

Non-adherence to PPRA Rules caused loss to the department.

Audit pointed this out to the management in April, 2022. It was replied that the validity of bid security of M/s DWP was for 120 days instead of 180 days as per clause-9.1 of the RFT due to which the bid was rejected.

The reply was not acceptable as the bid security valid for 120 days instead of 180 days was referred to PPRA but the work was awarded to 2nd lowest bidder without receipt of response from PPRA.

DAC in its meeting held on 19th May, 2022 directed the management to provide the copy of bid security valid for 120 days of rejected bidder as well as response received from PPRA to audit for verification.

Audit recommends immediate implementation of DAC directives.

4.3.2 Non-provision of performance security in accordance with contract agreement-Rs 39.950 million

According to clause 8.1 of contract agreement made between NTC and M/s Inbox Business Technologies (Pvt.) Ltd for supply, installation, testing and commissioning of NTC Data Centre Islamabad dated

25.03.2016, the contractor shall furnish performance security @ 10% of total contract value valid for 40 months in the shape of bank guarantee issued from any scheduled bank of Pakistan after issuance of Letter of Intent (LoI). The contract will be signed after getting confirmation from bank about the genuineness of guarantee submitted by the contractor.

During the Performance Audit of the National Data Centre for the years 2015-16 & 2016-17, it was observed that the contractor furnished performance security @ 10% for Rs 39.950 million in the shape of bank guarantee duly confirmed by HBL valid for a period of one year (12 months) instead of agreed period of 40 months as provided in contract agreement. It is worth mentioning that the contract was signed with the contractor without having confirmation of bank guarantee & its validity for 40 months.

Violation of contract agreement caused defective provision of performance security and gave undue favour to contractor.

Audit pointed this out to the management in April, 2022. It was replied that NTC signed the contract with M/s Inbox with the cost of Rs 399.500 million on 25-03-2016. The contractor provided bank guarantee of Rs 39.950 million equal to 10% of contract value valid for one year as per bank policy. The same was extended on yearly basis to comply with the contract clause.

The reply was not acceptable as agreement was signed against the validity of 12 months instead of 40 months in violation of contract clause.

DAC in its meeting held on 19th May, 2022 directed the management to provide the State Bank Policy as well as record relating to year-to-year revalidation of bank guarantee to audit for verification.

Audit recommends immediate implementation of DAC directives.

4.3.3 Irregular expenditure on establishment of National Data Centre –Rs 399.500 million

According to Rule 40 (1) of Public Procurement Rules, 2004, without changing the cost and scope of work or services, the procuring agency may negotiate with the successful bidder (with a view to streamlining the work or task execution, at the time of contract finalization) on methodology, work plan, staffing and special conditions of the contract.

During the Performance Audit of the National Data Centre for the years 2015-16 & 2016-17, it was observed that NTC awarded the contract to M/s Inbox was declared the lowest bidder for supply, installation, testing and commissioning of Data Centre at NTC Headquarter, Islamabad with a total cost of Rs 399,500,000 on 25.03.2016. As per financial bid of the contractor, the cost of the work was Rs 420,431,123 but NTC management negotiated with M/s Inbox after opening of bid and availed discount of Rs 20,931,123. Thus, expenditure of Rs 399,500,000 was held irregular as there was no provision of negotiation in cost and scope of work or services after opening of bid as per PPRA Rules, 2004.

Non-adherence to PPRA Rules resulted in irregular expenditure.

Audit pointed this out to the management in April, 2022. It was replied that as per online query raised for clarification of PPRA vide ID-351 dated 31-02-2013 from PPRA on negotiations, it was clarified that “after selection of the lowest bidder the benefits of reduction of rates, rebates and discounts could be obtained by the procuring agency without compromising the quality, fairness and value of money.”

The reply was not acceptable as negotiation made for the cost & scope of work was not allowed with the qualified bidder as per PPRA Rules.

DAC in its meeting held on 19th May, 2022 directed the management to provide the record relating to query raised and clarification of PPRA to audit.

Audit recommends immediate implementation of DAC directives.

4.3.4 Irregular expenditure on civil works without open tender -Rs 3.255 million

According to Rule 12 (1) of Public Procurement Rules, 2004, procurements over 100,000 rupees and up to the limit of 2 million rupees shall be advertised on the Authority's website or on procuring agency's own website. Further, rule 12 (2) *ibid* stipulates that all procurement opportunities over two million rupees should be advertised on the Authority Website as well as in other print media or newspaper having wide circulation. The advertisement in the newspapers shall principally appear in at least two national dailies, one in English and other in Urdu.

During the Performance Audit of the National Data Centre for the years 2015-16 & 2016-17, it was observed that M/s Inbox was awarded the work for supply, installation, testing and commissioning of NTC Data Centre project in Islamabad on 25.03.2016. The contractor was awarded some additional work i.e., providing & fixing fire rated doors, LED screens, panel lights, wooden floor and construction of manhole. An expenditure of Rs 3,254,765 was incurred during 2016-17 on the said items which were held irregular as the same was not included in the contractor's Bill of Quantity (BoQ) and required to be procured through open tenders, in contravention of the above rule (detailed in Annexure -1).

Non-adherence to PPRA Rules resulted in irregular expenditure.

Audit pointed this out to the management in April, 2022. It was replied that the fire rated doors and other works were carried out as per site requirements in compliance with the International Standards. The additional works were undertaken on market analysis basis.

The reply was not acceptable as the work was got done without calling open tenders by violating the PPRA Rules.

DAC in its meeting held on 19th May, 2022 directed the management to provide the market analysis report to audit for verification.

Audit recommends immediate implementation of DAC directives.

4.3.5 Irregular payment to contractor for delivery of equipments of NTC Data Centre Project – Rs 100.738 million

According to clause 13.2 of contract agreement made between NTC and M/s Inbox Business Technologies (Pvt.) Ltd for supply, installation, testing and commissioning of NTC Data Centre Islamabad dated 25.03.2016, forty-five (45) percent of the total contract value shall be payable to the contractor upon successful delivery of equipment at destination.

During the Performance Audit of the National Data Centre for the years 2015-16 & 2016-17, it was observed that an amount of Rs 100,738,478 was paid to contractor against delivery of equipment at destination for NTC Data Centre Islamabad against invoice # CL/150616/2016 dated 15.06.2016. The payment made to contractor was held irregular as complete equipments viz hardware load balancer, batteries, electric items, civil work were not included in delivery of equipments as per Bill of Quantity of the contract.

Violation of contract agreement resulted in undue favour to contractor by taking short delivery of equipments.

Audit pointed this out to the management in April, 2022. It was replied that the payment of 45% of the total contract value was made against the equipments delivered at site as per contract clauses.

The reply was not acceptable as the equipments viz hardware load balancer, batteries and electric items were not delivered by the contractor as per agreement.

DAC in its meeting held on 19th May, 2022 directed the management to produce the relevant record relating to receipt of items pointed out by audit for verification.

Audit recommends immediate implementation of DAC directives.

4.4 Asset Management

Management should implement the criteria made for procurement as per PPRA, 2004 as well as in accordance with the BoQ of contract agreement. All the assets of the department should be safeguarded from unforeseen risks. The assets should be capitalized according to International Accounting Standards. However, audit observed that assets were not purchased as per BoQ of contract agreement, insurance clause was not included in the PC-I and contract agreement, assets were not fully capitalized.

4.4.1 Irregular expenditure on installation of generators in National Data Centre–Rs 17.371 million

According to section 2 – BoQ Electric Works of contract agreement made between NTC and M/s Inbox Business Technologies (Pvt.) Ltd for supply, installation, testing and commissioning of NTC Data Centre Islamabad dated 25.03.2016, the contractor shall provide generators 2x360 KVA fixed DEG Set (Perkins UK/USA, Prime Rating 400KVA).

During the Performance Audit of the National Data Centre for the years 2015-16 & 2016-17, it was observed that M/s Inbox was awarded the work for supply, installation, testing and commissioning of NTC Data Centre Islamabad on 25.03.2016. An amount of Rs 17,371,120 was paid to

M/s Inbox for supply of 02 generators for NTC Data Centre. The expenditure was held irregular as the contractor supplied generators having specifications of MAN generators (M400 Model No. D2676LE221) instead of those agreed in contract agreement i.e. (Perkins UK/USA, Prime Rating 400KVA).

Violation of contract agreement caused irregular expenditure.

Audit pointed this out to the management in April, 2022. It was replied that two (02) Perkins generators of 400KVA (UK/USA) were required to be provided by the contractor as per agreement. Due to non-availability of Perkins generators in market with authentic documents, MAN generators (Germany) of the same specifications were provided by the contractor.

The reply was not acceptable as the generators were procured by violating the contract agreement.

DAC in its meeting held on 19th May, 2022 directed the management to provide revised reply, evidence of same specifications and make with cost, to audit for verification.

Audit recommends immediate implementation of DAC directives.

4.4.2 Irregular expenditure on provision of Firewall in National Data Centre –Rs 3.297 million

According to section 1 – BOQ Compute, Network and Power of contract agreement made between NTC and M/s Inbox Business Technologies (Pvt.) Ltd for supply, installation, testing and commissioning of NTC Data Centre Islamabad dated 25.03.2016, the contractor shall provide Firewall Type–I USG6600.

During the Performance Audit of the National Data Centre for the years 2015-16 & 2016-17, it was observed that M/s Inbox was awarded the work for supply, installation, testing and commissioning of NTC Data Centre Islamabad on 25.03.2016 and firewall having specification of Type-I USG6600 was to be provided as per BOQ agreed in contract agreement. During random physical examination of Data Centre, Islamabad it was observed that Firewall of specification Type - I USG 6000 instead of Type-I USG6600 was installed against which an amount of Rs 3,297,302 was paid to M/s Inbox irregularly.

Due to breach of contract agreement, irregular expenditure was incurred.

Audit pointed this out to the management in April, 2022. It was replied that Firewall Type-I USG 6600 was agreed upon in the contract but the contractor provided the latest version USG 6670.

The reply was not acceptable as the firewall was not installed as per contract agreement.

DAC in its meeting held on 19th May, 2022 directed the management to provide the relevant record to audit for verification.

Audit recommends immediate implementation of DAC directives.

4.4.3 Non-provision of insurance cover for National Data Centre

According to section 166 read with section 156 of Insurance Ordinance 2000, “Federal and Provincial Governments are required to place all insurance services relating to public property with National Insurance Company Limited”.

During the Performance Audit of the National Data Centre for the years 2015-16 & 2016-17, it was observed that M/s Inbox was awarded

the work for supply, installation, testing and commissioning of NTC Data Centre Islamabad on 25.03.2016 with the total cost of Rs 399,500,000. NTC management did not provide insurance cover in the PC-I of the said project as well as in the contract agreement to safeguard its assets from natural disasters like earthquakes, fires, floods, washouts, civil disturbances, explosions or any other mishap etc. as costly and highly sensitive equipment was installed in the NTC Data Centre.

Non-adherence to the insurance ordinance 2000 keeps the assets of department at risk.

Audit pointed this out to the management in April, 2022. It was replied that the contractor was responsible for all losses till commissioning of the project. However, similar protection was given by the contractor in shape of warranty valid for three years.

The reply was not acceptable as insurance cover to safeguard such assets was required as per rule.

DAC in its meeting held on 19th May, 2022 directed the management to fix responsibility against those held responsible for non-inclusion of insurance clause in the contract agreement under intimation to audit.

Audit recommends that matter may be investigated at Ministry level to fix responsibility on those held responsible.

4.5 Monitoring and Evaluation

This chapter of monitoring and evaluation includes audit observations regarding on-achievement of planned revenues, non-recovery of dues and non-conducting of internal audit of the project.

4.5.1 Non-operation of services of project – Rs 104.182 million

According to Annexure-D of PC-I of NTC Data Centre with Cloud Services, yearly targets for generating revenue from services used in project have been planned.

During the examination of revenue generating services in connection with NTC Data Centre mentioned in PC-I, it was observed that two services namely VDI services and website development had not been operated since inception of the project. An amount of Rs 104,182,400 had been projected for revenue against those services but due to non-operating of such services NTC had to sustain a loss of Rs 104,182,400 during the years 2016-17 to 2020-21. This showed that proper attention was not made by NTC management in preparation of PC-I as such services were not operated up till now. The reasons for non-operating the services as well as non-attaining the planned targets may be intimated. The detail is as under:

(Amount in Rupees)

Sl. No.	Name of Service	Revenue Planned 2016-17 to 2020-21
01	VDI Services	89,299,200
02	Website Development	14,883,200
Total:		104,182,400

Non-adherence to planning commission guidelines resulted in loss of revenue of Rs 104.182 million. This indicated poor performance on part of the NTC management.

Audit pointed this out to the management in April, 2022. It was replied that segment wise achievement may not be considered as the project achieved its overall targets from 2016-17 to 2020-21.

The reply was not acceptable as the services as planned in the PC-I were not operated and as such the targets fixed against such services were also not achieved.

DAC in its meeting held on 19th May, 2022 directed the management to provide comprehensive revised reply to audit.

Audit recommends immediate implementation of DAC directives.

4.5.2 Non-recovery from customers of Data Centre – Rs 242.029 million

According to Rule 26 to 28 of GFR Vol-I, it is the duty of the departmental controlling officers to see that all sums due to Government are regularly and promptly assessed, realized and credited to accounts. No amount due to Government should be kept outstanding without sufficient reason.

During the Performance Audit of the National Data Centre for the years 2015-16 & 2016-17, it was observed that NTC management issued invoices of Rs 1,104,412,985 during the financial years 2016-17 to 2020-21 for services provided to its customers but an amount of Rs 242,028,864 could not be recovered by NTC. It appeared that the management could not pay proper attention to recovery of such a huge outstanding amount.

Poor receivable management caused non-realization of outstanding amounts against the customers of data centre.

Audit pointed this out to the management in April, 2022. It was replied that an amount of Rs 126.180 million had been recovered from the departments concerned.

The reply was not acceptable as documentary evidence of recovered amount was not provided.

DAC in its meeting held on 19th May, 2022 directed the management to provide the recovery particulars to audit for verification besides recovery of outstanding amount.

Audit recommends immediate implementation of DAC directives.

4.5.3 Non-achieving of targeted revenue from services of project –Rs 128.442 million

According to Annexure -D of PC-I of NTC Data Centre with Cloud Services, yearly targets for generating revenue from services used in project has been planned.

During the examination of revenue generating services in connection with NTC Data Centre mentioned in PC-I, it was observed that following three services have not achieved their planned targets for the financial years 2016-17 to 2020-21 causing loss of Rs 128.442 million to NTC. This appeared that NTC management as well as concerned staff did not make strenuous efforts to achieve the targets. The reasons for non-achieving the targets may be intimated. The detail is as under:

(Rupees in millions)

Sl. No.	Name of Service	Revenue Planned 2016-17 to 2020-21	Revenue Achieved 2016-17 to 2020-21	Revenue Short Achieved 2016-17 to 2020-21
01	Email Service (Dedicated)	148.832	27.097	121.735
02	Email Service (Shared)	37.208	36.560	0.648
03	Value Added Services (Misc)	37.208	31.149	6.059
Total :				128.442

Non-adherence to planning commission guidelines resulted in loss of revenue of Rs128.442 million. This indicated poor performance on part of the NTC management.

Audit pointed this out to the management in April, 2022. It was replied that segment wise achievement may not be considered as the project achieved its overall targets around 107% from 2016-17 to 2020-21.

The reply was not acceptable as service wise targets were fixed in the PC-I which were not achieved accordingly.

DAC in its meeting held on 19th May, 2022 directed the management to provide records regarding revenue earned against such services during 2016-17 to 2020-21 to audit for verification.

Audit recommends immediate implementation of DAC directives.

4.5.4 Discrepancies in operations of National Data Centre Project –Rs 420.081 million

According to clause 10.3 of contract agreement made between NTC and M/s Inbox Business Technologies (Pvt.) Ltd for supply, installation, testing and commissioning of National Data Centre Islamabad dated 25.03.2016, the constituted & approved PAT team will sign PAT certificate after successful completion of Test. After successful conduct of PAT, Director (Procurement) NTC HQs will issue certificate of successful completion of PAT after which Project Director/Ultimate Consignee will issue the PAC on the basis of provisional acceptance test. The processing time from the date of successful PAT till the issuance of PAC will not be attributed to contractor for completion of time. Further as per clause 15 of the contract agreement, the Project Director/Ultimate Consignee will issue Final Acceptance Certificate in favour of contractor subject to satisfactory completion of warranty period of 36 months after successful operation and issuance of PAC as per requirement of contract.

During the Performance Audit of the National Data Centre for the years 2015-16 & 2016-17, it was observed that while conducting the Provisional Acceptance Test (PAT) as per contract agreement by the department, there were found some discrepancies in some areas viz Backup Acceptance Guide (Ocean Store), VMWare, F-5 Load Balance, Firewall, UPS & Netcol, BoQ verification, Uninstalled Data Centre Equipment. Following irregularities were observed:

- i. Provisional Acceptance Certificate (PAC) was issued vide letter dated 1st November, 2016 in spite of some discrepancies found in PAT.
- ii. As per PC-IV, the project was shown as completed on 8th August, 2016 whereas PAC was issued on 1st November, 2016.
- iii. Nil Discrepancies Certificate (NDC) was issued on 29th June, 2018 but the detailed evidence of removal of discrepancies as pointed out in PAT/PAC as intimated to the contractor vide letter dated 1st November, 2016, was not found available in the record.
- iv. The Final Acceptance Certificate was to be issued in favour of contractor subject to satisfactory completion of warranty period of 36 months after successful operation and issuance of PAC which was issued on 1st November 2016 whereas FAC was issued on 17th March 2020 after a lapse of 04 months.

Non-observance of contract agreement caused unreliable preparation of documents which affects the credibility of the record.

Audit pointed this out to the management in April, 2022. It was replied that the discrepancies pointed out during PAT & PAC were addressed by the contractor and NDC was issued accordingly. Upon completion of warranty period FAC was issued as per contract.

The reply was not acceptable as evidence of removal of shortcomings as pointed out in PAT & PAC were not provided.

DAC in its meeting held on 19th May, 2022 directed the management to provide the relevant record to audit for verification.

Audit recommends immediate implementation of DAC directives.

4.6 Achievement of Project Objectives and Customer Satisfaction

As per PC-I, eleven services were to be offered to its customers by the NTC after completion of the project. It was observed that the NTC was able to fetch clients for only seven services out of eleven till the audit was finalized. This showed that the project objectives in terms of number of services were not attained. Reason of this is enshrined in the high rates that the NTC has fixed for these services. If there are no clients for these services, it means that the proper survey was not conducted in preparation for PC-I and these services were included without proper feedback.

A comparison of rates for different services showed that the NTC was charging Rs 533,381 for “web hosting” (with 100 GB storage and 6 GB RAM) against Rs 296,100 and Rs 342,000 by PTCL and M/s Nayatel respectively with more storage and better RAM. Similar was the case with rates for “hardware co-location” for which the NTC was offering a rate of Rs 2.4 million against much less rates offered by Silk Host at Rs 729,600 for similar service. It was also observed that NTC did not achieve the planned revenue against three of the services it set against them in the planning document. The detail of revenue earned against each service provided by NTC’s National Data Centre to its clients is given in Annexure - 2. The table also showed that the number of clients had remained limited despite establishment of Data Centre.

To assess customer satisfaction, a survey was conducted by audit team. According to data collected the clients were generally not satisfied with NTC services (moderate level). The most prominent reason was the low standard of the services which was not concomitant with the tariff charged by the NTC. According to a client, the services of data centre remained suspended during some public holidays to avoid cyber-attacks. A few clients believed that the security measures provided by the NTC were not effective and were insufficient to prevent the data from such

attacks. The clients complained that the services remained suspended in case of cyber-attacks. Instead of suspending the services, the management should make efforts to mitigate or counter such attacks. Moreover, the complaint redressal system was poor as the customers had to raise the issue repeatedly for restoration of services and resolving their issues.

NTC has a big canvas in the shape of many government organizations to which they could sell their products but increasing customer base entails a combination of better rates, good quality of services and immediate complaint redressal system. NTC has been lacking in all three fields despite investing of Rs 399.500 million. This is evident by the fact that as many as 151 departments were approached by NTC management for shifting their websites to National Data Centre but hardly any positive response was received from most of them.

Audit is of the view that due to above mentioned reasons most of the Government entities were avoiding the services of NTC Data Centre.

Audit recommends that the NTC management should conduct customer surveys and try to reduce their complaints on an emergency basis as the running of website is not only an issue of security but also a matter of reputation for the organization. The management may also focus on identifying specific needs of government organizations before embarking on any future endeavours like National Data Centre.

4.7 Sustainability

PC-I of the project was approved by Development Working Party (DWP) with a cost of Rs 399.500 million on 6th July, 2015. The date of commencement of the project was 16th July, 2015 and date of completion was 8th August, 2016 as per PC-IV. The useful life of project is ten (10) years.

4.8 Overall Assessment

- i. The feasibility report for establishment of NTC Data Centre with Cloud Services with total cost of Rs 399.500 million was not prepared by NTC management. The calculation/projection of total cost was made without preparations of any feasibility report (PC-II). The figures of total cost mentioned in PC-I without considering all the aspects of the project were unjustified.
- ii. An amount of Rs 140.953 million on account of expenditure incurred on the project as well as the amount of GST was not charged to the project cost of Rs 399,500,000. Resultantly, the total cost of the project came to Rs 540,453,161 which exceeded the allowable limit of 15% of the total cost of the project and resulted in a cost overrun of 35.28%.
- iii. NTC violated the PPRA Rules while awarding the contract for the project. The PC-IV of the project was unreliable and not approved by competent authorities. Further, project expenditure of Rs 152.609 million was not capitalized.
- iv. NTC incurred irregular expenditure on additional civil works without open tender of Rs 3.255 million.
- v. The contractor did not conduct foreign training for NTC officers/officials for components of Data Centre which affected the capability to run the technical equipments installed in Data Centre. This also caused difficulties for smooth running of project resulted into poor performance of staff due to lack of proper knowledge which tantamount to less generation of revenue.
- vi. NTC incurred irregular expenditure on installation of generators and Firewall in National Data Centre – Rs 17.371

million & Rs 3.297 million respectively as the items were procured against the specifications mentioned in the BoQ of contract agreement.

- vii. NTC sustained a loss due to non-operating of services of project –Rs 104.182 million as well as non-accomplishment of planned objectives of National Data Centre –Rs128.441 million.
- viii. There were found many deficiencies in preparing different reports like PC-IV, completion reports, issuance of PAT, PAC and FAC etc. Moreover, NTC had not any system of marketing for the project. Further, internal audit of the project was not conducted. This state of affairs showed loose internal controls.

Relevance:

The project was not included in the scope of MTFD. It was approved through annual development programme and met by NTC's resources.

Efficacy:

NTC was to be provided eleven services to its customers but two services had not been operated since inception of project. Further, in three services the planned revenue was not achieved during 2016-17 to 2020-21. Many Government organizations were not availing services from NTC Data Centre and around 150 plus departments were not shifting their Websites to National Data Centre. The calculation/projection of total cost was made without preparations of any feasibility report (PC-II).

Efficiency:

The project could not be termed as well planned as NTC sustained a loss due to, non-operating of services / non-achievement of planned revenues of project. NTC did not recover the outstanding amount from its customers for services provided to them during the financial year 2016-17 to 2020-21. The department could not introduce their product project in detail to attract customers as there was no system for marketing in the department.

Economy:

The project could not be termed to have followed the principle of economy as NTC crossed the allowable limit of 15% of the total cost of the project and cost was overrun by 35.28%. The work was awarded to 2nd lowest bidder causing a loss to the department. Two assets were procured against the specifications mentioned in BoQ of contract agreement. An irregular expenditure was incurred on civil works without tender. Expenditure was incurred over and above the approved cost in PC-I regarding four (04) items ranging from 24% to 64%.

Effectiveness:

NTC provided the services of Data Centre to almost forty (40) departments approximately whereas many Government organizations were not availing services from NTC Data Centre and around 150 plus departments were not shifting their Websites to National Data Centre. NTC had not any comprehensive strategy for business development plans as it was providing the services to its designated customers only in traditional way.

Compliance with Rules:

The instances of non-compliance with rules were observed and there were found irregularities by violating PPRA Rules, contract agreement, instructions of Ministry of Planning, Development & Reform, projections contained in PC-I, Manual for Development Projects, DAC directions and international accounting standard etc.

Performance Rating of Project: Moderately Satisfactory

Risk Rating of Project: Medium

5 CONCLUSION

There were certain flaws in different areas viz contract, asset, financial & organization management, monitoring & evaluation, procurements and overall implementation of the project. Feasibility report of the project was not prepared, the cost of the project was over run, planned targets of the project were not achieved, non-recovery of outstanding amounts, violation of PPRA Rules and contract agreements was observed. Moreover, internal audit & foreign training were not conducted and the record was not properly maintained. The marketing mechanism was not available. NDC did not provide all the services as planned in PC-I, the rates of products offered by NDC were on higher side as compared to market. The customers/clients were generally not satisfied due to the low standard of services of NDC which was not according to the tariff charged by NTC. Further, downtime of system, apprehending cyber-attacks, was against the world's best practices of data centre services. Due to such reasons most government entities were avoiding the services of NTC. These flaws were due to the improper attention of the management.

6 ACKNOWLEDGEMENT

We wish to express our appreciation to the management and staff of the project for the assistance and cooperation extended to us during this assignment.

Annexure – 1**STATEMENT SHOWING THE DETAIL OF ADDITIONAL WORK
FOR NTC NATIONAL DATA CENTRE, ISLAMABAD****(Amount in Rupees)**

Sl. No.	Description	Quantity	Rate	Amount
1	Providing and fixing LED Screen 50” Model: Samsung LED 50 J 5500 Smart TV	06	143,220	859,320
2	Providing and fixing LED panel light size 12” x 48” 40 watt made in China	19	20,044	418,836
3	Construction of manhole complete	15	34,123	511,845
4	Providing and installation of PFI panel	01	409,015	409,015
5	Providing and fixing fire rated door size 50” x 80” complete	04	206,580	826,320
6	Providing and fixing wooden floor made of Germany, complete	892.72 Sft	257	229,429
			Total:	3,254,765

Annexure – 2

**STATEMENT SHOWING THE DETAIL OF REVENUE EARNED
AGAINST SERVICES PROVIDED TO CUSTOMERS BY NTC
NATIONAL DATA CENTRE, ISLAMABAD**

(Amount in Rupees)

Sl. No.	Name of Service	No of Clients	Revenue Earned
1	Webhosting (shared)	08	51,342,360
2	Webhosting (virtual dedicated)	21	333,524,044
3	Email (shared)	08	25,947,897
4	Email (dedicated)	05	2,763,104
5	Hardware Co-location	05	68,106,714
6	Value Added Services	09	28,055,311
7	Intranet	02	352,644,691
8	Virtual Desktop Infrastructure	-	-
9	Website Development	-	-
10	DNS Hosting Services	-	-
11	International Bandwidth for Client Connectivity	-	-