



Project Information Memorandum

For

O&M PPP Management Contract (2025-2030) of the Abuja Premier Medical Warehouse and Lagos Federal Medical Warehouse

Prepared for:

**Federal Ministry of Health & Social Welfare (FMOH & SW)
on Behalf of
The Government of Nigeria**

Prepared by:

**Martins Onyia//CSCA//PRINCE2//B. Pharm (Hons)
*Lead Consultant, Project Delivery Committee***

**Kunle Kammal Oladokun
*Finance Consultant, Project Delivery Committee***

**Joseph Olanrewaju
*Procurement Consultant, Project Delivery Committee***

**Folakemi Ajagunna LL.B, BL. LL.M, MPH, Ph.D
*Legal Consultant, Project Delivery Committee***

Disclaimer

This Project Information Memorandum (PIM) is intended to provide interested parties with information on the Operations and Maintenance of the PPP Management Contract of the Abuja Premier Medical Warehouse and Lagos Federal Medical Warehouse (the Transaction), developed by the Federal Ministry of Health & Social Welfare (FMOH & SW) with the support from the technical expert team, and the approval of the Infrastructure Concession Regulatory Commission (ICRC), of the Federal Republic of Nigeria (FGN)

This memorandum is for informational purposes; to facilitate recipients in appraising the transaction and in deciding whether to make a proposal and for recipients to provide feedback, on the proposed transaction only; hence not intended to serve as the basis for an investment decision in the transaction. Each recipient is expected to make such independent investigation and to obtain such independent advice as he or she may deem necessary for such decisions

The PIM does not constitute an offer, invitation, or agreement.

The Federal Ministry of Health & Social Welfare, its agencies, advisors and ICRC or any other member of the FGN make no representations or warranties, express or implied, regarding the accuracy, completeness, or reliability of the information contained herein.

Each Applicant should conduct its own investigations and analysis and verify the accuracy of the information provided. The Federal Ministry of Health & Social Welfare reserves the right, but is under no obligation, to update, amend, or supplement the information contained in this PIM at any time without giving any prior notice or providing any reason. Any liability in connection with the use by any recipient of the information contained in this document is hereby disclaimed.



Commented [D1]: Signature of the PDC Chairperson

.....
PDC Chairman
Federal Ministry of Health & Social Welfare
Phase III, Federal Secretariat Complex
Central Business District, Abuja 900242
FCT
April 2025.

Table of Contents

ACRONYMS/ABBREVIATIONS.....	4
EXECUTIVE SUMMARY	7
CHAPTER 1	8
Policy, Strategic Objective and Project Local Context.....	8
Needs Analysis	8
Project Scope	8
Demand - Pull Factors.....	8
Supply - Driven Factors	8
CHAPTER 2.....	9
Warehousing Systems in Nigeria	10
Chapter 3	13
Drug Supply Chain Assessment in Nigeria.....	13
Chapter 4	15
Legal and Regulatory Environment	15
Chapter 5	18
Institutional Framework.....	18
Chapter 6	19
Scope of the Project.....	19
Warehouse infrastructure expectations	21
Chapter 7	22
Financial and Investment Considerations	22
Chapter 9	26
Transaction Structure and Project Risks.....	26

ACRONYMS/ABBREVIATIONS

S/N	Acronym	Full Meaning
1	APMW	Abuja Premier Medical Warehouse
2	ATM	AIDS-HIV, Tuberculosis and Malaria
3	CAPEX	Capital Expenditure
4	EOI	Expression of Interest
5	FBC	Full Business Case (Functional Business Case)
6	FMOH & SW	Federal Ministry of Health & Social Welfare
	FMS	Federal Medical Stores
7	FDS	Food & Drugs Services
8	GHSC-PSM	Global Health Supply Chain Program- Procurement Supply Management
9	ICRC	Infrastructure Concession Regulatory Commission
10	LFMW	Lagos Federal Medical Warehouse
11	MDA	Ministry, Department & Agency
12	NACA	National Agency for Control of HIV/AIDS
13	NAFDAC	National Agency for Food and Drug Control
14	NPSCMP	National Product Supply Chain Management Programme
15	OBC	Outline Business Case
16	O&M	Operate and Maintain
17	OPEX	Operational Expenditure
18	TGF	The Global Fund
19	RSSH	Resilient Sustainable Systems for Health
20	RFI	Request For Information
21	RFP	Request For Proposal
22	RFQ	Request For Quotation
23	PCN	Pharmacy Council of Nigeria
24	PSM	Procurement and Supply Management
25	CCM	Country Coordinating Mechanism
26	CM	Contract Management
27	ICB	International Competitive Bidding
28	ICT	Information and Communication Technology
29	ITT	Invitation To Tender
30	PDC	Project Delivery Committee
31	PR	Principal Recipient

32	ROI	Return On Investment
33	KPI	Key Performance Indicator
34	LCB	Local Competitive Bidding
35	SCM	Supply Chain management
36	SLA	Service Level Agreement
37	SOW	Statement Of Work
38	SPV	Special Purpose Vehicle
39	TGF-ATM	The Global Fund to Fight AIDS/HIV, Tuberculosis and Malaria
40	TOR	Terms of Reference
41	USAID	United States Agency for International Development
42	USD	United States Dollar

PREFACE

This Project Information Memorandum (PIM) is a tendering Pre-qualification requirement by the Infrastructure Concession Regulatory Commission (ICRC) for the prospective bidders, as part of the procurement of projects through Public-Private Partnership (PPP). Its preparation is part of the support by the technical expert team engaged by the FMOH&SW for the delivery of the transaction for the Operations and Maintenance of the Abuja Premier Medical Warehouse and Lagos Federal Medical Warehouse under Public-Private Partnership (PPP) model.

The PIM document is to provide information for interested organizations on the warehouse management services of Abuja Premier Medical Warehouse and Lagos Federal Medical Warehouse through PPP option

29 April 2025

Contact

- I. All questions and comments relating to technical issues in the Project Information Memorandum (PIM) should be directed to:

Federal Ministry of Health & Social Welfare (FMOH & SW)

Email: advert4medicalstores2025@gmail.com - Phone no.08033385032

EXECUTIVE SUMMARY

Project Background

Nigeria's healthcare sector is undergoing a significant transformation, led by the Federal Ministry of Health and Social Welfare (FMoH & SW), to enhance supply chain management and ensure sustainable healthcare delivery. The main goal is to improve the distribution of pharmaceutical products across Nigeria through private sector collaboration and leveraging expertise in supply chain management. Key objectives include: To Improve Supply Chain efficiency enhances storage and distribution, leverage expertise, and ensure regulatory compliance through Public-Private Partnership (PPP) model: The Abuja Premier Medical Warehouse (APMW) and Lagos Federal Medical Warehouse (LFMW) have been operating under the PPP model since 2019. The FMoH & SW seeks to enact another five (5)-year PPP management contract with a private operator for the APMW and LFMW. The benefits of the Proposed PPP Model are as follows: Improved access to quality medical supplies, streamlined logistics and better healthcare service delivery, enhanced collaboration and innovation, sustainable practices and a resilient and responsive healthcare supply chain. It also includes rewards for Private Investors in a sustainable manner and meeting the needs of the government, donors, patients, and healthcare providers. The proposed PPP model has the potential to transform Nigeria's healthcare sector, and its key benefits align with the Global Sustainable Development Goals (SDGs)

Key Points: -

- Nigeria's population growth drives demand for healthcare services
- Demand is driven by national health programs, donors and partners
- APMW and LFMW addresses storage needs for public healthcare products
- Supply has improved with expanded storage capacity and efficiency initiatives
- Competitive rates ensure sustainability and fund generation for future development

CHAPTER 1

Policy, Strategic Objective and Project Local Context

1.1 Needs Analysis

The steady growth in population always comes with the attendant increase in demand for basic needs such as food and public healthcare products. The Government of Nigeria has implemented policies and strategies that align with the Global SDGs in the health sector and has successfully attracted development partners to support the provision of basic healthcare products to those who need it no matter the location.

1.2 Project Scope

1.2.1 Demand - Pull Factors

The demand for storage space at the Abuja Premier Medical Warehouse (APMW) and Lagos Federal Medical Warehouse (LFMW) is largely driven by donors and partners who support the development of these facilities for storing and distributing essential public healthcare products for national programs, including HIV/AIDS, Malaria, Family planning, and cold chain management. In alignment with the sustainable development goals, investments from health sector partners in Nigeria have steadily increased. Organizations such as United State Agency for International Development (USAID) and The Global Fund to fight AIDs/HIV, Tuberculosis and Malaria (TGF-ATM) have contributed millions of USD in public healthcare products, which are stored in the pharma-grade warehouses.

There are strong indications that the growing demand for storage space will continue in the foreseeable future, extending into the next five years and beyond.

1.2.2 Supply - Driven Factors

By the provisions of the National Drug Policy, pharmaceutical products for public health care programme especially the donated healthcare products must be stored in federal-owned warehouses; however, a shortage of pallet spaces in FMS Oshodi necessitated the utilization of privately-owned pharmaceutical warehouses. The situation improved significantly with the construction of APMW and LFMW in 2017, which expanded Federal medical storage capacity from 1,700 pallet spaces to 10,334 pallet spaces.

With the Backward Integration initiative from donor agencies, including USAID and The Global Fund, storage efficiency has greatly improved, leading to a significant reduction in pharmaceutical product waste and less reliance on the use of privately-owned medical warehouses.

Competitive rates are offered for both storage and handling in the two new Federal warehouses, to ensure the sustainability of the services provided at these warehouses. This approach has proven to be effective and scalable. The Public-Private Partnership (PPP) management model was

deployed and this has demonstrated strong potential to generate sufficient funds to cover operational costs while also building savings for reinvestment in the development of more world-class pharmaceutical-grade warehouses and deployment of state-of-the-art technology in inventory management. This strategy is crucial for ensuring that supply meets future demand in the country.

CHAPTER 2

Warehousing Systems in Nigeria

Efficient warehousing plays a critical role in Nigeria's public healthcare supply chain, ensuring the availability of essential medicines, vaccines, and other health commodities. Over the years, various stakeholders including the government, donors, and private sector partners, have contributed to the development of pharma-grade warehousing infrastructure. However, significant gaps remain especially in provision of world class inventory management services, necessitating innovative solutions such as Public-Private Partnerships (PPP) to optimize efficiency and sustainability.

2.1 The Two National Pharma-Grade Warehouses in Abuja and Lagos

The two national pharma-grade warehouses in Abuja and Lagos are the backbone of Nigeria's public health logistics system. They serve as central storage hubs for key commodities especially the donor supported public healthcare products such as essential medicines, antiretroviral (ARVs), malaria treatments, tuberculosis (TB) drugs, and family planning products.

These warehouses are equipped with temperature-controlled storage to maintain product integrity. They serve as distribution hubs to state and regional warehouses, from where products are further supplied to healthcare facilities. They enhance inventory management through automated warehouse management systems (WMS) to track stock levels and expiry dates in addition to other performance requirements. They are supportive in the implementation of Nigeria's Last Mile Distribution (LMD) model, ensuring efficient supply chain delivery.

Despite these benefits, operational challenges such as funding constraints, maintenance issues, and bureaucratic inefficiencies sometimes hinder their full effectiveness.

2.2 The Role of Stakeholders in Public Health Commodities Warehousing

The Federal Government of Nigeria, through the Federal Ministry of Health (FMOH), and other agencies like the National Agency for Food and Drug Administration and Control (NAFDAC), and the National Product Supply Chain Management Programme (NPSCMP), plays crucial roles in the development of public health warehouses. Some of these roles include the following.

- Policy and Regulatory Oversight: Setting storage and distribution standards to ensure product safety and quality
- Infrastructure Investment: Establishing and maintaining pharma-grade warehouses across the country
- Supply Chain Coordination: Working with stakeholders to ensure continuous availability of essential medicines
- Capacity Building: Training supply chain personnel in modern warehouse management practices.

However, reliance on government funding alone has proven unsustainable, necessitating increased private sector involvement.

International donors and development agencies have been instrumental in strengthening Nigeria's warehousing and supply chain system as part of their gap-filling contributions to Government of Nigeria. The Warehouse in a Box was a foremost intervention in Nigeria that culminated in the opening of the two state-of-the-art pharma-grade warehouses in Abuja and Lagos known as the Premier Medical Warehouse Abuja and Federal Medical Warehouse Lagos, respectively. This major infrastructure development, procurement of storage equipment, and supply chain system strengthening was specifically for Malaria, HIV/AIDS, and TB commodities. USAID (United States Agency for International Development) also provides technical assistance, funding for cold chain storage, and investment in modern warehouse technologies. Other donors (e.g., UNFPA, Gavi, World Bank) contribute to specialized storage facilities for vaccines, family planning products, and essential medicines.

These interventions have enhanced Nigeria's warehousing capacity, but sustainability remains a concern, as many donor-funded projects face challenges in transitioning to full government ownership.

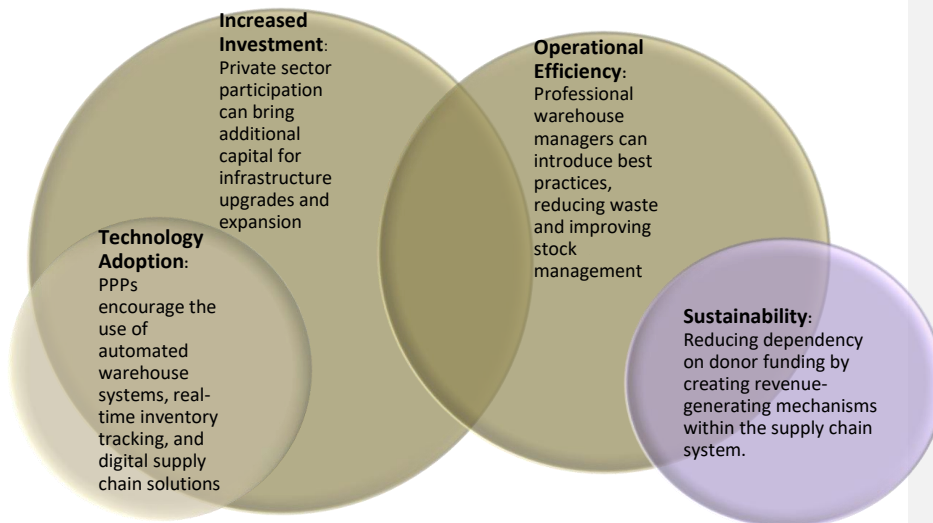
2.3 Gaps in Pharma-Grade Storage of Public Health Products

Despite improvements, several gaps persist in Nigeria's public health warehousing system. The existing warehouses struggle to handle growing demand due to increasing healthcare needs and insufficient ultra-cold storage for vaccines and biologics, leading to potential product wastage. Some warehouses across Nigeria suffer from inadequate maintenance, leading to inefficiencies in storage conditions. Issues such as stockouts, overstocking, and poor inventory management still occur due to weak coordination. Some warehouses lack adequate security measures, making them vulnerable to pilferage and unauthorized access.

2.4 Prospects of Adopting the PPP Model in Warehousing Optimization

The Public-Private Partnership (PPP) model presents a viable solution to address the inefficiencies in Nigeria's healthcare warehousing system.

Key benefits of adopting a PPP model include:



A well-structured PPP model can transform Nigeria's pharma-grade warehousing sector, ensuring efficiency, sustainability, and better healthcare outcomes. Warehousing remains a critical component of Nigeria's public health supply chain. While the government, donors, and international partners have made substantial investments, existing challenges highlight the need for innovative approaches. The adoption of the PPP model offers a promising pathway to enhance efficiency, expand infrastructure, and ensure long-term sustainability in warehousing for public healthcare products. By leveraging private sector expertise while maintaining government oversight, Nigeria can build a resilient warehousing system that guarantees continuous access to essential medicines and health commodities for her population.

Chapter 3

Drug Supply Chain Assessment in Nigeria

The drug supply chain in Nigeria plays a critical role in ensuring the availability, accessibility, and quality of pharmaceutical products. However, systemic challenges such as poor warehousing, weak distribution networks, and regulatory gaps have necessitated comprehensive assessments to strengthen the system. Important components of Drug Supply Chain assessment involve evaluating key areas such as:

- **Warehousing & Storage:** Human resources capacity, compliance with pharma-grade standards, cold chain management, and infrastructure maintenance
- **Procurement & Distribution:** Efficiency of procurement processes, stock availability, and last-mile distribution challenges
- **Regulatory Compliance:** Adherence to National Agency for Food and Drug Administration and Control (NAFDAC) and Pharmacists Council of Nigeria (PCN) guidelines
- **Data & Inventory Management:** Use of technology for stock monitoring, tracking expiry dates, and preventing stockouts
- **Funding & Sustainability:** Role of government, donors (USAID, Global Fund), and private sector participation.

A number of these assessments have been conducted with the support of donors and funders and the key challenges have been poor warehousing infrastructure, limited pharma-grade storage, inadequate cold chain facilities, and maintenance issues. Supply Chain Disruptions have persisted. Frequent stockouts, poor inventory forecasting, and inefficient last-mile distribution. There have been challenges with regulatory oversight, including prevalence of substandard and counterfeit medicines due to inadequate enforcement mechanisms. There is Data Gaps & Technology Constraints, lack of real-time tracking and out-dated inventory management systems. There is huge dependency on Donor Funding due to limited domestic financing for sustainable pharmaceutical supply chains. A number of opportunities for improvements have been highlighted therefore.

- **Public-Private Partnerships (PPP):** Engaging private sector logistics providers for efficient warehousing and distribution
- **Technology Integration:** Implementing digital inventory management systems and block chain for drug traceability
- **Decentralized Warehousing:** Expanding regional pharma-grade warehouses to reduce supply chain bottlenecks
- **Capacity Building:** Training supply chain personnel to enhance efficiency and regulatory compliance
- **Sustainable Financing:** Increasing government budget allocations and exploring local manufacturing to reduce import dependency.

A robust drug supply chain is essential for ensuring continuous access to quality medicines in Nigeria. Addressing existing gaps through strategic investments, regulatory enforcement, and PPP models will enhance efficiency, reduce wastage, and improve healthcare delivery.

Chapter 4

Legal and Regulatory Environment

Nigeria's legal and regulatory environment for the storage and distribution of public healthcare products is governed by various laws, policies, and regulatory agencies. These frameworks ensure that healthcare commodities meet quality standards, are distributed efficiently, and are accessible to the population. In recent years, Public-Private Partnerships (PPPs) have been introduced to optimize healthcare logistics, and their implementation is guided by specific concession regulations.

4.1 Overview of PPP procurement laws, warehouse management regulations

The Nigerian PPP domain is overseen mainly by the Infrastructure Regulatory Commission (Establishment) Act 2005. This Act regulates contracts in which the GoN through its MDA's grants concession to any duly pre-qualified project proponent in the private sector for the financing, construction or maintenance of any infrastructure that is financially viable or any development facility of the GoN. In furtherance of its oversight functions, the ICRC administers the Infrastructure Concession Regulatory Commission -PPP Regulations 2014. The Pharmacy Council Of Nigeria (Establishment) Act 2022 establishes the PCN to inspect, approve, license and regulate the registration and practice or operations in all pharmaceutical premises where drugs, medicines and poisons are manufactured, imported, exported, distributed, stored, dispensed or sold in Nigeria, based on Good Pharmaceutical Practice Standards (GPP).

4.2 Contractual obligations and dispute resolution mechanisms

Contractual obligations in this PPP contract include the specific responsibilities and commitments agreed upon by the public and private sectors involved in this project. These obligations typically encompass the operation, and maintenance of the Warehouse. Each party's roles, performance expectations, and deliverables are clearly defined to ensure accountability and efficiency. Key contractual terms include scope of service, grantors responsibilities, operator's responsibilities, termination procedures, commencement and effective date, dispute resolution procedures etc.

4.3 Data protection and security compliance standards

The O & M contract takes into cognizance the sensitive nature of the information considerations for a project of this magnitude and thus puts into place the required clauses such as confidentiality clauses, as well as ownership of Intellectual Property Rights.

4.4 Key Pharmaceutical Legal and Regulatory Frameworks:

4.4 KEY PHARMACEUTICAL LEGAL AND REGULATORY FRAMEWORKS

National Agency for Food and Drug Administration and Control (NAFDAC) Act

Mandate

- Regulates and controls the manufacture, importation, distribution, advertisement, and sale of pharmaceuticals, ensuring they meet quality standards

Challenges: Enforcement gaps

- Enforcement gaps and issues related to counterfeit drugs in the supply chain

National Health Act (NHA), 2014

Key Provisions

- Establishes a legal framework for healthcare service delivery
- Mandates national health system strengthening, including medical supply chain improvements
- Provides a structure for public-private collaboration in healthcare logistics

Key Features

- Encourages private investment in public infrastructure, including healthcare logistics

Pharmacists Council of Nigeria (PCN) Act

Mandate

- Ensures only competent entities handle pharmaceutical products

Compliance Issues

- Many unregistered facilities operate due to limited enforcement

4.5 PPP CONCESSION REGULATIONS IN NIGERIA

Infrastructure Concession Regulatory Commission (ICRC) Act, 2005

Purpose

- Ensures transparency and accountability in government procurement, including contracts for warehousing and distribution services

PPP Alignment

- Defines procedures for selecting private-sector partners for concession agreements
- Promotes efficiency and risk-sharing in healthcare supply chains

4.5 PPP Concession Regulations in Nigeria

PPP Regulatory Frameworks in Nigeria



Infrastructure Concession Regulatory Commission (ICRC) Act, 2005

Mandate:
Governs the execution of PPP projects in Nigeria

Key Provisions:

- Sets rules for concession agreements between the government and private entities
- Requires due diligence, feasibility studies, and regulatory approvals for



Public Procurement Act, 2007

Purpose:
Ensures transparency and accountability in government procurement, including contracts for warehousing and distribution services

PPP Alignment:
Defines procedures for selecting private-sector partners for concession agreements



National Policy on Public-Private Partnership (PPP), 2009

Key Features:

- Encourages private investment in public infrastructure, including healthcare logistics
- Defines roles of stakeholders in PPP engagements
- Promotes efficiency and risk-sharing in healthcare supply chains

4.6 Gaps in the Legal and Regulatory Framework



FRAGMENTED OVERSIGHT

Overlapping roles of multiple agencies lead to inefficiencies



REGULATORY ENFORCEMENT ISSUES

Inadequate monitoring of compliance with storage and distribution regulations



PPP BOTTLENECKS

Bureaucratic delays in concession approvals discourage private sector participation

Chapter 5

Institutional Framework

Key Institutional Players

1. Federal Ministry of Health & Social Welfare (FMOH & SW)

- Oversees national health policies and supply chain strategies
- Coordinates with donors and private partners on health commodity logistics
- leveraging PPPs, to improve healthcare access, promote innovation, and ensure regulatory oversight to strengthen the health system and respond effectively to public health needs.

2. National Agency for Food and Drug Administration and Control (NAFDAC)

- Regulates the storage and distribution of pharmaceuticals to prevent substandard and counterfeit drugs
- Enforces regulatory standards to maintain product safety and quality.

3. National Product Supply Chain Management Program (NPSCMP)

- Implements strategies for efficient storage, inventory management, and last-mile distribution

4. Federal and State Central Medical Stores & Regional Warehouses

- Serve as storage hubs for public health commodities, including essential medicines and vaccines
- Distribute products efficiently across regions.

5. Donor-Supported Supply Chain Platforms

USAID, Global Fund, and Gavi provide technical and financial support for warehousing and distribution partnering with private logistics providers to enhance efficiency and ensure timely delivery of health supplies.

Chapter 6

Scope of the Project

Public-Private Partnership (PPP) Model: This project will be structured as a Performance-Based Contract (PBC) under a PPP framework. The government will retain ownership of the warehouses while the private partner assumes operational responsibility under a structured Service-Level Agreement (SLA) using the Operate and Maintain (O&M) model.

The Operate and Maintain (O&M) option in Public-Private Partnerships (PPP) is a model where the government retains ownership of healthcare warehousing and distribution infrastructure, while a private entity is contracted to handle daily operations, maintenance, and service delivery. This model is particularly relevant for Nigeria's pharmaceutical supply chain, as it ensures efficiency, sustainability, and quality assurance in warehousing and distribution.

Rationale for Private Sector Engagement: Despite the existing infrastructure, challenges such as inefficient inventory management, delays in distribution, and high operational costs necessitate private sector involvement. This partnership aims to:

- Improve warehouse efficiency and reduce wastage.
- Enhance compliance with Good Storage and Distribution Practices (GSDP).
- Optimize costs while maintaining high service delivery standards.
- Leverage private sector expertise in modern warehouse management.

6.1 Key Features of the O&M Model

Government Ownership: The public sector retains control over the assets, ensuring that infrastructure remains aligned with national healthcare goals. The government will continue to provide oversight and performance monitoring

Private Sector Expertise: A private partner manages day-to-day operations, applying best practices in warehouse management and logistics. It will ensure operational efficiency and investment in modern technologies

Performance-Based Contracts: The private operator is held accountable for meeting predefined service levels and key performance indicators (KPIs).

Cost Efficiency & Risk Transfer: The government reduces operational risks and inefficiencies while leveraging private sector investments in technology and workforce management.

6.2 Relevance of O&M in Optimizing Pharma Warehousing and Distribution

A. Infrastructure Development & Optimization: The O&M model facilitates infrastructure development by ensuring that:

- Existing warehouses are upgraded to meet global pharma-grade standards (e.g., Good Storage Practices and Good Distribution Practices)
- Private sector investment is used to introduce modern cold chain systems, automated storage solutions, and digital inventory management tools
- Expansion is demand-driven, allowing for flexibility in scaling up warehousing capacity based on real-time healthcare needs.

B. Maintenance & Sustainability: Many government-managed healthcare warehouses in Nigeria suffer from poor maintenance, resulting in equipment breakdowns, substandard storage conditions, and loss of medical supplies. The O&M model ensures that:

- Warehouses are proactively maintained, preventing deterioration of infrastructure
- Temperature-sensitive drugs (such as vaccines and biologics) are stored properly, reducing wastage due to improper handling
- Emergency response mechanisms are in place, enabling swift repairs and replacements when necessary.

C. Value for Money (VfM) & Cost Efficiency: The O&M model delivers value for money by:

- Reducing waste and stock losses through improved inventory tracking and stock rotation
- Enhancing efficiency in distribution, ensuring timely delivery of medical products to health facilities
- Minimizing government overhead costs, as private operators absorb many of the operational and maintenance expenses.

D. Risk Management: Risk management is a critical aspect of O&M in pharma warehousing and distribution. The private sector is contractually obligated to manage:

- Operational Risks. Ensuring uninterrupted storage and distribution of healthcare commodities
- Financial Risks. Maintaining cost efficiency while meeting service-level agreements (SLAs)
- Regulatory Risks. Ensuring compliance with NAFDAC, PCN, WHO, and other relevant authorities to avoid penalties and legal liabilities
- Security Risks. Implementing robust security measures to prevent theft, pilferage, and counterfeit drug infiltration.

E. Quality of Care & Service Delivery: A well-managed pharmaceutical supply chain contributes directly to better healthcare outcomes. The O&M model enhances quality of care by:

- Ensuring drug availability, reducing stockouts at health facilities
- Maintaining product integrity, ensuring medicines are stored at the right conditions to preserve efficacy

- Improving logistics efficiency, reducing lead times for drug delivery to hospitals, clinics, and pharmacies.

6.3 Technical & Operational Requirements:

The selected private partner must implement a Warehouse Management System (WMS) with real-time tracking. It will ensure compliance with temperature and humidity control requirements maintain an efficient order fulfilment and last-mile distribution process and train personnel on safety protocols and regulatory compliance.

6.4 Core Responsibilities of the Private Partner

- Warehouse management and inventory control
- Temperature and quality control for pharmaceutical storage
- Order fulfilment and last-mile logistics support
- Security and risk management measures.

6.5 Compliance & Regulatory Standards

- Adherence to Good Storage and Distribution Practices (GSDP)
- National and international pharmaceutical warehousing regulations
- Reporting obligations to government health agencies.

6.6 Expected Key Performance Indicators (KPIs)

- Turnaround time for inventory dispatch
- Reduction in storage losses and expiries
- Service efficiency and customer satisfaction metrics
- Etc.

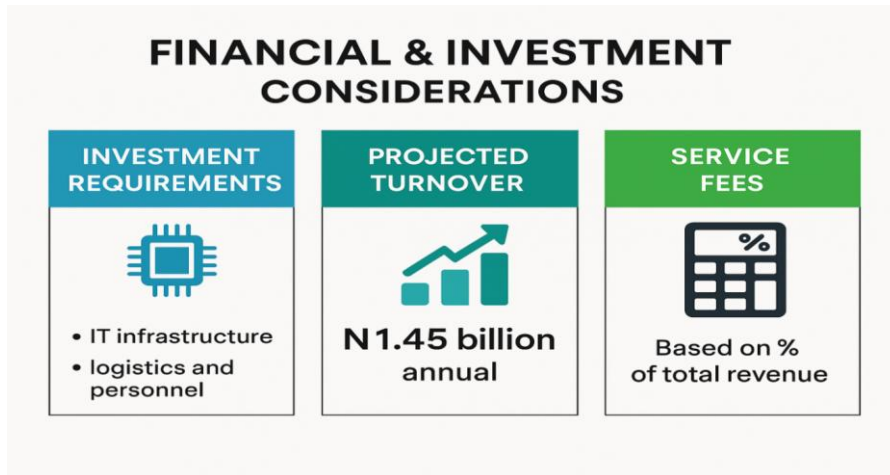
6.7 Warehouse infrastructure expectations

- **Storage areas:** 3465m² (4317 pallets spaces) for each warehouse
- **Cold room:** measuring 10m x 5m x 6m
- **Freezer room:** measuring 2.7m x 2.7m x 2.5m
- **Security:** State of the art security systems with biometrics finger printing, motion detectors, electrical fencing and CCTV.
- **Technology requirements:** Digital tracking, automated inventory systems
- **Capacity building:** Workforce training & operational efficiency strategies.

While the government will provide the warehouse infrastructure, the private partner is expected to invest in technology upgrades for inventory tracking and cold chain monitoring, optimize operational costs while ensuring value for money. Maintain cost-efficiency in staffing, utilities, and security management.

Chapter 7

Financial and Investment Considerations



Investment Requirements

- Private partner's capital investment in IT infrastructure, logistics, and personnel
- Operational cost breakdown for warehouse management.

Investment Requirements includes the private partner's capital investment in the following;

- Initial Mobilization Investment – this is required to set up operations at the start of the contract
- Equipment and tools, IT systems and software, recruitment and training of staff and office/facility setup.
- Working Capital - this is to ensure day-to-day operational costs are covered until revenue flows become steady. Working capital Includes salaries, consumables and utilities, maintenance supplies and spare parts inventory.
- CapEx for Asset Upgrades - for refurbishment or modernization of existing infrastructure handed over by the public partner such as system upgrades and energy-efficiency improvements.
- Major Maintenance Reserve with regards to fund major overhauls or replacements during the contract period. It is set aside periodically to ensure long-term asset performance.
- Contingency Fund is to cover unforeseen expenses (e.g., emergency repairs, cost overruns)

Financial Sustainability Model

The Objective of the financial sustainability is to ensure long-term, cost-effective, and high-quality operations through a fair balance of financial returns, risk sharing, and service delivery.

Key components considered in the financial modelling include:

- **Revenue Streams** – User fees payment including warehouse pallet space utilization by the FMOH &SW.
- **Cost Structure** – Covers fixed/variable O&M costs, asset renewal, and financial capacity of the operator.
- **Performance-Based Payments** – Linked to KPIs with penalties and revenue based, all-encompassing management fee (Opex &fee)
- **Risk Allocation** – Clear division of operational, financial, maintenance, demand risks etc.
- **Life-Cycle Costing** – Full-term cost planning including major maintenance.
- **Indexation** – Adjustments for inflation or cost changes.
- **Financial Tools** – Historical cost and transaction data, sensitivity analysis and cash flow forecasting.
- **Governance** – Special purpose vehicle, independent audits, transparent reporting, contract monitoring.
- **Exit Strategy – Handover terms and asset condition requirements.**

Projected revenue streams and cost-efficiency measures: The projected revenue Streams and cost-efficiency measures in the PPP O&M contract are summarized as follows:

i. The Projected Revenue Streams

- User Fees/Tariffs – Payments from end-users.
- Availability Payments – Fixed payments from all users for service readiness.
- Usage-based payments from the government and donors.
- Viable revenue generation for self-sustainability funding (No additional government investments, continuous growth in infrastructural and technical capabilities) for the duration of the contract term.
- Revenue generated performance incentive.
- Ancillary Services – Extra income from add-ons like handling charges are consolidated into the total turnover.

ii. Cost-Efficiency Measures

- Preventive maintenance – minimizes emergency repair costs.
- Energy &resource efficiency – reduces utility via green energy and operational expenses.
- Economies of scale – Shared procurement and bundled services on maintenance and security outsourcing to experts.
- Optimized workforce – Efficient staffing and outsourcing.
- Aligns performance with cost savings

Break-even analysis and long-term viability: A break-even analysis helps assess short-term feasibility, while long-term viability: ensures the project delivers value throughout its contract Life. Break- even

analysis is to determine when the PPP project will start generating enough revenue to cover its operating and maintenance costs.

Key indices include i.) Fixed costs such as Salaries, IT license, baseline repair & maintenance, ii.) Variable costs such as utilities, insurance and iii.) Revenue from user fees.

Break-even Point (BEP) - this is point at which total revenue is equal to total costs and it helps assess how long it will take for the project to become self-sustaining. Useful Metrics are:

- **Payback Period:** Time to recover initial costs.
- **Contribution Margin:** Revenue per unit minus variable cost per unit.
- **Long-term viability:** ensuring the PPP O&M contract remains financially and operationally sustainable over its full term (typically 10–30 years).

Key Factors considered includes:

- **Stable Revenue Flows** - Predictable user demand and secure government payments availability
- **Efficient Cost Management** - Lean operations, preventive maintenance, resource optimization
- **Performance Incentives** - Linking payments to KPIs encourages continuous improvement.
- **Asset Lifecycle Planning** - Budgeting for mid-life upgrades or component replacements from escrow account on government from revenue distribution.
- **Financial Resilience** - Ability to handle demand fluctuations, inflation, and currency risks.
- **Regulatory and Contractual Flexibility** - Clauses for renegotiation or rebalancing in response to economic shifts.

Chapter 8

Key Project Risks in PPP Warehousing Models

1. Regulatory Risk: Changes in government policies affecting contract terms.
2. Operational Risk: Inadequate management leading to supply chain failures.
3. Financial Risk: Delays in payment from government partners or donor funding shortfalls.
4. Reputational Risk: Poor service delivery affecting public confidence in healthcare supply chains.

Risk Allocation Framework

Risk Factor	Government Responsibility	Private Partner Responsibility	Mitigation Strategy
Regulatory Compliance	✓		Regular audits, SLA monitoring
Inventory Losses		✓	Insurance, advanced WMS
Financial Stability	✓	✓	Performance-based payments
Supply Chain Disruptions	✓	✓	Contingency planning, strategic stockpiling
IT & Cyber security Risks		✓	Data encryption, secure cloud-based WMS
Operational Failures		✓	Performance monitoring, automated reporting systems

Chapter 9

Transaction Structure and Project Risks

PPP Transaction Structure for Warehousing & Distribution

1. Project Preparation Stage:

- Feasibility study & needs assessment
- Government approval and stakeholder consultation.

2. Procurement Stage:

Competitive bidding and selection of private sector partner

Interested bidders must meet the following criteria:

- Demonstrated experience in warehouse management and supply chain operations.
- Financial capacity to support operational investments
- Compliance with GSDP and pharmaceutical warehousing regulations
- Strong technical expertise in inventory management and logistics solution
- Negotiation of concession terms.

3. Selection Process:

- **Request for Qualification (RFQ) Stage:** Prequalification of eligible firms.
- **Request for Proposal (RFP) Stage:** Shortlisted firms submit detailed technical and financial proposals.
- **Evaluation & Contract Award:** Assessment based on experience, financial viability, and operational strategy.
- **Implementation Stage:**
Warehouse operation, inventory management, and performance monitoring

Project Implementation Roadmap

Milestone	Timeline
RFQ Issuance	21/05/2025
RFQ Submission Deadline	04/06/2025
Evaluation & Shortlisting	04-06/06/2025
RFP Issuance	10/06/2025
Proposal Submission Deadline	10/07/2025
Contract Award	11/08/2025
Project Kick-off	22/09/2025

1. Next Steps & Bidder Engagement

Prospective bidders are encouraged to:

- Review the RFQ and submit their responses to the RFQ.
- Attend scheduled pre-bid meetings for clarifications
- Submit queries to advert4medicalstores2025@gmail.com before the proposal deadline.

Conclusion

The legal and institutional framework for public healthcare warehousing in Nigeria is evolving, with increasing emphasis on efficiency and sustainability through Public-Private Partnerships. However, concerns in regulatory enforcement, bureaucratic delays, and operational risks remain.

The Operate and Maintain (O&M) model in PPP is an effective strategy for optimizing public healthcare warehousing and distribution in Nigeria. By leveraging private sector expertise in infrastructure development, maintenance, risk management, and cost efficiency, this approach enhances quality of care and supply chain reliability

However, for PPP models to succeed, strong regulatory oversight, risk management, and transparent governance are necessary. By addressing these challenges, Nigeria can build a resilient pharmaceutical supply chain that guarantees uninterrupted access to essential medicines for its population.

We look forward to engaging qualified and capable bidders in this process.