Ministry of Health (MoH) Programme Management Unit (PMU)

Functional Requirements Document (FRD)

CONTENTS

1 INTRODUCTION 3

1.1 Purpose and Scope 3

1.2 Background of the Consultant 3

1.3 References 4

2 METHODOLOGY 4

3 FUNCTIONAL REQUIREMENTS 4

3.1 Context 4

3.2 User Requirements 4

4 Functional Requirements; 5

4.1 Grant and Financial Management Module 5

5 Fixed Assets Management 8

6 Payables, Procurement and Supply Chain Management 8

7 Payroll System 9

8 System Security 9

9 OTHER REQUIREMENTS 9

10 Data Migration, Data Exchange and Conversion Requirements 9

11 Hardware and Software Requirements 9

12 Operational Requirements 9

# INTRODUCTION

As a part of National Capacity Development effort, a-two year Capacity Development and Transitional Action Plan (CDTAP) was developed for Ministry of Health (MoH) which was under implementation from July 2012. To strengthen the financial management and systems of MoH under the CDTAP, a Financial Management and Information System, Microsoft Dynamics NAV (NAVISION) was deployed at Programme Management Unit (PMU) of MoH and 84 Provincial and District Health Offices in 2013 and subsequently the system end-users were trained on Microsoft Dynamics NAV. The system modules that were implemented in the said Financial Management and Information system included:

1. Financial Management Module
	1. General Ledger
	2. Cash Management
		1. Multiple Cash Books
		2. Bank Reconciliation
	3. Receivables
		1. Programme Officers Imprest Management
		2. Other Receivables
2. Fixed Assets
	1. Fixed Asset Management – acquisition and movement
	2. Fixed Asset Analysis
	3. Comprehensive Asset Register
3. Payroll System
	1. Payroll Management
	2. Statutory Reporting
	3. Ad hoc reporting

Following the successful deployment of Microsoft Dynamics NAV at MoH-PMU and 1st disbursement made by UNDP to MoH-PMU for implementation of Global Fund Project activities, the system has been operational at MoH-PMU, since January, 2014.

Since January 2015, MoH is now Principal Recipient (PR) as well as Sub Recipient (SR) and the current Financial Management Information system is inadequate to operate functional database requirements demanded for a Principal Recipient by Global Funds (GF). In order to ensure smooth operation and optimum performance of Microsoft Dynamics NAV and as guided by the Global Fund the current system requires to be upgraded to Microsoft Dynamics NAV2016 to provide timely reports as per GF report formats directly from the system and include the other modules that were recommended by GF including Expenditure and Budget checks and controls. For the foregoing reason, MoH engaged a Consultant to provide the services of upgrading the software, increasing number of users, increasing number of modules in the system and provide training and technical support to system users. The upgrade of the system is from Microsoft Dynamics NAV2009 to Microsoft Dynamics NAV2016. The Consultant shall also provide on-going technical support and maintenance, to MoH-PMU.

## Purpose and Scope

The purpose of the Functional Requirement Document (FRD); a functional requirement defines a purpose or function of a system and its components. A function is described as a set of inputs, the behavior, and outputs. Functional requirements may be technical details, data manipulation, calculations and processing and other specific functionality that define what a system is supposed to accomplish. Functional requirements specify particular results of a system and drive the application architecture of a system.

## Background of the Consultant

Enterprise Solutions/Sacip Support Services (the Consultant) is an undertaking between Enterprise Solutions Ltd and Sacip Support Services both Microsoft Dynamics Partners selling, implementing and providing professional, technical support and training services in Microsoft Dynamics NAV ERP solutions in Zambia and outside Zambia.

The enterprise has sub-contracted the services of HRP Solutions Uganda Limited, of Kampala, Uganda to take on specialised implementation, technical, training and consulting services in the implementation and deployment of the MoH-PMU Microsoft Dynamics ERP Solution in accordance with the Global Funds system requirements and Annual Financial Reports (AFR) formats.

## References

The primary basis of this FRD is the MoH-PMU tender document, the Request for Quotations. The other supporting documents or basis on which this FRD is premised include but not limited to;

1. Outcome of the requirements gathering as listed in Functional Requirements section below.
2. The Technical Response/Proposal submitted in response to the Request for Quotations
3. The incomplete system requirement document and Report Formats submitted by MoH-PMU
4. The detailed reviews made by Global Fund representatives and MoH-PMU project personnel and other ordinary mainstream MoH personnel during the system review meeting held in Lusaka, at MoH-PMU offices on 15th to 17th of February, 2016.

# METHODOLOGY

The overall approach used in the determination of the FRD contents was by reference to primary source documents including the Request for Quotations (RFQ), Technical Proposal document (response document to RFQ), MoH-PMU GF system upgrade requirements document, requirements gathered through interviews with the key MoH-PMU project personnel and from the resolutions made from the system review meetings held from 15th to 17th of February, 2016 at MoH-PMU offices by all stakeholders, including two Global Fund representatives and two auditors from PWC.

# FUNCTIONAL REQUIREMENTS

## Context

The overall framework in which the MoH-PMU system will be installed is where the Microsoft Dynamics NAV Central Database will reside at the Ministry of Health Programme Management Unit (MoH-PMU) with eight concurrent Full Access Users on premise with a compliment of five light users, accessing the system with read only permission through web client.

## User Requirements

**The key system requirements is the implementation of the following business application areas:**

1. Grant and Financial Management Module
	1. Fund Management
		1. administrative and fiscal monitoring,
		2. reporting and compliance to the Grant Conditions of budgeting, control, analysis and accounting.
	2. General Ledger Accounting with comprehensive transaction analysis
	3. Comprehensive Budgeting, Budget Checks and Control
	4. Receivables
		1. Programme Officers Imprest Management
		2. Implementers (Sub-Recipients)
		3. Other Receivables
	5. Cash Management
		1. Multiple Cash Books
		2. Bank Reconciliation
	6. Comprehensive user define Global Fund financial and management reporting
	7. Periodic Ad hoc reporting – multiple user defined schedules
2. Fixed Assets
	1. Fixed Asset Management
		1. Acquisition
		2. Depreciation
		3. Disposal
	2. Fixed Asset Analysis by:
		1. Grant
		2. By class
		3. Sub-Class
		4. Location
		5. Responsible employee
		6. Sub-Recipient
	3. Comprehensive Asset Register reporting by:
		1. Grant
		2. By class
		3. Sub-Class
		4. Location
		5. Responsible employee
		6. Sub-Recipient
3. Procurement and Supply Management Module
	1. Purchase Requisitioning
	2. Purchase Order Processing
	3. Purchase Order and Stores Documents Management
	4. Reporting
4. Payables
	1. Local Suppliers of Goods and Services with varying trading currencies
	2. Statutory Bodies that are Taxes related
	3. Foreign Suppliers of Goods and Services (foreign currencies)
	4. Management of Pooled Procurement Mechanism (PPM), supplies bought directly by GF.
	5. Payables Reporting
5. Payroll System
	1. Payroll Management
	2. Statutory Reporting
	3. Ad hoc reporting
6. System Security
	1. Varied System Users
	2. Controlled User Roles and
	3. Robust User Permissions

# Functional Requirements; the modular system functional requirements are broadly specified below

## Grant and Financial Management Module

* 1. The system must have all the basic workflows of the Grant Management system
		1. the system must allow for creation of Multiple Grants in a single Database
		2. The system must allow the linking of Grant Baseline information to each specific Grant
		3. The Baseline Budget must be linked to the Grant and no changes may be made to the Baseline Budget once uploaded
	2. The system must be able to manage and track the performance of each Grant in respect of;
		1. Baseline Budgets
		2. Periodically Reprogrammed Budgets e.g. Half yearly or yearly reprogrammed
		3. The system must allow for revisions or reprogramming of Budgets multiple times
		4. The latest revised Approved Budget together with the baseline Budget should always be kept in the system and the basis of comparison of financial variance reports
		5. The Budget must be uploaded on quarterly amounts basis across the applicable Implementation periods and Fiscal Years
		6. The Budget Format that should be upload in the system must include all the important Budget Fields as per the GF Excel Budget Format.
		7. Grant Implementation Periods;
			1. One Grant to One Implementation Period
			2. One Grant to Many Implementation Periods
		8. Grant Receipting; the system must allow receipts in draw downs and/or in whole
		9. Funds Disbursements to Sub-Recipients, Programme Officers and other Implementers analysed by Budget Analysable entities ie. Grant, Activity and in this case, Implementer and all other related analysis dimensions
		10. Expenditure Check; the system must be able to check expenditure against budget by:
			1. First level at Grant level and
			2. Second Level Activity level
		11. The system must give a warning message when funds are not available in the Budget at Activity level but should allow the warning to be overridden.
		12. The system should track the reason(s) for overriding the Budget at Activity level
		13. The system must not allow, it should block, an expenditure transaction to be processed if the expense will result in over expenditure at overall Grant Level.
		14. Grant Reporting;
			1. User defined reports as per GF formats and others
			2. Ad hoc analytical reports as maybe requested for by the users
			3. Inbuilt system reports should include;
				1. Trial Balances by Grant
				2. Age Analysis by Sub-Recipients, Programme Officers and others
				3. Statements of Accounts by Sub-Recipients, Programme Officers and others
				4. Any other ad-hoc reports
			4. The system must have comprehensive transactional analytical functionality and features to track and report on General Ledger financial entries and Budget Ledger entries by different user defined analysis dimensions, including by:
				1. Grant
				2. Module and Intervention
				3. Cost Grouping and Cost Item
				4. Activity etc
	3. Accumulated Funds; the system must provide for accounting for the Accumulated Funds which maybe Surplus or Deficit
	4. The system must be able to maintain separate Accumulated Funds accounts for each Grant
	5. The system must be able to produce both separate and consolidated reports on accumulated funds with respect to the Grants
	6. Foreign Exchange Revaluation; the system must be able to maintain Foreign Exchange Revaluationfor each Grant
	7. The system must be able to produce both separate and consolidated reports on Foreign Exchange Revaluation Reserve with respect to all the Grants
	8. Budgeting;
		1. **Budget Currency**; the System must use the United States Dollar (USD) as the Budget Currency.
		2. **Payment Currencies**; the system must use the currencies specified in the GF Budget as Payment Currencies, and payment currencies should be linked to Budget Currency by exchange rate and by reporting.
		3. **Base Currency**; the System shall use the United States Dollars as the Base Currency, this is to align it to the Budget Currency and enable Budget Controls and Checks in the same currency
		4. the system should assist in Budget control, Expenditure check and be able to hold Budget values at different levels of intelligence and analysis including;
			1. Budget Period; the system should allow for the Budget to be for a specified period, in this case quarterly Budgets will apply, and the period can changed according to the user’s needs
			2. Budget Review and Reprogramming; the system should allow changes to be made to the Budget (or the Budget to be reprogrammed) annually
			3. Budget Analysis; the system should allow the Budget to be broken down in various analytical units or analysis dimensions in a hierarch form or ‘tree’ concept
			4. The system should provide for the Budget to be at multiple highest level be by Grant then broken down to Module, then to Intervention and further broken down to Cost Grouping, Cost Items and Activities, all these in a related manner and hierarchically
			5. The system should be able to track the very initial total Budget, the Baseline Budget, and lock it once uploaded and posted.
			6. The system should not allow the Baseline Budget to be changed once posted.
			7. The system must allow the importation of Budgets from Microsoft Excel and vice versa for reprogramming purposes and other manipulation reasons
			8. Reporting; the system must report on Budget figures in comparison with the Actual Expenditures in user prescribed GF formats and otherwise
	9. Grant Receipting
		1. The system must allow for receipting of the Grant in either multiple instalments called draw down or in a single instalment, whichever is applicable
		2. The system must be able to maintain separate funds or income received under each Grant
		3. The system must be able to produce both separate and consolidated reports on funds or income received under each Grant against a related implemented period
		4. The system should be able to receive the Grant according to the Budgeted analytical breakdown or dimensions
		5. The system must allow the transfer of portions of the Grant to Sub-Recipients, broken down by the Budgeted dimensions, for the said Sub-Recipient
		6. The system must track and report on revenue received in a particular Implementation period or across a number of implementation periods
	10. Funds Disbursement
		1. The system must assist in the monitoring and reporting of the disbursed and retired funds to and fro Implementers and Programme Officers
		2. The system must age (imprest aged analysis) the un-retired imprest from Programme Officers, in accordance with the GF guidelines or Terms and Conditions of imprest retirement
		3. At the point of disbursing the funds to Implementers or Programme officers, the system must provide for breakdown of disbursed funds by budgeted analytical dimensions
	11. Expenditure Tracking and Retirement, and Cash Retirement
		1. The system must be able to maintain multiple user defined expenditure general ledger accounts
		2. The system must allow posting of expenses, from the previously disbursed funds, to appropriate expenditure accounts analysed or tagged with the budget analytical dimensions for which the funds have been spent on
		3. The system must be able to check and disallow over expenditure
		4. The system should only allow expenditure where there is enough budget at general ledger account level and analytical dimension level
		5. The system should recognize and accept the retirement of both Expenditure and Cash retirement
		6. At the point of retirement by Sub-Recipients or Programme Officers, the system must provide for matching of expensed and retired cash to the initial disbursed funds
		7. The system must be able to produce both separate and consolidated reports on expenditure with respect to the Grants
	12. Grant Reporting
		1. The system must report in two currencies, the Zambian Kwacha and the US Dollar (the Base currency of the system shall be the Zambian Kwacha and the US Dollar the additional reporting currency)
		2. The system must be able to produce user defined financial reports (Annual Financial Reports) by:
			1. Grant
			2. Budget analytical units or dimensions e.g. Module, Intervention, Cost Grouping, Cost Item, Activity
		3. The system must provide various ad hoc analytical reports by:
			1. Grant
			2. Budget analytical units or dimensions e.g. Module, Intervention, Cost Grouping, Cost Item, Activity
		4. The system must have standard inbuilt system reports, including Trial Balances that should be generated by Grant by all means

# Fixed Assets Management

1. The system must maintain a Fixed Asset Register subsidiary ledgers for each Grant
2. The system must be able to produce separate Fixed Asset Register per Grant
3. The system should expense and/or capitalize assets at the time of acquisition or purchase whichever is applicable
4. The system need not compute depreciation for the Assets except for Motor Vehicles and any other that may be deemed depreciable
5. The system must track and report on Fixed Assets according to;
6. Grant
7. Asset Class
8. Asset Sub-Class
9. Asset Physical Location
10. Employee Responsible for the Asset
11. Sub-Recipient, if applicable

# Payables, Procurement and Supply Chain Management

1. The system must allow for creation of unlimited, different categories, of suppliers in the system
2. The system must provide for various Payment Terms and Conditions for suppliers
3. The system must provide for the creation of system generated Purchase Requisitions with Budget and Expenditure Checks enabled. The check controls should be at:
4. Activity level, this should give a warning that can be overridden and a reason for overriding tracked
5. Grant level, the check control should block a requisition to be processed if budget is not enough at Grant level
6. The system must allow to convert an approved Purchase Requisition into either;
7. a Goods Purchase Order (Order), which converts into a Goods Received Note (GRN) at receipt stage
8. a Service Purchase Order (Blanket Order), which converts into a Service Received Note at receipt stage
9. The System must allow a Goods Purchase Order (Order) to be converted to a system generated Goods Received Note (GRN) at receipt stage
10. The System must allow a Service Purchase Order (Blanket Order) to be converted to a system generated Services Received Note
11. The system must allow the Payables Accountants to pick and acknowledge the liability by invoicing in the system the Purchase transaction generated from a Requisition through to Purchase or Service Order and to a Goods or Service Receipt
12. The system must allow payments to Suppliers to be from the system through Cheque Printing
13. The system must track the Bank details for suppliers to enable the generation of system payments by system generated Cheques
14. The system must allow for creation of system Payment Vouchers and Cheques as designed by the Bankers
15. The system should be able to maintain separate Accounts Payable in modified Cash Accounting concepts per Grant
16. The system should be able to produce both separate and consolidated reports on accounts payable with respect to each Grant
17. The system should be able to handle the procurement and financial entries of the Pooled Procurement Mechanism (PPM), where goods and/or services are procured by GF and sent directly to the Receiving Agent.
18. The PPM procurement and expense entries should be treated as normal business transactions and should be subjected to the Budget and Expenditure checks just like other normal transactions

# Payroll System

1. The system must be able to create employees linked to Grants and Activities, and other analytical dimensions
2. The system must be able to track Payroll entries by Grant and Activities and other relevant analytical dimensions
3. The system must be able to produce all the relevant Payroll reports per Grant
4. The system should be able to compute statutory taxes in accordance with the Zambian laws per Grant

# System Security, refer to Operational Requirements, Security and Privacy.

# OTHER REQUIREMENTS; the non-behavioral requirements vis-à-vis interfaces requirements, system hardware and software pre-requisites, data migration or conversion requirements are not categorically documented in this FRD but for the sake of details, a comprehensive System Requirements for Microsoft Dynamics NAV 2016 Document has been added to this FRD, as an addendum. The supplementary document, in many ways cover and discuss the concepts concerning:

1. **Interface Requirements**
	1. Hardware Interfaces
	2. Software Interfaces
	3. Communications Interfaces

# Data Migration, Data Exchange and Conversion Requirements

1. The system must provide for importation of backlog financial transactions from Microsoft Excel spreadsheets
2. The system must provide for importation of backlog Budgets
3. Data Exchange; the system must have a procedure for exporting Financial Transactions to the Zambian Givernment IFMIS (SAP) system in accordance with the file format that is acceptable by IFMIS

# Hardware and Software Requirements

Refer to the **System Requirements for Microsoft Dynamics NAV 2016** Document

# Operational Requirements

1. **Security and Privacy**
2. The system must be able to control access to the system data including Master or Reference Data and Transactional Data. This must include controlling who may
	1. View master and transactional data in the different respective modules
	2. Read master and transactional data in the different respective modules
	3. Create and/or Alter and/or Delete master data in the respective different modules
	4. Setup and/or perform maintenance tasks to master data and setup configurations in the different respective modules
	5. Perform Data entry in each respective module of the system
	6. Approve and Post the captured data to the different Ledgers of the system
	7. Perform, specific special periodic activities in different respective modules
	8. Perform system wide administrative functions, across all the system modules
3. The system should allow for separation of responsibilities for various user roles so that at least two and preferably more individuals fulfill these roles. (It is particularly important that the same person does not create an entry, approve the same entry and post the same entry)
4. The various User Roles and Permissions that the system should provide for, include:
	1. **Finance**; Financial Data Entry personnel roles and permissions will including capturing or entering;
		1. General Ledger Entries
		2. Cash Book Entries
		3. Bank Account Reconciliation
		4. Audit and Year-end adjustment entries
		5. And any other general ledger entries
	2. **Fixed Asset (Inventory)**; Fixed Assets Data Entry personnel roles and permissions will including capturing or entering;
		1. Fixed Asset Ledger Entries
		2. Fixed Asset Depreciation, where applicable
		3. Fixed Assets Type Classification
		4. Fixed Assets Sub Type Classification
		5. Fixed Assets Physical Location Analysis
		6. Fixed Assets Serial Numbers tracking
		7. Fixed Assets persons responsible for each Asset
	3. **Receivables**;
		1. Data entry/capture personnel for the funds **disbursements** to Sub-Recipients (Implementers), Programme Officers and other Receivables
		2. Data entry/capture personnel for **retirements** and **application** of funds from Sub-Recipients (Implementers), Programme Officers and other Receivables for expensed funds and
		3. Data entry/capture for retired cash from the previously disbursed funds
	4. Procurement and Supplies Unit Data capture personnel
		1. Raise Purchase Requisitions
		2. Convert Purchase Requisitions into either
			1. Goods Purchase Order or
			2. Services Purchase Order
		3. Print Goods and Services Purchase Orders
	5. Goods and Services **Receiving** (GR)
		1. Convert Goods Purchase Order into Goods Receipt Note (GRN)
		2. Convert Services Purchase Order into Services Receipt Note (GRN)
		3. Print Goods and Services Received Notes
	6. **Payables**;
		1. Data entry/capture personnel for **Invoicing** of approved and released Goods and Services Purchase Orders for invoicing, i.e. converting Goods or Services Purchase Orders into Invoices. Hence creating a liability.
		2. Data entry/capture personnel for **payments** and **application** to invoices for suppliers for invoiced Purchase Orders

**The key functional and administrative users of the system include but not limited to**:

|  |  |  |  |
| --- | --- | --- | --- |
| **Position** | **# of staff** | **Functional Requirement** | **Business Application Area (Module)** |
| Grant Managers | 1 | To be advised by MoH-PMU | To be advised by MoH-PMU |
| Financial Specialists | 1 | To be advised by MoH-PMU | To be advised by MoH-PMU |
| Senior Accountants | 1 | To be advised by MoH-PMU | To be advised by MoH-PMU |
| Accountants | 1 | To be advised by MoH-PMU | To be advised by MoH-PMU |
| Assistant Accountants (AA) | 3 | To be advised by MoH-PMU | To be advised by MoH-PMU |
| Payroll Accountants | 1 | To be advised by MoH-PMU | To be advised by MoH-PMU |
| Senior Procurement Specialists | 1 | To be advised by MoH-PMU | To be advised by MoH-PMU |
| Programme Officers | 3 | To be advised by MoH-PMU | To be advised by MoH-PMU |
| Procurement Specialists | 4 | To be advised by MoH-PMU | To be advised by MoH-PMU |
| Supplies Officers and Logisticians | 3 | To be advised by MoH-PMU | To be advised by MoH-PMU |
| Internal Auditors | 1 | To be advised by MoH-PMU | To be advised by MoH-PMU |
| Assistant Auditors | 2 | To be advised by MoH-PMU | To be advised by MoH-PMU |
| PHO Accountants | 10 | To be advised by MoH-PMU | To be advised by MoH-PMU |
| PHOz Assistant Accountants | 10 | To be advised by MoH-PMU | To be advised by MoH-PMU |

1. **Audit Trail**
2. The system must provide for transparent transactional audit Registers
3. The system must provide for audit to alteration made to master or reference data in the system
4. The system must provide for audit to deletion made to master or reference data in the system
5. The system should provide for transactional drilldowns for audit purposes, to review the source and origin of any transaction in the system
6. The system should provide for in-depth search facility to interrogate entries by transaction reference number, transaction amount and any other relevant reference or search criteria, including use of mathematical logics in searches
	1. **APPENDICES - GLOSSARY**
7. System Requirements for Microsoft Dynamics NAV 2016