

Software Requirements Specification

Asset Management Information System,
Health Department, Khyber Pakhtunkhwa

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ACRONYMS AND DEFINITIONS

Acronym	Definition
AMIS	Asset Management Information System
DHIS	District Health Information System
DOH	Department of Health
EPI	Extended Program for Immunization
FICO	Finance and Controlling (SAP Module)
FP	Family Planning
GHSC-PSM	Global Health Supply Chain - Procurement and Supply Management System
GoKP	Government of Khyber Pakhtunkhwa
ICT	Information and Communication Technology
IMU	Integrated Monitoring Unit
IVMP	Integrated Vector Management Program
KP	Khyber Pakhtunkhwa
KPITB	Khyber Pakhtunkhwa Information Technology Board
MNCH	Maternal, Newborn and Child Health (MNCH) Program
NMD	Newly Merged Districts
PIFRA	Project for the Improvement of Financial Reporting & Auditing (Pakistan)
PKR	Pakistan Rupee
PWD	Population Welfare Department
ROI	Return on Investment
USAID	United States Agency for International Development
VPID	Vaccine Preventable Infectious Diseases

1. EXECUTIVE SUMMARY

Healthcare services rely on variety of tangible assets as part of emergency and routine healthcare services. Record keeping and tracking of assets is essential for planning, financing, accountability and above all smooth service delivery.

Effective asset management helps improve healthcare system, optimize cost and allocation of assets to health facilities which require them the most. USAID funded GHSC-PSM project in collaboration with Health Department Khyber Pakhtunkhwa has developed an “Asset Management Information System” (AMIS). The system has been designed to meet the local requirements while using the international asset management standard features for the world’s best systems like SAP ECC, Oracle E-Suite and Microsoft Dynamics. The AMIS is interoperable with all third-party systems like SAP Financial and Control, DHIS/DHIS2, Provincial Dashboards, etc. and offers analytics, dashboards, SMS/Email alerts for administrative purposes.



Currently, AMIS is being piloted in Charsadda, Lakki Markwat and Swat districts. This robust system with dynamic configuration management and flexible architecture is scalable across any public sector organization of the province to record and track assets.

In order to scale up AMIS across the province, USAID funded GHSC PSM project would provide technical assistance for development, deployment, training and implementation whereas; Health department KP would bear the cost for data hosting services, and IT hardware.

The successful implementation of AMIS would guarantee tangible and intangible Return of Investment (ROI). It will provide base data for cost optimization, evidence-based planning and procurement, timely maintenance of assets for optimal use, track to avoid non-use or misuse, suppliers’ performance, 3-way match payments to suppliers, transparency, and accountability.

2. BACKGROUND

Since 2009, USAID and Government of Khyber Pakhtunkhwa have worked closely to address critical deficiencies in public health supply chain in the province focusing on Family Planning (FP), Expanded Program on Immunization (EPI) and Maternal, Neonatal and Child Health (MNCH), Basic Health Services (BHS) and Infectious Diseases (IDs). This collaborative journey has truly transformed supply chain systems in Health and Population Welfare departments. The supply chain system strengthening support includes development and implementation of policies, systems, infrastructure, and human resource to address chronic issues around commodity security and data visibility.

During quarterly steering committee meeting to review USAID funded project, additional chief secretary highlighted the need for an Asset Management System for health department on July 28, 2020. The similar kind of request was also raised by district health department.

USAID funded GHSC – PSM Project developed AMIS under guidance of Health Department and first batch of fourteen officials from Charsadda, Lakki Marwat and Swat were trained on Jan 29th, 2021. The system is successfully implemented in 3 pilot districts and ready to scale-up to the entire province.

The other technology products supported by the project are Medicines' Logistics Management Information System MLMIS (3 pilot districts), D-Talk EMR and LMIS, IMU Web and mobile applications, DHIS1 enhancements and maintenance, DHIS2 planning, PWD Contraceptive LMIS, PWD HR MIS, IVMP MIS for NMDs (in progress), preventable infectious diseases and supply chain system strengthening.

3. PROPOSED IMPLEMENTATION MODEL

1. The AMIS will be implemented under supervision of ADG Admin/procurement cell at Directorate General Health Services, KP. The cell would also maintain asset inventory at provincial level i.e., Health Secretariat, Director General office, and allied/vertical health programs.
2. AMIS will be used at district health offices to update the inventory of all health facilities of the concerned districts. The data collection sheets will be shared with each health facility to record the existing assets and compiled data will be entered at district level. All newly procured assets will also be entered by the district office.
3. The data collection/ paper based of existing assets from all health facilities, district stores and DHO office will be a cumbersome process and should take at least one month to compile quality data after due diligence.
4. A dedicated data entry operator will be required at district health office until the system is being used by each health facility. However, during implementation phase, more than one operator would be required for initial data entry keeping in view the number of health facilities in the district. This master data entry process should be completed within one month.
5. To update the assets' functional status, the AMIS and mobile application of Independent Monitoring Unit will be interfaced. The asset data of AMIS will be available in the IMU mobile app and IMU monitors visiting each health facility would record the functional status which in turn update the asset status in the AMIS.
6. The payments of newly procured assets will be linked with the entry in AMIS. The system would be interoperable with the provincial financial management systems, like PIFRA, for greater efficiency.

4. COSTS

Category Descriptions		Number	Cost / Unit	One Time (Million PKR)	Recurring for 5 Years (Million PKR)	Total Cost of Operations TCO 5 Yrs (Million PKR)
1	Software / Application	The Cost will be borne by USAID GHSC PSM project				
2	Hardware/Equipment	40	150,000	6.0	-	6.0
3	Internet	40	3,000		0.6	0.6
4	Training (Master Trainers/Trainees)	The Cost will be borne by USAID GHSC PSM project				
5	Hosting	KPITB				
6	Application Maintenance Support	2	100,000		12	12
Total				6.0	12.6	18.6
* Calculations are based on 36 districts health offices, Provincial Directorate & Secretariat						
* In case, KPITB is not available for application hosting, please add 4.50M in TCO with 1.50 in 1 st year						

5. ROPOSED IMPLEMENTATION PLAN

S#	Activity	Responsible	M1	M2	M3	M4	M5	M6	Year# 2 to 5
1	Formal letter to all DHO	DOH							
2	Compile nominations' list	DOH							
3	Plan Training	DOH/PSM							
4	Trainees' Training	DOH							
5	App Hosting at Govt. DC	DOH/PSM							
6	Data entry, monitoring	DOH/PSM							
7	Enhancements / Maintenance	PSM							
8	Transfer of Technology/Knowledge	PSM/DOH							
9	Support	DOH							

Note: Implementation would be dependent on availability of IT hardware/Internet at district level for data entry in AMIS. Non availability can cause delays in smooth implementation of the system.

APPENDIX A: SALIENT FEATURES OF AMIS

1. Configuration Management Module

- a. Organization (Province to Health Facility)
- b. Access Roles (Data Access Controls)
- c. Asset Master data with specifications
- d. Statuses
- e. Manufacturers
- f. Suppliers

2. Asset Profile Management

3. Accessories / Parts management

4. Maintenance / Repair Management

5. Analytics and Dashboards

6. Notifications and Alerts

