



RFP for Project Management Unit for Implementation of DVDMS and strengthening of Drug Supply Chain in UP

Part – III – Schedules of Contract

Date: _____

Tender Number: _____

National Health Mission

State Health Society,

19A Vidhan Sabha Marg,

Lucknow, Uttar Pradesh.



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1 Schedule – 1: Terms of Reference and Scope of Work

1.1 About DVDMS initiative of Government of Uttar Pradesh

Uttar Pradesh, the fourth largest State in the country with a population of 199.50 million¹, has 75 districts, 820 blocks and 1,07,776 villages. Given the large geographical coverage and population of the state, ensuring that right beneficiaries receive the right medicines at the right time is extremely difficult. Hence to strengthen drug supply chain in Uttar Pradesh, Director General of Medical Health (DGMH) has approached CDAC to implement Drug & Vaccine Distribution Management System (DVDMS) in UP.

1.2 Advantage of DVDMS system

- Top down Approach helps Head Quarter in Better Monitoring & Control down the line
- Help in better Planning & Execution at all administrative level
- Efficient control on supply & Inventory.
- Complete Package for Centralized Supply Chain Management System supporting with best functionality
- Best Performance with high number of users
- Able to extend the functionality as per Department's choice and available Infrastructure.
- Quality Control on Drugs and monitoring & control on Quality of Drugs
- Online Drug Distribution to Patient on DDC
- Intra Depot Excess/Short drug transfer integrated with HQ
- Supplier Payment linked with Supplier Performance.
- Help & Solution Desk for Users

1.3 Key features of DVDMS system

- Provision to enter the Rate contract with suppliers
- Store, Maintain, Update, Search & Display information related to drugs through centralized Database server across multiple stores.
- Ease of Demand Generation and forecast
- Online Indenting from DDWH to Head Quarter on annual demand basis or need based request for purchase basis.
- Purchase Order generation based on consolidated Indenting at HQ
- Purchase Order generation based on consolidated Indenting at District Level

¹ Population, districts and blocks in Uttar Pradesh - <http://upgov.nic.in/upstateglance.aspx>



- Online Purchase Order generation to suppliers
- Ease of entering Challan at DDWH against the issued Purchase Order.
- Online issue of Drug based on Drug Purchase and Availability.
- Provision to maintain expiry date / shelf life for an item wherever applicable.
- Quality Control for Drugs
- Ability of online tracking of Drug Inventory in all Institutions across the State.
- Help in better planning, execution and control on demand and supply.
- Ability to generate customized Reports
- Various alert generation facility with different colors e.g. for expired items, re-order level, Quarantine etc.
- Ability to locate drugs using a number of search criteria in all Institutions.
- Provision to link all drug warehouses hierarchically to understand their physical as well as functional structure
- Inter DDWH Drug Transfer with proper control by HQ
- Bar Code Interface for unique identification of product

1.4 Coverage of the project

The project is expected to be executed out of Lucknow, Uttar Pradesh and rolled out in the all the districts of Uttar Pradesh

1.5 Duration of the project

The Project Management Unit (“PMU” is to be engaged for a period of three years from the date of signing of the contract.)

1.6 Role and Scope of Work for Project Management Unit

1.6.1 Background

To improve availability of drugs in all the healthcare facilities for state of Uttar Pradesh, Govt. of UP is envisaging implementation and rollout of DVDMS (Drug and Vaccine Distribution Management System). It is felt that an improved supply chain process, training and tools would be required to ensure sustainable and adequate benefits from the tool. With this context, a PMU is considered to be set up to address the effective rollout of DVDMS in the Uttar Pradesh along with supply chain orientation across processes, training and tool implementation.



1.6.2 Objectives

The objectives of the PMU will be:

- Ensuring an effective DVDMS rollout
 - Project manage DVDMS implementation
 - User acceptance testing and ensuring tool meets the end user and supply chain requirements
 - Successful rolling out of DVDMS at all healthcare facilities
 - Project manage migration of data and application.
- Strengthening Supply Chain processes in Uttar Pradesh
 - Provide assistance to State government in various supply chain related functions like Procurement, demand estimation, inventory management, Logistics planning etc.
 - Ensure drug availability at healthcare facilities
- Ensure effective DVDMS and Supply Chain training rollout
 - Coordinate DVDMS training rollout by CDAC
 - Coordinate and monitor CDAC and Supply Chain training for healthcare facilities in the state

1.6.3 Deliverables and Timelines

S. No.	Deliverables	Scope	Timeline
1	UAT Testing and Validation	Ensure Acceptance specification meets GAD. Coordinate with CDAC for completion of UAT and conforming the final result. In case of feedback, weekly closure status follow up to be done by PMU and status to be reported in Monthly Status Report	1 month of software release
2	Conduct of DVDMS Training by CDAC and migration of Past data from NIC to DVDMS	Coordination and conduct of CDAC training to be provided to Master trainers Complete migration of existing data from NIC based system to DVDMS within 30 days of Go Live date	within 1 month of go live date



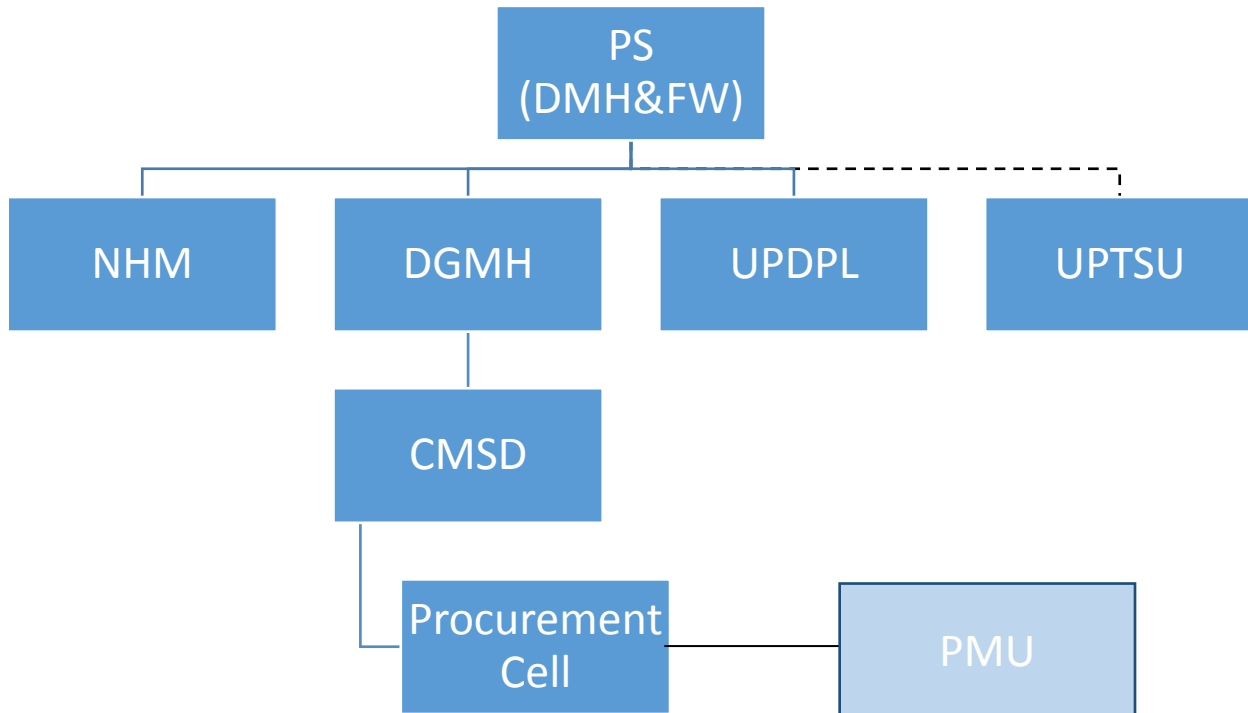
S. No.	Deliverables	Scope	Timeline
3	Roll out of DVDMS at Healthcare facilities	Coordination of Roll out of DVDMS at all healthcare facilities. Closure status of issues to be tracked and follow up to be done by PMU and consolidated status to be reported in Monthly Status Report. In case the rollout of system cannot happen due to factors outside the control of PMU, the payment for this deliverable will be removed from total cost.	At all district Hospitals within 1 month of Go live
			At all CHCs within 3 months of go live
			At all PHCs within 6 months of go live
4	Training and Usage effectiveness of Staff at Health facilities	Planning and monitoring the staff training along with tracking the usage of DVDMS at healthcare facilities. Monthly status reports on issues and follow ups. In case the rollout of system cannot happen due to factors outside the control of PMU, the payment for this deliverable will be removed from total cost.	90% usage by DHs within 3 months of rollout at DHs
			90 % usage by CHCs within 6 months of rollout at CHCs
			90% usage by PHCs within 12 months of rollout at PHCs
5	Application and Database migration of DVDMS	Coordination of Migration and hosting of DVDMS application and Database from CDAC center to an appointed center by govt.	12 months of go live date
6	Supply Chain training	Coordination of Roll out of Supply Chain training at all healthcare facilities. Weekly closure status of issues to be tracked and follow up to be done by PMU and consolidated status to be reported in Monthly Status Report	6 months of completion of divisional training by Accenture
7	Hiring of 3rd party logistics provider	Develop and execute the RFP for 3rd party logistics provider	By Mar '17
8	Demand Generation	Generate and Consolidate the demand for all the EDL drugs at State level so that quantity contracts can be executed with vendors	Demand estimation for FY 17-18 at all districts by Oct 2016
			Demand estimation for FY 18-19 at all districts by Oct 2017



S. No.	Deliverables	Scope	Timeline
9	Inventory norms for drugs at healthcare facilities	Create Inventory norms (Reorder quantity) for all EDL drugs at healthcare facilities level	Inventory norms for all EDL drugs at each healthcare facility by Dec 16
10	Drug availability at healthcare facilities	Monitor drug availability at health facilities and assist CMSD/UPMSC in purchase order planning. In case this deliverable cannot be completed due to factors outside the control of PMU, the payment for the same will be released on condition that the factors have been adequately highlighted by PMU	At least 40% drug availability by end of Dec '17
			At least 75 % drug availability by end of Dec '18
11	Project Status Report	Provide status information on work stream progress and overall project accomplishments for the period	Monthly by 5 th of every month
12	Monthly Issue, Risk and Action Log	Tracks risks, issues, mitigation plans and contingency plans.	Monthly by 5 th of every month
13	Monthly Training and Usage Effectiveness Report	Tracks Training and Usage effectiveness of DVDMS across various modules in all healthcare facilities	Monthly by 5 th of every month
14	MIS Report	Generate Dashboard report for CMSD/UPMSC for drug availability and inventory across healthcare facilities	By 15 th of every quarter (as per Financial year calendar)

1.7 Structure of PMU and Reporting Relationships

The following diagram depicts the proposed structure of the PMU and the reporting relationships it will have at various levels of governance



The PMU is required to provision the following profiles.

- a. PMU Lead Manager
- b. IT Expert
- c. Supply Chain Expert 1
- d. Supply Chain Expert 2

1.8 Staffing Requirements and Profiles Required

1.8.1 PMU Lead Manager

S. No.	Profile Requirement
1	<p><i>Qualification</i></p> <ol style="list-style-type: none"> 1. Must possess Post-Graduate degree or diploma in Management 2. Certification in Program/Project Management is preferred (PMP ® or PRINCE2 ®) 3. Experience in Health Sector is preferred <p><i>Experience</i></p> <ol style="list-style-type: none"> 1. Must have at least 10 years of experience in Supply Chain/Healthcare/IT. 2. Should have successfully program managed or delivered at least one system integration project with Union/State/UT governments or PSUs.



S. No.	Profile Requirement
	<ol style="list-style-type: none"> Should have successfully program managed or delivered at least one supply chain project with Union/State/UT governments or PSUs At least 7 years of experience in project management with Union/State/UT governments or PSUs in India.
	<p><i>Deployment</i></p> <p>Shall be based in Lucknow, Uttar Pradesh on a full-time basis during the period of the contract.</p>

1.8.2 IT Expert

S. No.	Profile Requirement
1	<p><i>Qualification</i></p> <ol style="list-style-type: none"> Must possess B.Tech, MCA, BE or equivalent degree from a AICTE recognized University in India <p><i>Experience</i></p> <ol style="list-style-type: none"> Must have at least 7 years of experience in IT industry Should have completed at least 3 Union/State/UT government or PSU projects involving Rollout of IT Systems
	<p><i>Deployment</i></p> <p>Shall be based in Lucknow, Uttar Pradesh on a full-time basis during the period of the contract.</p>

1.8.3 Supply Chain Expert 1

S. No.	Profile Requirement
1	<p><i>Qualification</i></p> <ol style="list-style-type: none"> Must possess Masters or equivalent degree from a recognized University in India <p><i>Experience</i></p> <ol style="list-style-type: none"> Must have at least 7 years of experience in Supply Chain. Should have completed at least 3 Union/State/UT government or PSU projects involving Inventory management and Distribution



S. No.	Profile Requirement
	<p><u>Deployment</u> Shall be based in Lucknow, Uttar Pradesh on a full-time basis during the period of the contract.</p>

1.8.4 Supply Chain Expert 2

S. No.	Profile Requirement
1	<p><i>Qualification</i></p> <ol style="list-style-type: none"> 1. Must possess Masters or equivalent degree from a recognized University in India <p><i>Experience</i></p> <ol style="list-style-type: none"> 1. Must have at least 7 years of experience in Procurement. . 2. Should have completed at least Union/State/UT government or PSU projects involving demand estimation and procurement.
	<p><u>Deployment</u> Shall be based in Lucknow, Uttar Pradesh on a full-time basis during the period of the contract.</p>

2 Schedule – 2: Service Level Agreements

S. No.	Service Level	Target	Penalty for non-adherence to target
1	Submission / Completion of deliverables / activities	As per timelines specified in Clause 1.6.3 of the Schedule 1.	1% of the corresponding payment for the deliverable / activity for every week of delay directly attributable to the PMU subject to a maximum of 10% of the payment due for that deliverable / activity



Detailed Penalty Matrix:

S. No.	Deliverables	Activity	Target	Penalty for non adherence to the target attributable to PMU
1	UAT Testing and Validation	Ensure Acceptance specification meets GAD. Coordinate with CDAC for completion of UAT and conforming the final result. In case of feedback, weekly closure status follow up to be done by PMU and status to be reported in Monthly Status Report	1 month of software release	.05 % for every week of delay, max penalty capped to 0.5% of total payment
2	Conduct of DVDMS Training by CDAC and migration of Past data from NIC to DVDMS	Coordination and conduct of CDAC training to be provided to Master trainers Complete migration of existing data from NIC based system to DVDMS within 30 days of Go Live date	Within 1 month of go live date	.05 % for every week of delay, max penalty capped to 0.5% of total payment
3	Roll out of DVDMS at Healthcare facilities	Coordination of Roll out of DVDMS at all healthcare facilities. Closure status of issues to be tracked and follow up to be done by PMU and consolidated status to be reported in Monthly Status Report. . In case the rollout of system cannot happen due to factors outside the control of PMU, the payment for this deliverable will be removed from total cost.	At all district Hospitals within 1 month of Go live	.04 % for every week of delay, max penalty capped to 0.4% of total payment
			At all CHCs within 3 months of go live	.03 % for every week of delay, max penalty capped to 0.3% of total payment
			At all PHCs within 6 months of go live	.03 % for every week of delay, max penalty capped to 0.3% of total payment
4	Training and Usage effectiveness of Staff at Health	Planning and monitoring the staff training along with	90% usage by DHs within 3 months of	.04 % for every week of delay, max penalty



S. No.	Deliverables	Activity	Target	Penalty for non adherence to the target attributable to PMU
	facilities	tracking the usage of DVDMS at healthcare facilities. Monthly status reports on issues and follow ups. In case the rollout of system cannot happen due to factors outside the control of PMU, the payment for this deliverable will be removed from total cost.	rollout at DHs	capped to 0.4% of total payment
			90 % usage by CHCs within 6 months of rollout at CHCs	.03 % for every week of delay, max penalty capped to 0.3% of total payment
			90% usage by PHCs within 12 months of rollout at PHCs	.03 % for every week of delay, max penalty capped to 0.3% of total payment
5	Application and Database migration of DVDMS	Coordination of Migration and hosting of DVDMS application and Database from CDAC center to an appointed center by govt.	12 months of go live date	.05 % for every week of delay, max penalty capped to 0.5% of total payment
6	Supply Chain training	Coordination of Roll out of Supply Chain training at all healthcare facilities. Closure status of issues to be tracked and follow up to be done by PMU and consolidated status to be reported in Monthly Status Report	6 months of completion of divisional training by Accenture	.05 % for every week of delay, max penalty capped to 0.5% of total payment
7	Hiring of 3rd party logistics provider	Develop and execute the RFP for 3rd party logistics provider. In case the hiring of 3 rd party logistics provider is not approved by govt., the payment for this deliverable will be removed from total cost	By Mar '17	.1 % for every week of delay, max penalty capped to 1% of total payment
8	Demand Generation	Generate and Consolidate the demand for all the EDL drugs at State level so that quantity contracts can be executed with vendors	Demand estimation for FY 17-18 at all districts by Oct 2016	
			Demand	.1 % for every



S. No.	Deliverables	Activity	Target	Penalty for non adherence to the target attributable to PMU
			estimation for FY 18-19 at all districts by Oct 2017	week of delay, max penalty capped to 1% of total payment
9	Inventory norms for drugs at healthcare facilities	Create Inventory norms (Reorder quantity) for all EDL drugs at healthcare facilities level	Inventory norms for all EDL drugs at each healthcare facility by Dec 16	.05 % for every week of delay, max penalty capped to .5% of total payment
10	Drug availability at healthcare facilities	Monitor drug availability at health facilities and assist CMSD/UPMSC in purchase order planning. In case this deliverable cannot be completed due to factors outside the control of PMU, the payment for the same will be released on condition that the factors have been adequately highlighted by PMU	At least 40% drug availability by end of Dec '17	
			At least 75 % drug availability by end of Dec '18	.1 % for every week of delay, max penalty capped to 1% of total payment
11	Project Status Report	Provide status information on work stream progress and overall project accomplishments for the period	Monthly by 5 th of every month	0.25% for every week of delay, max penalty cap to 2.5 % of total payment.
12	Monthly Issue, Risk and Action Log	Tracks risks, issues, mitigation plans and contingency plans.	Monthly by 5 th of every month	
13	Monthly Training and Usage Effectiveness Report	Tracks Training and Usage effectiveness of DVDMS across various modules in all healthcare facilities	Monthly by 5 th of every month	
14	MIS Report	Generate Dashboard report for CMSD/UPMSC for drug availability and inventory across healthcare facilities	By 15 th of every quarter (as per Financial year calendar)	



3 Annexure – 1: High level scope of work of CDAC

CDAC shall be expected to perform the following activities as part of this project for the Director General of Medical Health, (DGMH), UP.

The Scope of Work consists of four stages as indicated below:

Stage I – GAD and FSD: In this stage a Gap Analysis Document (GAD) will be generated by C-DAC listing the gaps between the system and application being developed, detailing the action plan in the form of a GANTT/PERT that indicates all subtasks, their linkages, and responsibility for each. This document will be submitted by C-DAC to DGMH, modified based on mutual discussions and adopted jointly by the parties for development of application. This completes the first stage.

In this stage a Finalized System Document (FSD) will be generated by C-DAC listing the Hardware Specifications including Connectivity at Head Quarter, IT Cell, on site Project Implementation Unit, Main Store, Sub Store and Drug Distribution Counters.

Stage II – Application Development/Customization: In this stage, C-DAC will complete the modification/customization and tuning as indicated in the GAD and generate the user manuals for the various control pulpits in consultation with DGMH.

The next step in this stage is UAT, A formal training session at the DGMH where the UAT plan will be explained to the user community. This will be followed by the conduct of the UAT. The results of the UAT will be summarized & codified and presented to a high level team in a meeting held at the DGMH. The minutes of the meeting will indicate the mutually agreed changes. The UAT document will now be modified to reflect these changes and submitted to the DGMH for its final approval. Upon receiving the approval, the application modules will be modified/ customized as per these final changes. The successful completion of UAT as above signals the end of stage II.

During this stage only C-DAC will initiate the process of acquiring safe to host certificate.

Stage III – System Installation Stage: In this stage, C-DAC will set up the system hardware at the CDC and DGMH will setup the system hardware at respective end user locations. The setting up of hardware, network, third party software etc. would include up gradation/ up scaling/ enhancement options as per the system requirement. On completion of these activities, it will be inspected jointly by DGMH & C-DAC. In case any deviations are found, they are reconciled and addressed appropriately by DGMH.

C-DAC would support the IT Cell formed by DGMH at this stage. C-DAC will provide them training as envisaged in Annexure I on system installation and subsequent Operationalization. This cell will now be used to complete the Master Data Base creation at



the DGMH and the same will be submitted to the DGMH for verification. The Master Data Base will now be modified as per the modifications indicated and re-submitted for final approval. The master database is now transferred into the system at the DC. The successful implementation completion certificate and sign off will be taken from implementation committee.

The next step in this stage is to conduct the training program for the end users at suitable location. C-DAC will conduct the training program as envisaged in the Annexure I and Annexure II under training section.

The system is now deemed to be ready for operations from DC and it will go live at the earliest as decided by the DGMH.

Stage IV – Operationalization and Operational Support: In this stage, IT Cell manages the operations and extends the operational support to the end user. At DC application engineer will ensure the effective management of the software solution. C-DAC will provide the hand holding support, during this period if any defects/Bugs arise, same will be attended within one working day, addressed within three working days and in exceptional conditions it may go up to six working days, without any financial implications.

3.1.1 Project Plan and Deliverables

PROJECT PLAN

S. No.	Stage	Activity	Time	Date/Duration
1	Stage-I	Preparation of Gap Analysis Document (GAD) and Finalized System Document (FSD)	30 Days	Within 2 months from the Effective Date
		Acceptance of Gap Analysis Document (GAD) and Finalized System Document (FSD)	5 Days	
2	Stage-II	Application Customization based on approved GAD	60 Days	Within 4 months from the Effective Date
		User Acceptance Testing (UAT)	5 Days	
		UAT Based Modification and afterwards Verification by DGMH	20 Days	
Parallel Activities				



3	Stage-III	Infrastructure Setup and Hosting at Data Center *	90 Days	Within 4 months from the Effective Date
		Configuration of the application for Implementation and Training	30 Days	
		Sign Off with Approval and Go Live	1Day	
Time period from the Effective Date				04 months
4	Stage-IV	Operationalization-Operational Support (OOS)	60Days	For 2 months from the completion of Stage-III
		Handholding Support For 1 Year	12 Months	For 12 months after completion of OOS
Months = Calendar Months and Effective Date = Date of MoU signing				
* DGMH would ensure that all the Hardware, LAN & WAN, Third Party Software's etc. are in place at the end of Stage-II and for successful initiation of Stage-III.				

GANTT CHART

A Detail Project Activity Plan Document will be prepared by C-DAC listing above activities and detailing the action plan in the form of a GANTT that indicate all subtasks, their linkages, and responsibility for each. This document will be submitted by C-DAC to DGMH, modified based on mutual discussions and adopted jointly by the parties for implementation.

PROJECT DELIVERABLES

- Project Plan and schedule
- GAP Analysis Document along with FSD
- Customized version of application software
- User Acceptance Test Reports duly signed by the concerned
- Training on the software developed
- Support of IT Cell
- Setting up of Onsite Implementation Team
- Report on Deployment at the CDC
- Safe to Host Application Certification



- Software upgrades/enhancements
- Source Code of the Customized Application software as per Article 15

Documents to be provided:

- User Manual of the software
- Technical Manual of the software developed

Following reports are to be provided for all the activities given in Scope of Work:

- Monthly Status reports for all activities/services defined in scope of work
- Report within 24 hours on the security breach in the complete system as and when detected and action taken by C-DAC for its removal
- Root Cause Analysis reports for all critical services failure and any other major problem.
- Action plan to prevent re-occurrence, with project plan / tasks required and timing for each major milestone of the correction effort, and identification of DGMH responsibilities in the correction process