

Request for Proposal for Development of Mentoring Application

DEVELOPMENT OF MENTORING APPLICATION

Contents

1.	Introduction	4
2.	Objective	5
3.	Scope of Work.....	6
3.1	Detailed Description of Activities:.....	6
3.1.1	System Requirements Study and Solution Design	6
3.1.1.1	Project Plan and the Inception Report preparation.....	6
3.1.1.2	System Requirement Specification (SRS)	6
3.1.1.3	Solution Design Document preparation	6
3.1.1.4	Prototype Development and Demonstration	7
3.1.2	Application Development	7
3.1.2.1	Development and Testing of Mentoring Application - application and Mobile App	8
3.1.2.2	Dashboard and Reports	8
3.1.2.3	Competency Module as a Middleware	9
3.1.2.4	SMS/Alert Solution.....	10
3.1.2.5	Security.....	10
3.1.2.6	Key Consideration	11
3.1.3	Testing Requirements	11
3.1.3.1	User Acceptance Testing / Pilot Testing.....	11
3.1.4	Documentation and Versioning	11
3.1.5	Operation & Maintenance from the date of Go-Live.....	12
3.2	Function Requirement Specification.....	12
3.2.1	Functional Requirements	12
3.2.1.1	Mentoring Application	13
3.2.1.2	Mentoring Application Competency Module	17
3.2.1.3	Mentoring Application Backend Support.....	19
3.2.1.4	Application Admin.....	19
3.2.1.5	Authentication	19
3.2.1.6	Privilege Administration.....	19
3.2.1.7	User and Group Management	19
3.2.1.8	Rights/Privilege Management.....	20
3.2.2	MIS Reporting	20
3.2.3	Audit Trail.....	20
3.2.4	Password Retrieval / Reset	21
3.2.5	Search /Advanced Search	21
3.2.6	Integration Services	21
3.2.6.1	Integration with External Applications and Systems	21
3.2.7	Proposed Backend Components / Server Interactions	21

3.3	Technical Specification.....	22
3.3.1	Application and Other Standards.....	22
3.3.2	Performance matrix	23
3.3.3	Acceptance Criteria	23
3.3.3.1	Security.....	23
3.3.3.2	Backup and Recovery	23
3.3.3.3	Uptime and Performance.....	24
3.3.3.4	Version Control and Bug Fixing	24
3.3.3.5	Future Changes / Application Upgrades	24
3.3.3.6	Data Loss Protection	24
3.4	Training Requirements.....	24
3.4.1	Identification of training Material.....	25
3.4.2	Circulating pre-training material.....	25
3.4.3	Language for delivery of training	25
3.5	Change Management.....	25
3.5.1	Need for Change Management.....	26
4.	Key Project Milestones and Timeline	26
5.	Payment Terms & Schedule	27
6.	Performance Guarantee	28
	Service Level Agreement and Penalty for Implementation Phase	28
7.	Eligibility criteria.....	29
8.	Technical Proposal	30
9.	Financial Proposal	31
10.	Criteria for Evaluation of Bidders.....	31
10.1	A two-stage procedure shall be adopted in evaluating the proposals:	31
11.	Pre-Bid Queries	34
12.	Bid Submission	34
13.	Award of Contract.....	34
14.	General Instructions and Consideration	35

Acronyms

- *AMC - Annual maintenance charges*
- *MIS – Management Information System*
- *SC – Sub Centre*
- *PHC – Primary Health Care*
- *CHC – Community Health Care*
- *RfP – Request for Proposal*
- *IHAT – India Health Action Trust*
- *GoI – Government of India*
- *UPTSU- Uttar Pradesh Technical Support Unit*
- *BMGF- Bill & Melinda Gates Foundation*
- *UoM- University of Manitoba*

1. Introduction

India Health Action Trust (IHAT) aims at improving public health initiatives by supporting programs nationally and globally through comprehensive technical assistance in program planning, management and monitoring. IHAT has set up a Technical Support Unit (TSU) for the Government of Uttar Pradesh (GoUP) to provide techno-managerial assistance to improve the coverage of key reproductive, maternal, new-born, child health and nutrition (RMNCH+A) interventions and services in the state from the funding support of Bill & Melinda Gates Foundation (BMGF) through University of Manitoba (UOM), Canada.

IHAT believes that strengthening the existing health system is the best way to achieve sustained health outcomes at scale. It has developed a “theory of change” to guide its support to government in improving these health outcomes, and providing techno-managerial support lies at the core of this approach. IHAT transfers skills and knowledge to partners through embedded techno-managerial support, including hands-on orientation to gap analysis and prioritization; developing standards, systems and processes; monitoring and evaluation; and problem solving.

Uttar Pradesh as a state is comprised of 18 Divisions, 75 Districts and 821 Blocks is the most populous state in India. Health infrastructure contains public and private centres (like sub-centre, primary health centre, district hospital and common health centre etc.) at different level is the key backbone to strengthening the health ecosystem in the state.

The Facility Assessment Study conducted by India Health Action Trust (IHAT) in 25 High Priority Districts (HPDs) of Uttar Pradesh (2013), showed that there were significant gaps in facility preparedness for providing Reproductive, Maternal, New born and Child Health (RMNCH) Services. The primary care level facilities – Primary Health Centers (PHCs) and Community Health Centers (CHCs), which accounted for nearly 70% of all public health deliveries, were not adequately prepared for providing basic emergency obstetric and new born care. Less than 20% of the clinical providers – Auxiliary Nurse Midwives (ANMs) and Staff Nurses (SNs) had been trained as Skilled Birth Attendants (SBAs). The availability of essential new born services such as new born resuscitation, phototherapy for new born and Vitamin K for new borns, was low. There was also a shortage of essential medical supplies such as uterotonics, anti-hypertensive, injectable ampicillin and injectable gentamicin¹.

Similar gaps were observed across different cadres of healthcare professionals operating not only at primary healthcare centres but also secondary and tertiary healthcare centres across UP. Such cadres may be doctors, specialists, paramedics, pathologists, radiologists, pharmacists, critical care experts and many more.

To overcome this challenge, The Mentoring program is established, that aims to improve knowledge, skills and practices of the clinical staff through its dedicated workforce/change agents called Mentors. At the state level, program policy design, monitoring and clinical specialists were actively engaged in the program development. The program also intends to implement Mission Karmayogi. Mission Karmayogi is National Programme for Civil Services Capacity Building has been envisioned by the Government to address the changing needs and aspiration of the citizen. The Programme has been designed to enhance the civil services under a national Programme, anchored by an apex body headed by the Prime Minister. It is complemented by iGOT Karmayogi - a comprehensive online platform that enables online, face-to-face, and blended learning and manages lifelong learning records of the officials. Linkages between the two will enable (a) AI enabled assessment of competency levels and competency gaps in an individual and (b) data driven strategic HR decision making, both leading to Strategic HR management of the Government.

In context to the above, IHAT will identify and select an agency who can develop an enterprise level application to cater all the demand of the business requirement for Mentoring Application for Healthcare Professionals across Uttar Pradesh (UP).

2. Objective

The objective of developing and implementing a Mentoring Application in state of Uttar Pradesh which are linked at multi-level facilities like DH, PHC, CHC and SC hereafter referred as Smart Management to improve the quality, efficiency and effectiveness of services provided to the patients and also support continuity, consistency, planning and informed decision making for all stakeholders.

Key Components

The major components of the Mentoring Program for Healthcare Professionals includes provision for:

1. Competency Assessment based on OSCE (Objective Structured Clinical Examination) is mapped to Competency-Levels (as identified using FRACing method of Mission Karmyogi))
2. Allocating and Scheduling OSCE/Competency Based Improvement Plan (Mentoring/Learning Process)
3. Tracking Competency/OSCE Improvement
4. Reports and Data Analysis to understand Competency Based Capacity of Healthcare Professionals across UP

This project aims at creating ICT based Mentoring Application to provide benefits to all stakeholders and enable the administration in improving the service delivery system across the state by: -

- Ensuring management of quality of skill through Competency mapped OSCE
- Use of ICT to enhance the real time information gathering and reporting for monitoring and decision making related to human resource optimization for healthcare professionals across all the cadres in the state of UP
- Automation of the workflow wherever possible and removal of manual processes and / or dependency on the human resources in ongoing capacity building exercise and skill improvement eventually leading to resource optimization
- Monitoring of quality of services related to Healthcare Capacity Building

3. Scope of Work

The entire Scope of Work under the RFP constitutes selection of an Agency for design, development, demonstration, testing, operation and maintenance of the Mentoring Application in the state of Uttar Pradesh.

A Mentoring Application is envisaged to be a comprehensive, integrated information system designed to manage overall growth (in terms of service delivery) of the basic building block of the healthcare ecosystem- the clinical staff, by focusing on their mentoring needs, analysing their knowledge and skill by observational checklist and finding gaps and mentoring them accordingly to achieve the best practices for the services and efficient and effective skills to provide the best healthcare services.

The RFP envisages the following components of work to be executed by a competent developer and System Integrator in order to fulfil the objectives of the proposed Mentoring Application.

1. Development, installation, configuration, customization, integration, of Mentoring Application together with the necessary database and other software
2. Implementation of Mentoring Application according to the reference architecture, performance metrics, acceptance criteria's and conformance to industry standards including its testing and certification.
3. Operation and Maintenance of the entire Mentoring Application including Application for a period of two years from the date of Go-Live
4. Change Management and Capacity Building including Training of users for effectively using the system.

3.1 Detailed Description of Activities:

3.1.1 System Requirements Study and Solution Design

3.1.1.1 Project Plan and the Inception Report preparation

- The Agency shall prepare a Project Plan for the entire project
- The Agency needs to prepare and submit an Inception Report, which will serve as the foundation document for all activities related to the project. Additionally, the Inception Report must cover the risks the Agency anticipates and the plans they propose towards risk mitigation.
- The acceptance of the Inception Report by IHAT is necessary before proceeding to the next stage of the project.

3.1.1.2 System Requirement Specification (SRS)

- The indicative functional requirements are provided in coming section of the RFP for the purpose of reference only. The business logic framework for Mentoring Application is built according to the functioning provision of IHAT. The Agency shall have detailed discussions with concerned stakeholders and perform complete requirement engineering processes.
- The Agency is expected to capture all findings and propositions in System Requirement Specification (SRS) document and Prototype, which shall detail the requirements of the complete solution up to the last detail. The documents should also present a clear plan of action to implement the Mentoring Application. The Prototype shall demonstrate all the features and functions of Mentoring Application. Agency shall consult with the subject matter experts designated by IHAT whenever necessary, to obtain more details on the requirements of the project

3.1.1.3 Solution Design Document preparation

The SI shall prepare a solution design document (SDD) containing:

- Complete architecture of the proposed Mentoring Application
- Design of an audit trail capturing mechanism for all transactions (add, update and delete) using transaction log reports, so that errors in data, intentional or otherwise, can be traced and reversed, throughout the project duration.
- The security aspects, measures etc. to be deployed for the solution
- Access Controls measures - to ensure that the databases are not tampered or modified by

the system operators or database administrator.

- Implementation plan for data security- to allow for changes in technology and business needs.
- Plans for various types of testing and audit as required by this RFP.
- Any other section as required in the SSD document

3.1.1.4 Prototype Development and Demonstration

- The Agency is expected to develop a prototype of Mentoring Application based on SRS and SSD documents prepared. Prototype should consist of navigation plan of the system, data entry forms, reports and should be capable to demonstrate usability of the designed solution with respect to functionalities of Mentoring Application. The Agency may use sample data for demonstration of prototype.
- The Agency shall demonstrate the prototypes of sub-modules and mobile app of Mentoring Application solution. The prototypes of sub-modules and mobile app of Mentoring Application shall be considered for approval one by one as and when they are submitted for approval to IHAT. The agency need not wait for the completion of prototype of the entire solution for the same. This will help to expedite the feedback and approval process. However, the agency shall have to demonstrate integrated functionalities and workflow across modules on the complete solution prototype when all the sub-modules are approved and accepted by IHAT. The acceptance of the integrated functionalities and workflow shall be taken as the acceptance of prototype.

3.1.2 Application Development

The proposed workflow of the Mentoring Application can be found below for the specific use case of Staff Nurse. Similar workflows may be utilized for Doctors and other clinical staff as well as configured. This is a summarized version of the efforts to be undertaken by the while developing the platform:

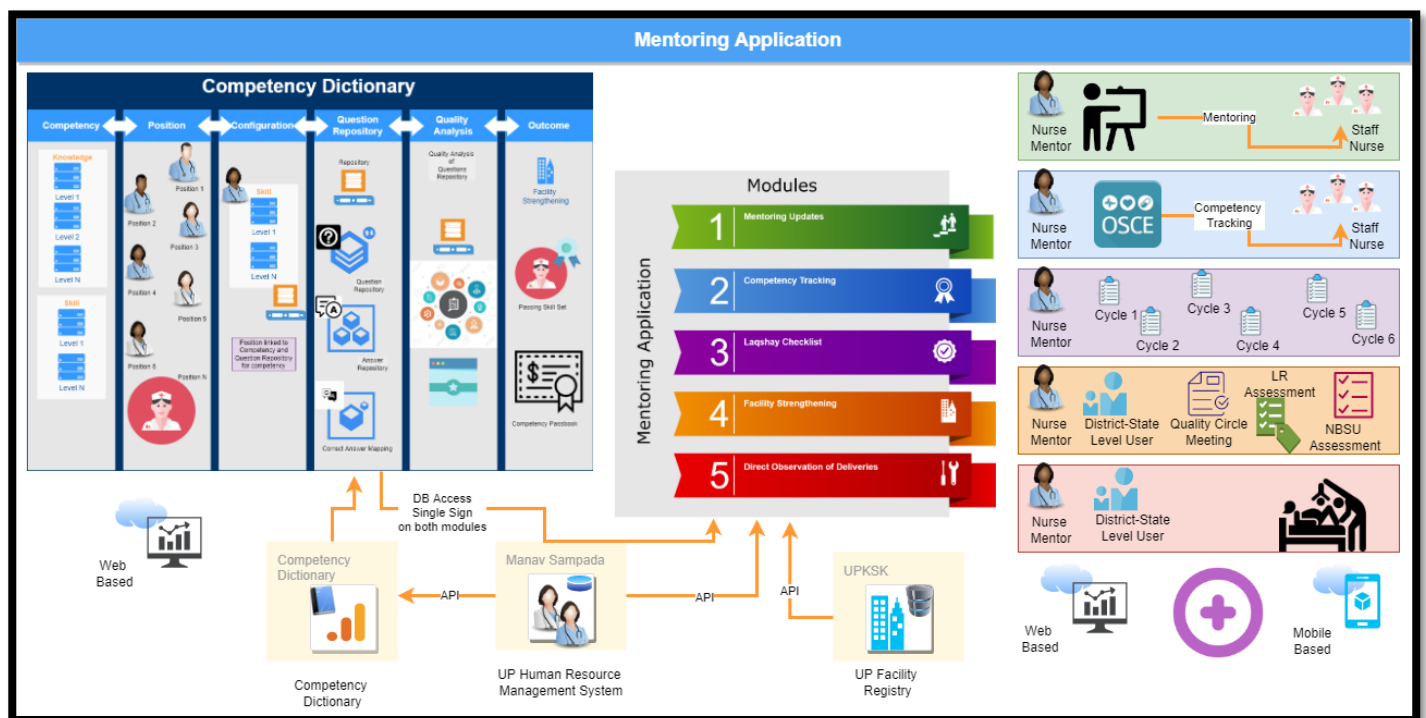


Fig i. Nurse Mentoring Application Project Modules

The Mentoring Application to have the following modules which are explained briefly in the Functional Requirement:

1. Competency Dictionary: A web based competency dictionary is to be designed, developed and maintained as part of the project.

2. Mentoring Modules: The Mentoring breaks in several different sub modules, which are to be designed, developed and maintained as both web and mobile based application.
 - a. Mentoring Updates
 - b. Competency Tracking
 - c. Laqshya Checklist
 - d. Facility Strengthening
 - e. Direct Observation of Delivery

The application should be designed and developed in such a way that its interoperable and could easily be integrated with other applications in future. The current scenario will also require to integrate different system to fetch data, a few of them are as follows:

1. Manav Sampada: Human Resource Management System of Health Professional within Uttar Pradesh.
2. UP Ke Swasthya Kendra: Health Facility Registry of Uttar Pradesh.
3. Others

3.1.2.1 Development and Testing of Mentoring Application - application and Mobile App

The agency will be responsible for development, integration, testing and deployment of the Nurse Mentoring Application along with portals based on:

- The functional requirements given in coming section of the RFP and
 - SRS & SDD finalized by the SI in consultation with the IHAT
 - Prototype development in consultation with the IHAT
 - Project implementation approach
 - Any other related documents
- The Mentoring Application should be able to support all common browsers and mobile platforms (like Internet explorer, Mozilla, Chrome, Safari, Android, iOS, Windows platform etc. up to the latest version).
 - Updates shall be provided by the Agency to support the future versions of the OS platforms and browsers free of cost during the Operation & Maintenance (O&M) period.
 - The mobile application shall be used by all the stakeholders, so, the application must support the Android and iOS operating systems versions of low-cost entry level smart phones also.
 - All the forms labels and instructions etc. shall be available in the Mentoring Application both in English and Hindi language.
 - The Agency is required to design the solution in such a way, that it works smoothly on the available bandwidth while meeting the SLAs and other requirements of this RFP.
 - The Nurse Mentoring Application solution should be designed in such a way that all the functionalities must be available to the end user even at the minimum Broadband speed specified by the Government of India/Telecom Regulatory.

3.1.2.2 Dashboard and Reports

The dashboard generated based on the data reported/collected on this platform will support decision making across the continuum of care.

Thus, the agency will create a Dashboard for all the application users available across different user levels in the state. The hierarchy based down drill down will be made available at each level. For instance, at the State level user should be able to view the dashboard for its sub-geographies like Division, District, Block, Facility, etc. The dashboard will be developed based on the Key Indicators selected program wise. The Dashboard must be flexible enough for viewing the data/graphs as per the requirement of the end user, and maybe facilitate the following views:

1. Competency Wise: Showing comparison or data/graphs on basis of the competency over a period of time
2. Geography Wise: Showing comparison or data/graphs on basis of the Geographical selection, over a period of time
3. Skill Wise: Showing improvement in form of data/graphs per skill wise to analyse the

effectiveness of the skill, over a period of time

4. Facility Wise: Showing improvement/Comparison, in form of data/graphs facility wise, over a period of time.

All these views will be accessible across the Timeline based filters available with the application users.

In addition to the dashboard, the agency will make a provision for generation of reports with suitable data analytics.

3.1.2.3 Competency Module as a Middleware

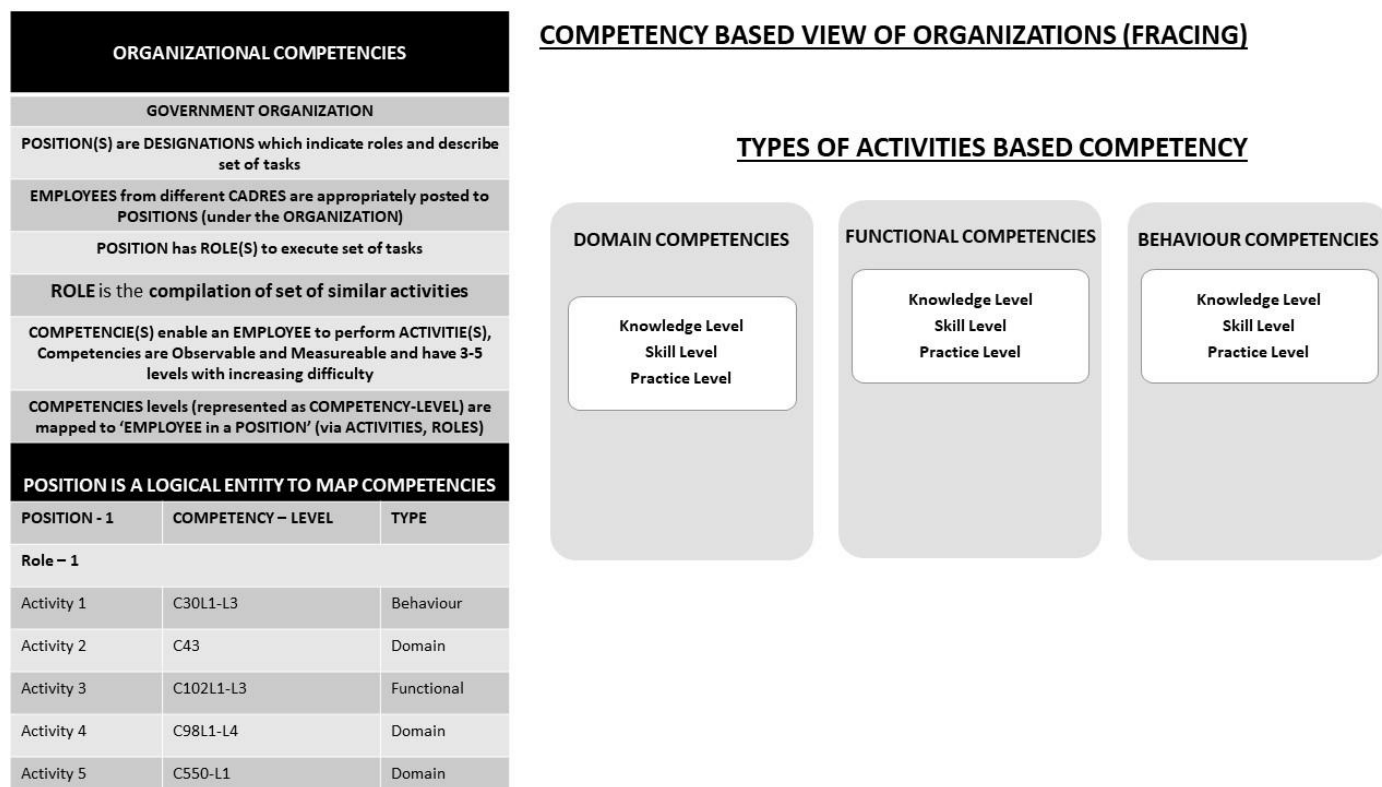


Fig ii. Illustrative Competency Based View of Organization

The competency based view is illustrated in the picture above. The details of such an organizational structure are briefed in the points below: -

1. An organization will be considered to have following hierarchical structure:
 - a. Cadre(s) – Government Officials are recruited under different cadres
 - b. Position(s) – Positions are designations which indicate roles and describe set of tasks within an organization
 - c. Role(s) – A role is the compilation of set of similar activities
 - d. Activity(s) and Competency(s) – Competency enable an employee to perform activities,
 - i. Competencies are Observable and Measureable and have 3-5 levels with increasing difficulty
2. Allocation of competencies for the employees can be understood in the points given as under:
 - a. Position is the level at which an employee is deputed (this is the level in the organizational structure at which a human resource may get deputed)
 - b. Serving at a position an employee may have to take different roles
 - c. Employees performing duties of a role is expected to hold competencies required to perform activities defined for the roles
 - d. Positions have unique activities; for one position, a particular activity may appear only once

3. The above way of articulating work of an employee is called FRAC-ing. This is representing organization as FRAC (Function, Roles, Activities and Competencies)
4. For ease of implementation, the competencies are classified as under: -
 - a. Domain Competencies – relates to clinical learnings (academics / elsewhere)
 - i. Competencies for Professional (Clinical) Learning and Know-How
 - b. Functional Competencies - relates to acquired skills to officiate in a position to deliver functional value
 - i. Competencies additional to Domain Competencies required to perform duties of a position; competencies related to officiating in a position may fall under this category; (say) for a doctor competencies related to financial accounting or appraisal of sub-ordinates may classify as Functional Competencies
 - c. Behaviour Competencies - Demonstration of behaviour expected during discharge of duties
 - i. Competencies to officiate in a manner as deemed by a professional
5. Each of the competency is observable and measureable and have 3-5 levels with increasing difficulty. Each of these competencies (Domain, Functional and Behaviour) can be assessed to have possessed by a professional. The initial levels of competency may signify possession of knowledge and higher levels may signify skill. For any professional assessed to have possessing adequate knowledge and skill, practice assessment is carried out to ensure whether the professional is using knowledge and skill at work.
6. Once FRACing is completed, the employees having adequate competencies can be tagged to any of the suitable positions within an organization
7. A tagged employee is made to take initial competency assessment to assess the baseline levels of competencies they possess
8. Based on analysis of baselined competencies of respective employee, an individual competency improvement plan is proposed
9. Formal learning plan (Theoretical Learning, Mentoring and Assessment, Professional Training and Certification) is assumed to be mechanism to execute competency improvement plan

In view of the above, the scope of this RFP will be to facilitate the assessment and improvement of professional competencies linked to professional skills. OSCE standard practice will be the preferred methodology. Mentoring and In-House OSCE assessment (Observational Assessment) will be covered under the scope of this RFP. Application for conduction of proctored OSCE assessment at a designated Assessment Centre will also be part of this RFP.

3.1.2.4 SMS/Alert Solution

The agency will integrate the relevant modules, functions etc. of Mentoring Application with SMS/Email Alert gateway functionalities. OTP based authentication shall be provided for specific features and modules (will explore this features more during requirement gathering phase). The details of such features and modules shall be discussed by IHAT with Agency.

3.1.2.5 Security

Security shall be one of the important requirements of Nurse Mentoring Application. The Agency shall adhere to IT security best practices right from the inception and design phase of the application development till the end of O&M. The bidders shall elaborate the proposed security practices as part of the technical solution of the bid document. The application should be free of any vulnerability and malware. The security solution shall be implemented in the following layers of the Nurse Mentoring Application:

- Application
- Database
- Server (Infrastructure)
- Mobile App

The proposed security solution shall adhere to all security guidelines issued by OWASP from time to time.

The Agency's responsibility shall be to continuously manage a secure environment, implement appropriate mitigating controls, integrate with the core IT environment and escalate appropriately in case of incidents or emergencies. As part of the technical bid, the bidders shall propose the hardware and security solutions required to implement security solution as mentioned in this section.

3.1.2.6 Key Consideration

- Solution should comply with latest Information Technology Act of India including all amendments thereon.
- Based on ISO 27001:2013 standards, user access to the system must be through an authentication process, which should involve specification of a user Identification, a password and the applications displayed must be as per the user profile and authority.
- The system should allow user to change his/her password based on a given time frame as well as give the User the option to change the Nurse Mentoring Application's password at any time.
- The system should disable the User profile after three unsuccessful log-on attempts. The system should have provision for re-enabling the disabled User profiles after single or multiple steps of online and/or offline verification of the User. The system should be able to log details of successful and failed attempts (number of attempts, IP Address, MAC Address, etc) to the system.

3.1.3 Testing Requirements

Agency shall create the test strategy document that defines the requirements and goals of the configuration, determine the tools and methods used to check that the system responds correctly, determine how and when the test will be performed etc.

The test strategy document shall guide the project team through the implementation to ensure that planning and conducting testing activities in the various phases of the implementation are proper. The various testing phases are as follows

3.1.3.1 User Acceptance Testing / Pilot Testing

- Agency shall prepare test cases for User Acceptance Testing (UAT) in consultation with concern Authority of IHAT (Program Team). The UAT shall be conducted in the form of Pilot Testing for each phase of the project. Agency shall facilitate the team from Authority and this test. For Pilot Testing, modules of Mentoring Application shall be chosen and the Agency shall demonstrate all the functionalities of the Mentoring Application, including end to end workflow, using real data for the department.
- The modules for the Pilot Testing shall be chosen by IHAT at an appropriate stage of the project, such that, it provides sufficient time to the Agency to implement the solution and demonstrate the Pilot Testing. Agency will close all bugs etc. identified during the UAT. This process of UAT will continue in an iterative manner till zero defects are shown by the Agency for the test cases developed. The SI also needs to ensure that errors/ defects detected in previous round of tests do not get repeated in successive tests.
- The agency will submit a Pilot Testing report along with test cases, tests results etc. at the end of the testing exercise and get a sign-off on the UAT/ Pilot Test report from Authority.

3.1.4 Documentation and Versioning

The Agency must ensure that complete documentation of Nurse Mentoring Application Project is provided with comprehensive user manuals, and adhere to standard methodologies in software development as per ISO standard and/or CMMi models. The project team shall provide the following documentations in hard as well as soft copies:

- Detail Project Plan
- Fortnightly & Monthly progress reports
- Traceability Matrix document

- Communication Plan listing all stakeholders in the project, defining their roles and responsibilities
- System Requirement Specification (SRS) document containing detailed requirement capture and analysis including functional requirement, Interface Specifications, application security requirements, database model
- Complete Source Code with required documentation.
- Test Plans and Test cases (including Unit Test Plan, System/Integration Test Plan, User Acceptance Test (UAT) Plan, Security Test Plan, Load Test Plan)
- Training Manuals and literature
- Systems Administration Manuals
- Application User manuals (Standard Operating Procedure)
- Installation Manuals
- Operational Manuals
- Maintenance Manuals
- Frequently Asked Questions Document
- Security policy and procedure for Nurse Mentoring Application including Password security, logical access security, operating system security, data classification, and application security and data backups.
- A data dictionary listing out all the data elements shall be prepared.
- All documentation will be supplied both in Hardcopy and Softcopy format.
- Authority expects the SI to document the operations and management processes as per the ISO 20000-1 standard.

3.1.5 Operation & Maintenance from the date of Go-Live

Once the systems have been commissioned, the Successful Bidder shall provide O & M for the period of Two (2) years. The Bidder shall propose the teams for this along with their roles, job descriptions and profiles of key individuals as specified in the RFP.

- Updates/Upgrades/New releases/New versions: The SI shall provide from time to time the Updates/Upgrades/New releases/New versions of the software and operating systems as required. The SI must provide free upgrades, updates & patches of the software and tools to Authority as and when released by OEM/SI. The SI will implement from time to time the Updates/Upgrades/New releases/New versions of the software and operating systems as required after necessary approvals from Authority about the same

3.2 Function Requirement Specification

3.2.1 Functional Requirements

The Mentoring Application will be deployed by the developer and System Integrator should be able to deliver at minimum the following services listed below. The System Integrator shall implement all the necessary functional, technical, operational and other supporting requirements to meet these services. The Mentoring Application is proposed to be one core, automated, scalable and integrated software application, deployed at cloud Server provided by IHAT.

The Application will be customized and enabled for various requirements of facility and other health indicator according to the level of facility. This shall be achieved through the master maintenance of modules and functionalities, through Admin module wherein the authorized resource will be able to enable or disable the different functionalities based on Role Based Access Control (RBAC) but the application shall work on a common architecture, configuration and functional modules.

The core modular, fully integrated and automated software application for the Mentoring Application, will have interface for various types of Users and applications (external integrated application). It is envisaged that the core application should have decoupled but integrated core database, though there may be logical partitioning for effective data retrieval and storage. In addition to the above, it is also proposed that the entire application architecture will have a "Business Logic layer" and a "Data Access Layer" to support the efficient data handling between the "Application Layer" and the "Database Layer". The application and its functionalities should be granular and modular enough for the administrators to enable

or disable any particular function of Mentoring Application at any health institution in the state, at any given time, as per their requirement, through “Application Admin” interface, without the need for a developer / code level change / custom UI change.

It is a necessary requirement that the application should have complete integration between different modules and an efficient data sharing mechanism so that each module can showcase complete automated workflow functionality for a seamless backend processing. It is necessary that all the technical documents, with versions traceability matrix and updates, are maintained by the agency as per standard Software Development Life Cycle (SDLC) and submitted to IHAT as per agreed milestones and timelines without fail.

It is proposed that the integrated core Mentoring Application shall have following two accessibility views:

- Mentoring Application Web Portal
- Mentoring Application Mobile App
- Competency Based Module – Competency Directory, , Competency to OSCE Mapping Module, Competency to Position Mapping Module

The sections below describe each of the functional components of the proposed Mentoring Application solution, as shown above:

3.2.1.1 Mentoring Application

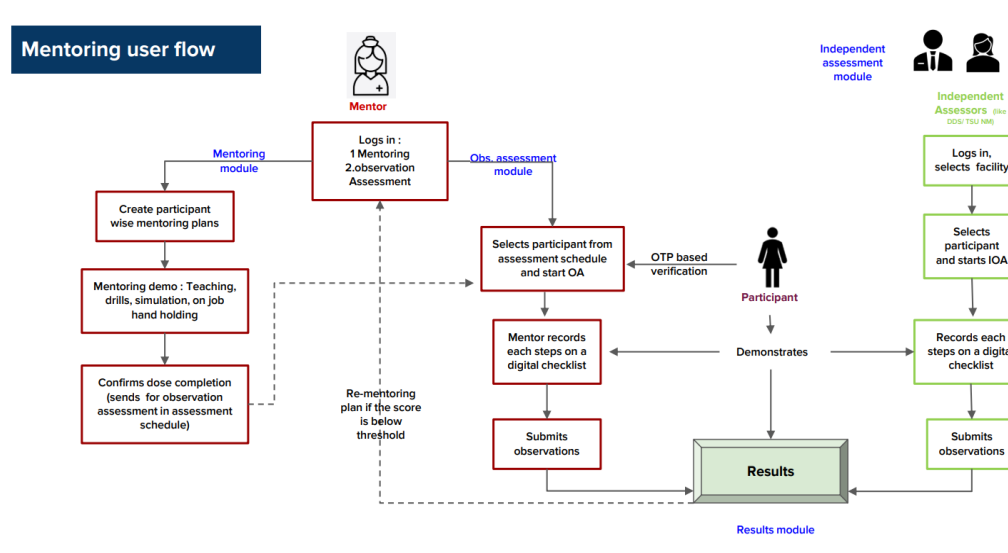


Fig iii. Illustrative of Mentoring Process

In reference to the above flow diagram, the Nurse Mentoring Process can be understood at a broader level in following points: -

1. Every participant (Mentee) is assigned a Mentor by the department
2. Department also frames the Mentoring Schedule called Mentoring Cycle
3. An illustrative Mentoring Cycle is given in Annexure III6
4. Mentoring is Planned and Implemented in following two modules: -
 - a. Mentoring Module: -
 - i. Mentor analyses Competencies of the Mentee(s) and prepares a Mentoring Plan in accordance with the organizational guidelines and in accordance with Mentoring Cycle
 - ii. Mentor conducts mentoring through teaching, drills, simulations and on-job handholding

- iii. On completion of any stage (Cycle) of Mentor plans an Observation Assessment to review and assess learnings of Mentee(s)
 - b. Observation Assessment Module
 - i. In a simulated environment, Mentor conducts an assessment (OSCE assessment) to test learnings and acquired skills by the Mentee(s)
 - ii. During observation Mentor records performance of Mentee(s) and gives feedback
5. The Mentoring activity is observed by independent observers (shown as Independent Assessment Module)
6. The independent observers fill a standard checklist of observations made during their visit
7. Detailed Work-Flow of Mentoring and Observation Assessment are given in Annexure III4 and Annexure III5 respectively.

The agency is required to develop a comprehensive information control and display feature through these modules.

- **Mentoring Update:** The main objective of Mentoring is to enhance the knowledge, skills and practices of the clinical staff. The specific objectives are:
 - To ensure Mentoring of the staff as per Rapid Improvement Cycles
 - Repeat Mentoring of the staff as per need

The mentoring flow will be as follows:

- Mentor to create a Mentoring Plan for skills as per the Bi-Monthly Cycle
- Notification to all concerns
- Update Mentoring Plan status: Completed/Cancelled
- If Completed: Mark attendance of all participants (OTP authentication based)
- If cancellation: can be individual participant or whole session cancellation.
- Reports
- Dashboard

Mentoring & OSCE Cycle						
YEAR	Cycle 1					Skill Set 1
	OSCE base line 1	Mentoring Plan 1			OSCE end line 1	
		Dose 1	Dose 2	Dose 3		
	Cycle 2					Skill Set 2
	OSCE base line 2	Mentoring Plan 2			OSCE end line 2	
		Dose 1	Dose 2	Dose 3		
	Cycle 3					Skill Set 3
	OSCE base line 3	Mentoring Plan 3			OSCE end line 3	
		Dose 1	Dose 2	Dose 3		
	Cycle 4					Skill Set 4
	OSCE base line 4	Mentoring Plan 4			OSCE end line 4	
		Dose 1	Dose 2	Dose 3		
	Cycle 5					Skill Set 5
	OSCE base line 5	Mentoring Plan 5			OSCE end line 5	
		Dose 1	Dose 2	Dose 3		
	Cycle 6					Skill Set 6
	OSCE base line 6	Mentoring Plan 6			OSCE end line 6	
		Dose 1	Dose 2	Dose 3		

- **Competency Tracking:** The main objective of competency /OSCE (Objective Structured Clinical

Examination) is to assess the competency of the clinical staff. The specific objectives are:

- To ensure competency of the staff as per Rapid Improvement Cycles

The competency flow will be as follows:

- Notification prompts if end line and base line scores are not filled within the cycle.
- Observation Checklist to be available with Observer (Mentor, District, Division or State Level Observer)
- Observer to mark it as End Line or Base Line Assessment
- Verification of participant through OTP based authentication mechanism
- Observer to observe the Skills of participants and fill in the checklist accordingly.
- Observer to submit the checklist after re-verification
- Skill based score calculated automatically from backend. The Skills are linked to Competency which will lead to an automated Competency based score.

- **Laqshya Checklist:** The main Objective of Quality Assurance Standards is to identify the gap in terms of availability of Infrastructure, Supplies and Records at the beginning of a RI cycle and to fulfil all the identified gaps during that Rapid improvement cycle. The Quality Checklist are also bifurcated as per the bi-monthly cycles. One checklist each cycle to be filled by mentor(mandatory) and other officials(non-mandatory) at state, division, district or block:

1. Cycle 1- Checklist 1
2. Cycle 2- Checklist 2
3. Cycle 3- Checklist 3
4. Cycle 4- Checklist 4
5. Cycle 5- Checklist 5
6. Cycle 6- Checklist 6

- **Facility Strengthening Checklists:** The application capture Facility Strengthening through the following Checklists:

- **Quality Circle:** The main objective of the QC meeting tool is to support district and state level program teams to routinely monitor and review activities and discussions happening at block level facilities. It captures both the quantitative and qualitative aspects of the meetings and the people participating in the meeting. The specific objectives are:
 - If quality circle has been formed in a block facility or not
 - If the QC team is conducting gap assessment for the facility based on LaQshya checklist for labour room
 - If the QC team is developing facility action plan based on the gap assessment by prioritizing the gaps and undertaking activities to bridge the gaps and reviewing the progress regularly
 - Are there some issues which needs to be escalated to higher level (CMO/ State level) for resolution?
- **Labour Room Assessment:** Assessment of the labour room by district level teams aims to highlight the gaps in facility strengthening, bridging those gaps by local authorities and review the gaps on continuous basis of Block level facilities. The specific objectives are:
 - To ensure that the labour room has the required infrastructure to function round the clock
 - To ensure that the infrastructure enables the service providers in providing respectful maternity care
 - The facility is ready to manage sudden, catastrophic events like PPH, Eclampsia and Birth Asphyxia which contributes significantly to maternal and new-born deaths.

Major gaps found in previous assessment, need to be flagged while re-assessing the labour room subsequently. This can be useful to assessor while assessing the labour room assessment.

- **New Born Stabilization Unit Assessment:** A functional NBSU is a critical and prioritized aspect of facility based new-born care on which the government is working for some time. Yet, the progress has been slow due to multiple reasons ranging from unavailability of

competent service providers to lack of infrastructure to lack of awareness in the community and service providers. The NBSU assessment and observation tools aims to further strengthen the facility preparedness and quality of care for sick new-born babies. This has a great potential in reducing infant mortality, particularly neonatal mortality from preventable causes like new-born sepsis, preterm birth, low birth weight and birth asphyxia etc. Hence, the main objectives in assessing the NBSU and the practice of service providers is identifying existing gaps and the means to bridge them. The specific objectives are:

- To ensure that the NBSU has the required infrastructure to function round the clock
 - To ensure that the facility has trained, competent and adequate service providers
 - To ensure that the infrastructure enables the service providers in providing proper care to the sick new-born
- **Direct observation of delivery:** The main objective of Direct Observation of Delivery (DOD) is to support district and state level program teams to routinely monitor and review the quality of services provided in delivery points (facilities) in and around birth. The specific objectives of DOD are:
 - To observe the practices of staff nurses/ANM in providing intrapartum and immediate postpartum care.
 - To evaluate the quality of care.
 - To provide onsite handhold and mentoring support to the staff in improving the quality of care.

During DOD, the teams will observe the quality of intra and immediate post-partum care focusing on initial assessment, monitoring of labour using partograph, conduction of delivery in 2nd stage of labour, active management of third stage of labour, immediate/ essential new-born care and post-partum care of the mother and new-born in 4th stage as per the GOI protocols.

- **User Wise Module Distribution:**

Web / Mobile	Module name	End user					
		Admin	Mentor Nominated (820)	Mentor TSU (87)	Divisional Mentor	District Senior Specialist (75)	STS / TL (18)
Mobile	Laqshya Checklist	Yes	Yes	Yes			
Mobile	Facility strengthening checklist	Yes	Yes	Yes		Yes (LR assessment & NBSU assessment)	Yes (LR assessment & NBSU assessment)
Mobile	Mentoring Updates	Yes	Yes	Yes	Yes		
Mobile	Competency Tracking	Yes	Yes	Yes	Yes		
Mobile	Direct observation of deliveries	Yes		Yes	Yes	Yes	Yes
Web & Mobile	Reports	Yes	Yes	Yes	Yes	Yes	Yes
Web & Mobile	Dashboard	Yes	Yes	Yes	Yes	Yes	Yes
Web	Competency Dictionary	Yes					
Web	Configuration	Yes					

Detailed reporting, dashboard & configuration requirement would be worked during the implementation phase of the project

The Mentoring Application web portal should have both static and dynamic information. The application should be accessible through a web browser via Internet. The kind of information to be displayed on the web portal will be managed and controlled through the “Application Admin” module and “User Management” module in the system with an intention of making most of the information available for user based access through the web portal.

A Mobile App (supporting Android and iOS) with Text, data interface (approximately 8 screens with options of handling user input) both in Hindi and English needs to be developed. The App would be primarily used an interface between facility/Health (Nurse Mentors / Staff Nurse) officials and Mentoring Application database. This app shall provide functionalities like Data capturing, Reporting and Dashboard under Health officials and other stakeholders shall be able to see basic reporting and dashboard related to various data being collated on Nurse Mentoring Application server.

3.2.1.2 Mentoring Application Competency Module

OSCE stands for objective structured clinical examination. It is a standard for skill assessment of professionals in medical and healthcare sector. The Mentoring application is expected to prepare nurses for OSCE assessment. This is done through mentoring of mentee nurse by a mentor and by taking an observational OSCE assessment of mentee by the mentor. By deploying these two aspects of training it is assumed that nurses will be prepared to successfully take proctored OSCE exam at an authorized centre.

However, the OSCE Skills will be mapped with the competencies of government nurses (Cadre: Nursing Organizational Position is ANM - Auxiliary Nurse Midwifery and Role - Midwifery). This will be done by mapping (i) Role with Competencies and Competencies with OSCE (Annexure III1). Measure of proficiency in Competency will be done as Levels. Therefore, each step under an OSCE will be mapped to C-L (Competency and Level). Successful demonstration of a step in OSCE will assume success in the associated C-L. This relationship between C-L is given in Annexure III3. Evaluation by giving marks during OSCE-Assessment is explained in Annexure III2.

To achieve this competency based module for mentoring and OSCE of clinical staff, the application will have a separate module called **Competency Dictionary**. The Module will be developed and deployed on a separately cloud server (to be procured by IHAT & maintained by the vendor). The module on have single sign IN feature as that of NM modules. The module will capture the following:

1. Please refer section “Competency Module as Middleware” (as above) for background
2. List of Employees (from Manav Sampada)
3. List of Competency: from Competency Directory ex: C1 = Operating a Mobile Device
4. List of Competency Level: one competency will have several levels, a few levels will be defined as Knowledge based and the others as skill based. Ex: C1- L1, L2, L3 – Knowledge, C1- L4, C5- Skill. Ex: C1: L1 to L3 Knowledge Required to Operate Mobile Devices (What is the purpose of Mobile App; Who owns the mobile app and who to approach for any mistakes made in data entry; What to do when telecom signal is not reaching mobile; Significance of SMS based authorization) C1: L4 – L5 Skills Required to Operate a Mobile Device (How to download and install the required apps, how to fill data on the suitable forms using the mobile app)
5. Linkage between Competency & Competency Levels.
6. Linkage between Position & Competencies
7. Linkage between OSCE steps and Competency Levels (CL)
8. OSCE Step repository -to determine the competencies of an individual.
9. Linkage of OSCE Steps to Marking on Step and Marking on associated Competency Level

10. Package of Competency: Ex: Package 1: Pregnancy related: C1: Identification of pregnancy, C2: ANC, C3: Birth preparedness, etc. All these 3 competencies are covered under a package of Competency.
11. The Outcomes will be derived at different portal where Observational OSCE (OSCE assessment by Mentor at the end of Mentoring Cycle) and Proctored OSCE (OSCE assessment at designated OSCE Centres) based test will be conducted. The Final result of an individual will be linked to their Competency Passbook.
12. Refer “Annexure III: Illustrative Flow Charts” for
 1. Illustrative Mapping of :
 - a. Position to Competency (Competency Levels)
 - b. OSCE Steps to Competency Levels
 2. Illustrative and Minimal Plans
 - a. Marking and Improvement Plan
 - b. Mentoring Schedule
 3. Illustrative and Minimalist Flow Charts
 - a. Mentoring with Roles
 - b. Observational OSCE with Roles
 - c. Proctored OSCE with Roles

The figure below briefly explains the process flow of the module:

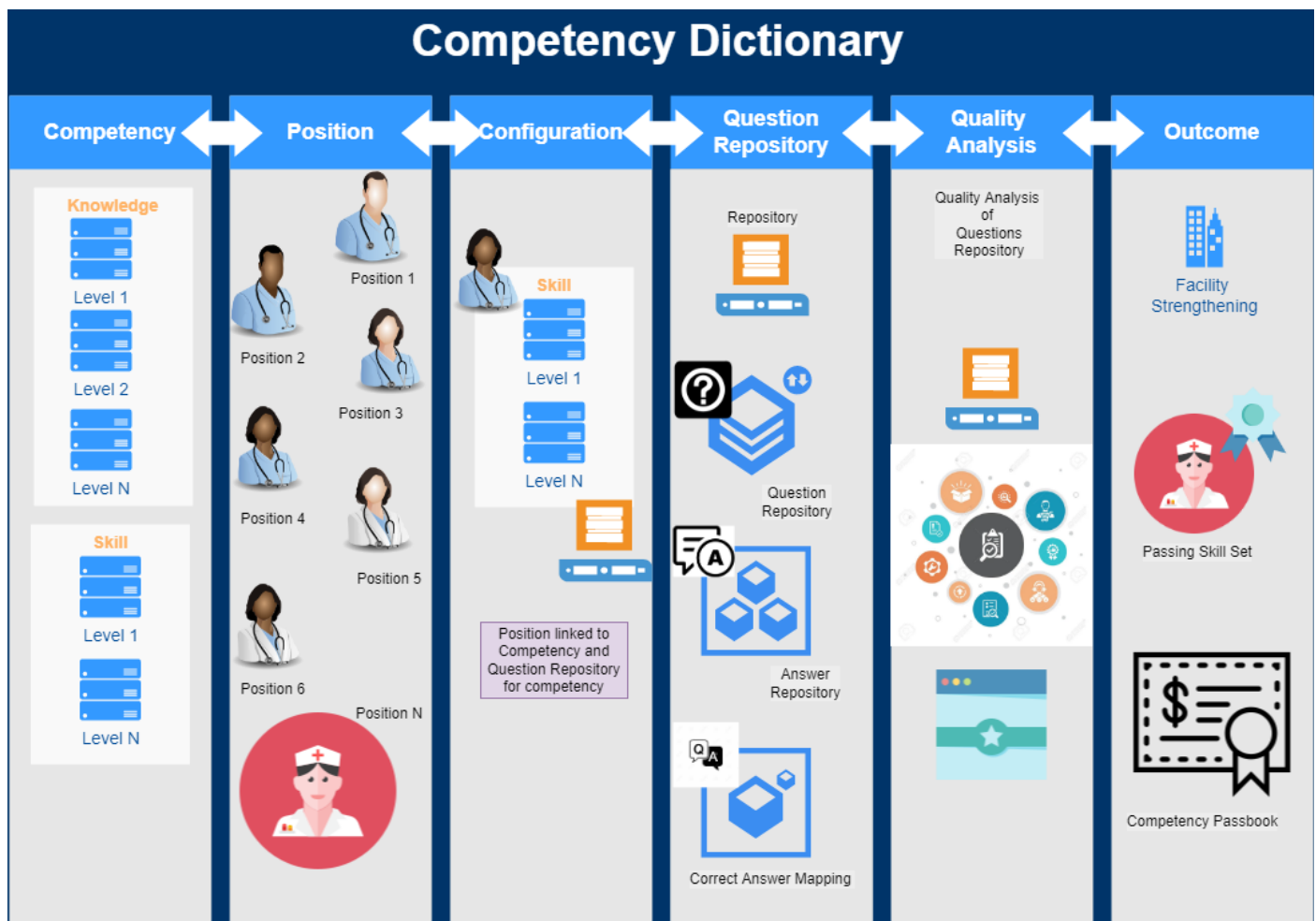


Fig iv. Illustration of Competency Dictionary Module

3.2.1.3 Mentoring Application Backend Support

It is proposed that all the backend support services including system support services will be part of the core Mentoring Application solution.

It is envisaged that the different support services would be available as user friendly options within the support services module, which would be accessible to different types of Users based on access rights provided through the “Admin” module.

3.2.1.4 Application Admin

It is required that there would be an UI Interface provided for the Admin User, for User Management, Rights Management, and Masters Management for controlling list / field values. The UI for Admin need to be configured as per the “ACCESS CONTROL” requirement provided by IHAT and the agency at the time of acceptance of the Nurse Mentoring Application.

This should be the heart of the application software. And for every change carried out during the Change Request, the impact analysis with reference to the Admin controls must be analysed, discussed, approved by IHAT and then implemented.

Maximum and/or nearly all the variables must be dynamically controlled through masters from Admin instead of being hard coded.

Admin USER will be strictly a single USER login for the Nurse Mentoring Application software and the ACCESS policy shall be integrated and collaborative for the “Nurse Mentoring Application” users

3.2.1.5 Authentication

Authentication is the process of identifying an individual, usually based on a username and password, as a valid application User. Authentication will be done for valid Users. A valid User for this application is one who has been set-up in this application such that he/she can access the application. Authorized Users will have to access the login screen for authentication.

3.2.1.6 Privilege Administration

Privilege Administration is the process of assigning privileges to individual Users or User Groups. The privileges specify the level of authority assigned to User or User Group i.e. whether it is for a tab, a screen or a field.

If a User Group has certain privileges, and a User gets assigned to that User Group, then automatically the User inherits those privileges. The application allows selective revoking or re-granting of privileges e.g. if a User has acquired certain privileges on account of being assigned to certain User Group, then for that User, the application should allow revoking of the inherited privileges at individual User level, as required.

There should be a UI available for adding new privileges also, with due approval and verification process inbuilt in the system. This will allow the Administrators to configure new privileges and will apply to all Users once configured and committed in the systems.

3.2.1.7 User and Group Management

User Management will be a management and authentication feature within the application that will provide administrators with the ability to identify and control the state of users that will have right to log into the “Mentoring Application” application and use it. The module will help create different types of new Users, Manage their designations, locations, Roles and Responsibilities, as well as their rights within the entire system. This will also provide the feature of activating or deactivating any users, including other User management features, but is not limited to, the ability to query and filter users that are currently logged into the network, and control user login counts and login times. There should be facility to form “Groups” and the Users can be assigned to desired Groups. These groups can be formed based on roles,

responsibilities, type of work, etc. The properties of these groups can be assigned for better manageability of each User within the Group.

3.2.1.8 Rights/Privilege Management

Through the User authentication server “Rights Management Services” (RMS), there will be a form of User authentication functionality that will allow various users to access the “Mentoring Application” system and work as per their defined Roles and Responsibilities. Rights Management Services will be used for restricting access to rights-protected content / sections / modules / screens / Fields, etc. to authorized users only. Rights to all active users will be granted based on their hierarchy and level in the organization, designation, assigned roles and responsibilities, location etc. among other parameters. It is also proposed that the new rights can be created through the Rights Management UI interface as well as existing rights be managed through the same. The access to this section of the application will be strictly based on “Role Based Access Control” (RBAC) for the Administrator(s) only as defined in the ACCESS Policy. The details of any change in this module will be captured in the Audit Trail of the application. Also there should be facility to assign/modify/delete rights globally for the desired Groups within the system.

3.2.2 MIS Reporting

This will give authorized Users the ability to have a customized view of the entire list of reports they use or wish to use. Required security will be applied to this module providing a restricted access as per different cadre of Users. This module may be further linked to the Personalized Dashboard where the same links to these reports can be displayed in small portlets, so that any User may not always search for their frequently used reports from the Reports module, and they can add it to their own dashboard for ease of use. All the reports made available need to be controlled through “Admin” module for variable access depending upon the nature and status of the USER. The access control list of the reporting servers needs to be mapped and configured with the admin access control policies.

All the required reports, must be immediately generated. The application architecture and the Database design must enable fast retrieval of data, supported by optimized “Mentoring Application” interface.

3.2.3 Audit Trail

Audit trail will be a detailed record showing who has accessed the system/application and what transactions / operations have been performed by the concerned user during a given period of time. Audit trail must display the following details, but not limited to, with filter / sorting criteria options:

- Timestamp
- User Name
- Module – Sub Module – Screen – Section – Field Name
- Previous Value
- Current Value
- Remarks (if any)

It is must that the Audit Trail module does not have a “Delete” or “Edit” right granted to any user irrespective of any type or hierarchy as created in the system. The “view” rights should also be controlled through RBAC in Admin Module

3.2.4 Password Retrieval / Reset

It is also proposed that the Nurse Mentoring Application will also have standard password retrieval / reset functionality to ensure that Users do not face any issues while logging into the system and availing online information and services, as applicable

3.2.5 Search /Advanced Search

It is proposed that the system should provide the users with “Search / Advance Search” features to get necessary information, based on the certain parameters or criteria’s pre-defined in the system. The results should be displayed to the Users in a User friendly manner with features like pagination, sorting, drill down etc. The Agency is expected to develop the entire search functionality within the application in discussion with the IHAT official’s / module leaders.

3.2.6 Integration Services

3.2.6.1 Integration with External Applications and Systems

Mentoring Application Core Application is envisaged to be a completely automated and integrated software application which envisaged to be used not only by internal facility /program and also for other users.

It is proposed that a standard mechanism of data exchange be built and implemented by the SI to cater to any external systems requirement so that the impact on the Mentoring Application core application is minimal due to any external changes. The system shall enable integration / data exchange to and from any external application / database which will happen only through an “Interface Component” by using a standard data exchange protocol through a secure channel, utilizing the “Interface component”

Following are the key external applications which are envisaged to be integrated with Mentoring Application, but not limited to:

- Manav Sampada
- Competency Passbook
- And other state and Gol application

List of integration application will be shared during the time of requirement gathering.

3.2.7 Proposed Backend Components / Server Interactions

Apart from the various functional modules and additional functionalities mentioned above, it is proposed that the application would be supported by backend components / servers / databases. The indicative components to be considered as part of the proposed solution and their logical interaction to support the overall automated system environment are mentioned below.

- **Application and Web Server**
Application Server will form the middle tier and the Mentoring Application core application would be hosted on it. Application server would take care of the necessary workflow, and the web server would be required for interfacing with the external users via web browser through Internet. The business logic layer will coordinate the application, process commands, make logical decisions and evaluations, and perform calculations. It also moves and processes data between the two surrounding layers.
- **Database Server**

The Mentoring Application integrated with a centralized database with Competency module database, it should be load balanced and clustered to ensure high availability and reliability. The data would be stored on the storage server.

- **Reporting Server**

Reporting Server can be used to prepare and deliver a variety of reports, majorly MIS reports. Users can generate fixed and custom reports through the Mentoring Application's core application that interfaces with the Reporting Server. Integration with advanced analytics/dashboard is also proposed so that analytical reports should also be available for Mentoring Application users in real time for decision making purposes

- **External Interface / Database**

It is envisaged that the Mentoring Application's core application will need to interact with other applications / specific databases, either for intelligence purpose or for information / data sharing. It is proposed that the Mentoring Application core application will share the data with any of the other applications / databases through an "Enterprise Service Bus". The necessary data mapping and formats for data exchange will have to be developed by the agency in consultation with IHAT and owner of external applications / databases.

- **Competency Server**

The Mentoring Application is also envisaged to create a competency based tool where competency, competency related data and questionnaire could be maintained. A complete workflow based setup to add/edit/delete and maintain the competency dictionary and its relevant questionnaire.

3.3 Technical Specification

Application Solution must be web enabled, built on enterprise application platforms with sufficient flexibility for customization based on IHAT's needs. The proposed Nurse Mentoring Application must use standard relational database

- **Language Support:** All functionalities must be provided with bilingual support i.e. in English and Hindi language. All the screens and templates should be in English and Hindi. Where required, screen shall support Devanagari script. In addition, application shall support Unicode formats for text editing, file name, data storage.
- **Dates:** All functionality MUST properly display, calculate, and transmit date data, in 21st-Century date data (DDMMYYYY) format.

3.3.1 Application and Other Standards

This section details the various Information Technology (IT) related standards that are to be considered while developing the Mentoring Application. The below mentioned components need to be taken care of while developing the technology components on Mentoring Application:

- **Platform Flexibility:**
 - Web-centric, multi-tier architecture shall be used
 - Open Standards and Interoperability shall be considered
 - XML based standard shall be used wherever applicable
 - Compliance to SOA and Web-services
- **Interoperability**
 - Usage of standard APIs
 - Service-oriented architecture (SOA) based
 - Support for multiple industry standard databases with ODBC, JDBC and Unicode compliance
- **Usability**
 - Applications should comply with Guidelines for Indian Government Websites
 - Compliance with industry standard: The Nurse Mentoring Application shall be based on and

compliant with industry standards (their latest versions as on date) wherever applicable.

3.3.2 Performance matrix

Some of the key considerations that the System Integrator should aim for while designing the deployment architecture is to ensure that the Mentoring Application project meets SLA requirements, standards, specifications and performance prescribed, by ensuring that the following are associated with clear, quantifiable metrics for accountability:

- Performance
- Availability
- Security
- Manageability
- Scalability
- Inter-operability & Integration
- Standards and protocols

The solution must be designed to meet all functional, non-functional and management requirements as mentioned in the document. Some of the key acceptance criteria are defined in the table below.

3.3.3 Acceptance Criteria

3.3.3.1 Security

The Agency must take rigorous provisions to prevent unauthorized alteration or damage to Mentoring Application, and all related applications and databases. The Agency must describe in detail all measures to be taken, including the use of security infrastructure including end-point security, Security Policy and Procedures for each project location, applicability of the policies and security controls for physical, communication, assets, software licenses, equipment security etc. Agency shall provide basic level of security by providing the end users with username and password to access the applications. Agency shall deploy the application only after it has undergone User Acceptance Testing (UAT) and is security audited by the third party for vulnerability assessment (VA) and penetration testing (PT). The UAT shall also include assessment and evaluation of all application SLA's However SI shall undertake and conduct all sorts of testing and follow a standard Software Testing Life Cycle approach (STLC) before deployment of application in a production environment in addition to assessment and certification through the security audit team. Additional layer of security shall be provided to sensitive applications by deploying these behind Application Firewall. The IHAT shall also arrange for the Third Party Audit (TPA) of the Mentoring Application Solution implemented by the Agency and the charges for hiring the services of TPA shall be borne by the IHAT.

The Governance Framework established for the project shall ascertain what all measured risks that needs to be accepted; however, agency shall at each such occurrence/incident be responsible for providing resolution in terms of correction, prevention and remediation throughout the project tenure.

3.3.3.2 Backup and Recovery

The agency must design and successfully test backup and recovery capabilities as provided by the hosting centre for the Mentoring Application the agency must describe this functionality, the frequency of backup and provide reports to IHAT. It is a must, that the facility to conduct such tests/audits should be provided to IHAT or any other nominated agency on behalf of IHAT for audit purposes, as and when required. Agency shall be responsible for data storage, backup and recovery measure that will be taken at individual facility separately.

3.3.3.3 Uptime and Performance

Nurse Mentoring Application should be complying the hosting service Uptime and hence performance issue can be avoided.

3.3.3.4 Version Control and Bug Fixing

The agency must make any modifications necessary for the duration of the contract to ensure that the system is compatible with current and supported versions and releases of the relevant operating system and other system software with all relevant documentation. It is a mandatory requirement that all relevant documentation be created, updated and maintained throughout the contract duration. The agency will also ensure that proper track of all bugs are maintained and are fixed as per various tests conducted on the application. It is desirable that the agency maintains a bug tracking tool for the purpose.

3.3.3.5 Future Changes / Application Upgrades

From time to time, changes in work process, legislations, policies, etc. may necessitate changes in the Mentoring Application. The agency must make any and all such changes for the duration of the contract as defined in the “Change Control” procedure. When provided the specifications of the change required, agency must submit an estimate of work effort and cost for the change, as defined in the “Change Control” Life Cycle” to IHAT for approval.

Note: The Change Control Life cycle needs to be discussed and agreed with IHAT upon selection of the agency and contract signing.

3.3.3.6 Data Loss Protection

The successful agency will need to implement comprehensive solutions with centralized workflow capabilities, integrated policies, and customized reporting, in order to manage Data Loss and protect sensitive data. They will also need to provide IHAT with a modular DLP program that offers capabilities across three main vectors: data at rest, data in motion, and data at endpoints. The agency shall provide IHAT with the DLP policy and statement of applicability for each aspect of the network, storage and end point according to the scope of work defined in the RFP. This is a mandatory requirement.

3.4 Training Requirements

Agency shall be responsible for imparting training to the trainees at identified location on developed applications. The participants for training shall be selected by IHAT.

Agency needs to conduct the training before Go-Live of each phase. The agency needs to carry out the following as part of the training exercise:

- **Developing the training content** - Agency shall ensure that the training content is relevant to the target trainees depending upon the role played by them. The training material should be illustrative enough for easy understanding of the user and smooth adaptability of the Mentoring Application. The training material should carry specific sections like ‘Dos and Don’ts’, ‘Frequently Asked Questions’, ‘Points to Ponder’, ‘Things to Remember’ to make it more interesting. There should be separate training materials for different level of users. The training materials should be revised on release of the revised software.
- The agency shall develop Web Based Training (WBT) modules for all categories of employees. The modules should be interactive and easy to understand. The agency shall also develop ‘How to Use’ videos for various modules of Mentoring Application. These videos shall be uploaded by IHAT on appropriate platforms.
- The agency shall submit the training content to IHAT for approval. It shall be submitted at least 20 days in

advance before the conduct of training. IHAT will review and provide comments to agency on the training content within 7 days of the submission of draft training content. Agency shall incorporate and implement changes suggested by the agency in training delivery and content.

- Prepare Training Schedule Objective of the training to ensure proper adaptation and use of the Mentoring Application software by the end users. To meet this objective, agency shall prepare training calendar for each phase of software development in consultation with IHAT. Agency shall organize both classroom sessions and hands on practice for the trainees. SI shall provide training portal for hands on practice of Mentoring Application modules.
- It is also proposed that the training contents / User Manuals be made available to Users in downloadable (PDF) format so that the Users may refer / download it for their own personal reference as and when needed. It is required that the Downloadable training content should have proper indexing and internal references, mapped with key words, in order to allow any User to search and reach the desired content with the help of those key words. It envisaged that any User will be able to search and read the directions / information for only the part required by him/her rather than looking through the entire PDF document and manually searching for the right content. On entering the key words for search criteria, the system should pull out and display the links to the content as mapped. This feature should be dynamic with real time search availability, i.e. as soon as the key words are changed; a new set of content links with page / chapter references within the document should appear for selection. Once the selection is made by the User, the system should display the PDF content.
 - Agency needs to submit training completion report at end of training.
 - Providing Hard copies of training material to participants shall be responsibility of SI.

3.4.1 Identification of training Material

IHAT shall be responsible for identifying the participants for the training based on the concerned modules going live during a particular phase.

3.4.2 Circulating pre-training material

Agency shall make adequate provision for circulating pre-training material to all the participants at least seven (7) days before the conduction of the training. The pre- training material may be circulated in electronic form and hard copy form, to IHAT.

3.4.3 Language for delivery of training

The mode of training delivery shall be in English and Hindi.

3.5 Change Management

Introducing any change needs to consider the impact that change will have on all stakeholders – both within and outside the program. It is therefore necessary to formulate a change management strategy that encompasses the requirements of the end user and the workforce. Change management should start with the planning stage and continue with life of the project. It is essential to understand that change management is not a onetime activity. It is a continuous activity propagating to complete life of the project and touching all the stakeholders involved in the project.

Agency shall track and manage changes to artefacts, such as code and requirements. Requirement for change management shall be provide by the client to vendor. Vendor shall acknowledge and understand the need for change, then develop a change plan accordingly, which shall be implemented and tested and signed off by the client before deployment.

This section focuses on the change management and capacity building approach and plan so as to be able to tackle the issues that might arise due to new processes within the new Mentoring Application.

Training for Mentoring Application will allow multiple stakeholders to participate in the day to day management of the solutions and ensure sustainable programs to cover basic system awareness

programs in addition to Mentoring Application specific programs in order to ensure adoption of the system at each level.

During AMC period after Go LIVE, 20 man days, to be provided as part of AMC.

Any requirement beyond 20 man days will be charged at “per man day cost provided as part of AMC”

3.5.1 Need for Change Management

Introducing radical reforms has to be necessarily accompanied by efforts to energize and orient the mind-sets of the people – both within and outside the program. A well-calculated and well-designed strategy has to be followed for the people to be trained to work effectively in the new environment. It is necessary to formulate a change management plan with appropriate interventions for capacity building, training and stakeholder communications.

A successful Change Management Program will ensure:

- A smooth transition to the new way of working
- The organization/people support the changes implemented
- Individuals know how the changes affect them and the role they have to play
- Stakeholders to understand the benefits of the changes and internalize it
- The new system and its underlying concepts are understood
- People are aware of how roles and responsibilities are changing
- Everyone is motivated and committed to the change program
- The success and progress of the program is monitored and measured

Scope of work and envisioned activities is at Appendix I7.

4. Key Project Milestones and Timeline

Sl. No.	Particular	Deadline
1.	Issuance of RfP document	13-10-2022
2.	Pre-Bid meeting with bidder	18-10-2022 at 15:00 hrs
3.	Last Date for seeking queries , if any	21-10-2022; 23:59 hrs
3.	Response to Queries	31-10-2022
4.	Start date and time for bid submission	04-11-2022; 00:00 hrs
5.	Last date and time for bid submission	18-11-2022, 18:00 Hrs
6.	Date and time for opening of Technical bids	21-11-2022
7.	Date and time for opening of Financial bids	to be intimated later
8.	Validity of Proposal	Proposals must remain valid for 90 days after the submission date
9.	Address for submission of Bids	To, Team Leader (ICT) India Health Action Trust 404, 4th Floor, Ratan Square Building, Vidhan Sabha Marg, Lucknow, PIN- 226001
10.	Contact Details	procurement@ihat.in

Note: IHAT reserves the right to change the dates mentioned in this document, which will be communicated to the bidders.

Note 1: The bids are to be submitted offline. Bidder may download Tender Document along with terms and conditions from IHAT website <https://www.ihat.in/> However, for participating in the tender, it is mandatory to download & submit the tender offline only. The bidders are requested to submit their bids prior to last date of submission to avoid non-submission of their bids due to any unforeseen reason in last moments or any reason whatsoever.

Pre-bid Meeting Link:

Join Zoom Meeting

<https://us06web.zoom.us/j/88669020124?pwd=Rk5MQXVUOU1JeEs0UIJ1eEdnUmFDdz09>

MeetingID:88669020124

Passcode: 992265

The last date of submission of bids will not be extended if any situation arrives at the last hours. IHAT reserves the right to reject all or any tender wholly or partly without assigning any reason whatsoever. The vendor submitting the proposal in response to RfP, shall hereinafter be referred to as “Vendor, Bidder / Vendor” interchangeably. IHAT will not be liable for any costs incurred by the bidder in the preparation of the response to this RfP. The preparation of bidder’s proposal will be made without obligation by IHAT to acquire any of the items included in the vendor’s product, or to select any vendor’s proposal, or to discuss the reasons why the bidder’s proposal is accepted or rejected. All information included by the bidders in their proposal will be treated in strict confidence.

5. Payment Terms & Schedule

- i. Advance payment will not be considered.
- ii. Entire payment shall be done in phased manner as shown below

S.no	On Submission of	% of Payment (in INR)	Remarks	Timelines (T) in weeks
1.	Project Plan Document and Detailed SRS along with milestones	10%	Only after quality inspection and verification by the IHAT representative	T + 2
2.	Design and Development of Mentoring Application including competency module and integration with other Application	20%	Only after quality inspection and verification by the Authority’s representative of the conformity of the Goods/ Products/ Services/ Solutions supplied as per the agreed specifications	T + 8
3.	Submission of UAT and Pilot Testing Report	20%	Only after quality inspection and verification by the Authority’s representative of the conformity of the Goods/ Products/ Services/ Solutions supplied as per the agreed specifications	T + 12
4.	Go-Live of Mentoring Web & Mobile App	20%	Only after quality inspection and verification by the Authority’s representative of the conformity of the Goods/ Products/ Services/Solutions supplied as per the agreed specifications	T + 16

5.	<ul style="list-style-type: none"> Software Design Documents like table design, relationships between tables, database Procedure details etc. should be included. Functional and Integration Test Case Documents Training and Capacity Building Related Material API document for third party integration and at least one successful integration 	10%		Documentation to be done in parallel and shared at each step of competition accordingly
6.	Delivery of the software source code.	20%	To be shared after Go LIVE for payment release. Beyond this during change management, monthly code backup to be shared	After GoLIVE
7.	Annual Maintenance Cost (AMC)	As per contract value. To be paid quarterly	AMC for 2 years, to be paid quarterly.	Effective after Go LIVE After T+16.

iii. Currency: The price is payable in local currency i.e. Indian Rupees.

6. Performance Guarantee

The Bidder shall provide the services and carry out their obligations under the Contract with due diligence, efficiency and professionalism/ethics in accordance with generally accepted professional standards and practices. The Bidder shall always act in respect of any matter relating to this contract. The Bidder shall abide by all the applicable provisions / Acts / Rules / Regulations, Standing orders, etc. of Information Technology standard as prevalent in the country.

The vendor shall be responsible for the performance of all its obligations under this Agreement and shall be liable for the acts and omissions of its employees in connection therewith.

10% of each invoice will be withheld as Performance Guarantee, which will be released at the end of the project i.e. 2 years** from the date of contract, based on timelines and quality of delivery. Details of quality indicators is as under:

In case of poor quality of deliverable, the vendor will be liable to bear penalty proportionate to the value as described below:

Service Level Agreement and Penalty for Implementation Phase

Sr. No.	Item	Penalty
1.	Delay in submission of deliverable(s) or completion of Activity(ies) as mentioned in table II -2 of financial bid for <u>deliverable as S.No 1 / S. No 2 (whichever is applicable)</u>	1% of "S.No. 1 / S.No 2 whichever is applicable" for the delay of each week or part thereof subject to a maximum of 10% of total cost mentioned in table II -2 of financial bid.

SLA (Service Level Agreement) for Change Management:

Any delay in incorporating the change management during AMC phase will attract penalty at the following rates:

Level	Time to incorporate	Deduction %
L1	6 hours -8 hours	0.25%
L2	2 days – 3 days	0.5%
L3	4 days – 5 days	1%

Level L1, L2, L3 will be defined in SRS

The delay penalty will be limited to a maximum of 5% per quarter of the AMC charges.

7. Eligibility criteria

Interested bidders must carefully read the minimum criteria of eligibility provided herein. Bids of only those bidders who satisfy the eligibility criteria will be considered for evaluation.

To be eligible for evaluation of its Bid, the bidder shall fulfil the following:

Sr. No.	Evaluation Criteria	Documents To Be Submitted
1	Minimum 5 years of experience in executing projects comprising of design, development, integration, implementation, operations and maintenance of projects and providing Change Management support for mobile /web applications to government, semi-government bodies, NGO and Private sector	suitable documents in terms of work orders, completion certificates, Go Live certificates
2	Projects worth 50 Lakhs, 25 lakhs or 15 lakhs, complying the following criteria: <ul style="list-style-type: none">completed projects each (with project completion certificate)Preferably projects in public health (government/semi-government)	Work Order, Go Live Phase completion certificate, certificate for ongoing projects
3	Bidder must have at least 25 full time technical employees in its pay roll. The technical Skills of these employees must cover server administrators, android and web developers (preferably JAVA), test engineers, project managers	Self-undertaking
4	Bidder should be registered in India under companies Act 1956/2013 or Partnership firm registered under the Partnership Act of 1932 or registered (converted to) under the Indian Limited Liability Partnership Act, 2008 or Societies Registration Act of 1860	Certificate of incorporation
5	Bidder should not be blacklisted by Multi-Lateral Funding Agency / Govt. Of India/ any State Government / PSU's as on the date of bid submission	Self-undertaking
6	The Bidder must have average annual turnover of Rs. 1 Crore in last three financial year ending at 31/03 /2022 from IT Services.	Self-certified copies of the balance sheet and profit & loss statement for

		the last 3 completed financial years
7	The Bidder must have positive net in last 3 financial years ending at 31/03/2022	CA certificate with UDIN for positive net worth for each year from the last 3 Financial years
8	Acceptability of all conditions contained in the Tender Document by the Bidder. No further deviations to any mentioned clause shall be sought for.	Declaration in this regard by the authorized signatory of The Responder
9	The bidder will not Sub-Contract the work/contract awarded. An undertaking to this effect has to be submitted by the successful Bidder.	Self-undertaking
10	The bidder should have ISO 9001:2008 certification OR ISO 27001 Certification.	ISO certificate

Eligibility criteria is listed at Appendix I6.

8. Technical Proposal

Bidders shall submit the Technical Bid in the formats specified in Annexure -I (the “Technical Bid”).

Bidder shall furnish as part of Technical Bid, documents establishing its technical qualification as specified in Annexure I, to be eligible for the IT Service provider. The Bidder shall submit all documentary evidence in hard copy in support of the information furnished, as given below.

S. No.	Criteria	Required Documentary Evidence
1	The Sole Bidder should have successfully executed or is executing projects comprising of design, development, integration, implementation, operations and maintenance of projects in the last 5 years as on the last date of bid submission.	Submit any of the following client concerned document 1. Work orders OR 2. Agreements OR 3. Completion Certificate
2	Number of full time technical employees in its pay roll. The technical Skills of these employees must cover server administrators, android and web developers, test engineers, project managers	Detailed Resume of the employees
3	Qualifications of proposed Manager: a. Post-graduate in relevant field with minimum 10 years of experience in IT preferably in Public Health sector b. Citation of at least 2 projects with a project component in following categories: <ul style="list-style-type: none"> Public Health sector Government/Semi-Government 	Detailed Resume of the Proposed Team Leader

4	The Sole Bidder should have minimum average annual Turnover of INR 1 Crore for last 3 audited financial years (2019-20, 2020-21 and 2021-22) from IT related services.	Balance sheet required
5	The Sole Bidder or the Lead Member of consortium should possess the CMM level 3 or above certifications which are valid as on last date of bid submission.	CMM level 3 or above certification document
6	Presentation of the Proposed Solution, Approach & Methodology: Overall approach towards data acquisition, Application development, installation, implementation and maintenance of the solution and project management plan)	
7	Projects worth 50 Lakhs, 25 lakhs or 15 lakhs, complying the following criteria: <ul style="list-style-type: none"> completed projects each (with project completion certificate) Preferably projects in public health (government/semi-government) 	Work Order
8	Bidder should be registered in India under companies Act 1956/2013 or Partnership firm registered under the Partnership Act of 1932 or registered (converted to) under the Indian Limited Liability Partnership Act, 2008 or Societies Registration Act of 1860	Certificate of incorporation
9	Bidder should not be blacklisted by Multi-Lateral Funding Agency / Govt. Of India/ any State Government / PSU's as on the date of bid submission	Self-undertaking
10	The Bidder must have positive net in last 3 financial years ending at 31/03/2022	CA certificate with UDIN for positive net worth for each year from the last 3 Financial years
11	Acceptability of all conditions contained in the Tender Document by the Bidder. No further deviations to any mentioned clause shall be sought for.	Declaration in this regard by the authorized signatory of The Responder
12	The bidder will not Sub-Contract the work/contract awarded. An undertaking to this effect has to be submitted by the successful Bidder.	Self-undertaking
13	The bidder should have ISO 9001:2008 certification OR ISO 27001 Certification.	ISO certificate

9. Financial Proposal

The bidder is required to quote the total project fee for the aforementioned scope of work (inclusive of OPEs and any other taxes, except GST) as part of the Financial Bid. No additional amount (except applicable GST) will be payable during the course of the assignment. Only once the Technical Proposal is ascertained to be qualified, corresponding Financial Proposal would be opened.

Financial Bid Format is at Annexure II

10. Criteria for Evaluation of Bidders

The successful Agency will be chosen based on the basis of QCBS (Quality & Cost Based Selection) with the Technical and Financial weightage at **70** and **30** respectively.

10.1 A two-stage procedure shall be adopted in evaluating the proposals:

Stage 1 – Technical Bid Evaluation

Technical Bid Evaluation (Stage-1)

- i. The technical evaluation emphasizes on the degree of confidence of the Evaluation Team in the proposal content and the Bidder's capability to deliver the outputs effectively.
- ii. This evaluation will be carried out on a total score of 100 on the basis of the following mentioned criteria.

Technical Evaluation Criteria and associated marks are mentioned as below:

S.No.	Evaluation Criteria	Evaluation Criteria
1	The Sole Bidder should have successfully executed or is executing projects comprising of design, development, integration, implementation, operations and maintenance of projects in the last 5 years as on the last date of bid submission.	<p>Total Marks – 20</p> <p>For projects cost \geq INR 50 Lakhs = 20 Marks</p> <p>For project cost \geq INR 25 Lakhs = 9 Marks per Project</p> <p>For project cost \geq INR 15 Lakhs = 4 Marks per Project</p> <p>Bidder can also come up with cumulative projects from each category, the maximum marks awarded will be 20.</p> <p>Ex:</p> <ol style="list-style-type: none"> 1) 3 project of 25 Lakhs: $(9 \times 3 = 27)$, but Max marks awarded will be 20) 2) 2 project 15 Lakhs and 1 project 15 Lakhs: $(9 \times 2 + 4 \times 1) = 18 + 4 = 22$, max marks awarded 20 only
2	Number of full time technical employees in its pay roll. The technical Skills of these employees must cover server administrators, android and web developers(preferably JAVA), test engineers, project managers	<p>Total Marks – 25</p> <p>25 to 40 employees: 10 marks</p> <p>41 to 50 employees: 20 marks</p> <p>More than 50 employees: 25 marks</p>
3	Qualifications of proposed Manager: a. Post-graduate in relevant field with minimum 10 years of experience in IT preferably in Public Health sector b. Citation of at least 2 projects with a project component in following categories: <ul style="list-style-type: none"> Public health sector Government/Semi-Government 	<p>Total Marks – 15</p> <p>Qualification [4]: PG Degree: 1 marks, Relevant course/ certification: 1 marks, Tier 1 Institute: 1 mark each for UG and PG course</p> <p>Professional Experience [4]: 10-<15 years: 1.5 marks, 15-20 years: 2.5 marks, 20+ years: 4 marks [steps of 0.5]</p> <p>Project Lead experience [1]: 1 mark</p>

		Experience of 2 projects in public health sector [5], (cumulative): I – 2.5 marks, II – 5 marks 1 mark for previous experience in UP
4	The Sole Bidder should have minimum average annual Turnover of INR 1 Crore for last 3 audited financial years (2019-20, 2020-21 and 2021-22) from IT related services.	Total Marks – 10 >= 10 Crores: 10 marks <10 and >=6 Crores: 8 marks <5 and >=1 Crores: 6 marks
5	The Sole Bidder or the Lead Member of consortium should possess CMM level 3 or above certifications which are valid as on last date of bid submission.	Total Marks – 10 CMMI Level 5: 10 Marks CMMI Level 3: 5 Marks
6	Presentation of the Proposed Solution, Approach & Methodology: Overall approach towards data acquisition, Application development, installation, implementation and maintenance of the solution and project management plan (Maximum 20 Marks)	Total Marks – 20

- i. The technical bids/proposals scoring at least 70 points/marks would be considered for financial evaluation. A technical proposal failing to achieve 70 marks shall be rejected.
- ii. In the second stage, financial proposals of those who have qualified the Technical screening would be evaluated and ranked to determine L1.

Financial Bid Evaluation (Stage-2)

- i. Financial bid of only those bidders shall be considered who qualify the technical evaluation.
- ii. The Financial Bids of technically qualified bidders will be opened on the prescribed date as per IHAT policy.
- iii. IHAT will determine whether the Financial Proposals are complete, unqualified and unconditional. The cost indicated in the Financial Proposal shall be deemed as final and reflecting the total cost of services.
- iv. The bidder with the lowest overall price, qualifying as Financial Proposal (L1) will be awarded 100 score (amongst the bidders that qualified on the basis of Technical evaluation and obtained marks above 70%).
Financial scores for other than L1, bidders will be evaluated using the following formula:

Financial score of Bidder (SF) = {(Lowest price of Financial Proposal of L1/Price of the Financial Proposal of the bidder under consideration) X 100}

(Figures will be adjusted to two decimal places)

Final evaluation (shortlisting of bidder)

- i. Points obtained by the Agency for both **Technical (70)** as well as **Financial (30)** scores would be clubbed for the final selection.

- ii. The agencies will be ranked based on their Total Score and the agency scoring the highest points shall be selected.

iii. **Table: Marks for evaluation**

Sl. No.	Evaluation	Marks
1	Technical Evaluation	70
2	Financial Evaluation	30
	Total	100

Proposals will finally be ranked according to their combined technical (S_T) and financial (S_F) scores as follows:

$$S = S_T \times T_W + S_F \times F_W$$

Where,

S= is the combined score

S_T and S_F = Technical and Financial score of the bidder

T_W and F_W = Weights assigned to Technical Proposal and Financial Proposal, which

shall be 0.70 and 0.30 respectively.

The Selected Applicant shall be the first ranked Applicant (having the highest combined score). The second ranked Applicant shall be kept in reserve and may be invited for negotiations in case the first ranked Applicant withdraws, or fails to comply with the requirements specified.

Note: In the event the composite bid scores are 'tied', the bidder securing the highest technical score will be adjudicated as the Best Value Bidder for award of the Project.

11. Pre-Bid Queries

The agencies may submit their consolidated list of queries to procurement@ihat.in, before October 21, 2022 at 2359 hours.

12. Bid Submission

Bid Submission Deadline: 18-11-2022, **November 18, 2022** at 1800 hours.

Interested agencies are advised to submit Technical and Financial proposal (Hard copies in separate envelopes) along with all required document to below mentioned address. Please mention "Quotation for Development of Nurse Mentoring Application" over the sealed envelope.

"Team Lead

India Health Action trust

404, 4th floor, Ratan Square

No. 20-A, Vidhan Sabha Marg

Lucknow-226001, Uttar Pradesh, India"

You may also reach out over email (procurement@ihat.in) for any further queries in this matter.

13. Award of Contract

On completion of the process of selection, the agency selected shall be awarded the contract. Within 30 days of selection, the agency should execute an agreement with IHAT.

14. General Instructions and Consideration

- i. The Client (called "IHAT") will select an organization/Agency in accordance with the method of selection specified in the RfP.
- ii. The Applicants are invited to submit Technical and Financial Proposals (collectively called as - the Proposal), for the services required for the Assignment.
- iii. The Proposal will form the basis for grant of work order to the selected Agency. The Agency shall carry out the assignment in accordance with the Scope of Work of this RfP.
- iv. IHAT requires that the Applicant hold IHAT's interest paramount, avoid conflicts with other assignments or its own interests, and act without any consideration for future work. The applicant shall not accept or engage in any assignment that may place it in a position of not being able to carry out the assignment in the best interests of IHAT and the Project.
- v. Applicants shall bear all costs associated with the preparation and submission of their proposals, and their participation in the Evaluation Process, including but not limited to postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by IHAT or any other costs incurred in connection with or relating to its Proposal.
- vi. It is the IHAT's policy that the Applicants observe the highest standard of ethics during the Evaluation Process and execution of work/assignment. In pursuance of this policy, the IHAT:
 - will reject the Proposal for award if it determines that the Applicant has engaged in corrupt or fraudulent activities in competing for the work order in question;
 - will declare an Applicant ineligible, either indefinitely or for a stated period of time, to be awarded any contract or work order if it at any time determines that the Applicant has engaged in corrupt or fraudulent practices in competing for and in executing the work order.
- vii. **Dispute Resolution:** If any dispute or difference of any kind whatsoever arises between the parties in connection with or arising out of or relating to or under this RfP, the parties shall promptly and in good faith negotiate with a view to its amicable resolution and settlement. In the event no amicable resolution or settlement is reached within a period of thirty (30) days from the date on which the above-mentioned dispute or difference arose, such dispute or difference shall be finally settled by Executive Director, TSU, whose decision shall be final.
- viii. The Agencies shall submit their proposal in two covers namely, Technical Proposal and Financial Proposal respectively. The technical evaluation will be carried out first and then a list of technically qualified Applicants shall be prepared in the order of their merit. The Financial Proposals of technically qualified Applicants will be thereafter opened.
- ix. Number of Proposals: No applicant shall submit more than one application.
- x. Misrepresentation of the content of RfP/ improper response by the applicant may lead to the disqualification of the applicant. If such disqualification/ rejection occurs after the proposals have been opened and the highest ranking applicant gets disqualified/ rejected, then the IHAT reserves the right to consider the next best applicant, or take any other measure as may be deemed appropriate at the sole discretion of the IHAT.
- xi. Acknowledgement by Applicant:
It shall be deemed that by submitting the Proposal, the applicant has:
 - made a complete and careful examination of the RfP;
 - Received all relevant information requested from IHAT;

- accepted the risk of inadequacy, error or mistake in the information provided in the RfP or furnished by or on behalf of IHAT;
- satisfied itself about all matters, things and information, including matters herein above, necessary and required for submitting an informed application and performance of all of its obligations there under;
- acknowledged that it does not have a Conflict of Interest; and
- agreed to be bound by the undertaking provided by it under and in term hereof.

IHAT and/ or its advisors/ employees shall not be liable for any omission, mistake or error on the part of the Applicant in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to RfP or the Selection Process, including any error or mistake therein or in any information or data given by the IHAT and/ or its employee.

Annexure I

Annexure I1: Letter of Technical Proposal Submission Form

[Bidders are required to submit the covering letter as given here on their letterhead]

[Location, Date]

To,

India Health Action Trust,
404, 4th Floor, Ratan Square Building,
Vidhan Sabha Marg, Lucknow,
226001

RfP dated [date] for selection of Agency for [name of assignment]

Sir,

With reference to your RfP Document dated [date], we<name of agency>, having examined all relevant documents and understood their contents, hereby submit our Technical Proposal for selection as agency for [name of assignment]. The Proposal is unconditional and unqualified.

We are submitting our Proposal as [name of the applicant].

If negotiations are held during the period of validity of the Proposal, we undertake to negotiate in accordance with the RfP. Our Proposal is binding upon us, subject only to the modifications resulting from negotiations in accordance with the RfP.

We understand you are not bound to accept any Proposal you receive.

Further:

1. We acknowledge that IHAT will be relying on the information provided in the Proposal and the documents accompanying the Proposal for selection of the Agency, and we certify that all information provided in the Proposal and in the supporting documents is true and correct, nothing has been omitted which renders such information misleading; and all documents accompanying such Proposal are true copies of their respective originals.
2. This statement is made for the express purpose of appointment as the Agency for the aforesaid Project.
3. We shall make available to IHAT any additional information it may deem necessary or require for supplementing or authenticating the Proposal.
4. We acknowledge the right of IHAT to reject our application without assigning any reason or otherwise and hereby waive our right to challenge the same on any account whatsoever.
5. We certify that in the last 3 (three) years, we have neither failed to perform on any assignment or contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Applicant, nor been expelled from any project, assignment or contract by any public authority nor have had any assignment or contract terminated by any public authority for breach on our part.
6. We declare that:
 - a) We have examined and have no reservations to the RfP, including any Addendum issued by the Authority;

- b) We do not have any conflict of interest in accordance with the terms of the RfP;
 - c) We have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as defined in the RfP document, in respect of any tender or request for proposal issued by or any agreement entered into with IHAT or any other public sector enterprise or any government, Central or State; and
 - d) We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.
- 7. We understand that you may cancel the selection process at any time and that you are neither bound to accept any Proposal that you may receive nor to select the Agency, without incurring any liability to the Applicants.
 - 8. We certify that in regard to matters other than security and integrity of the country, we or any of our affiliates have not been convicted by a court of law or indicted or adverse orders passed by a regulatory authority which would cast a doubt on our ability to undertake the Project or which relates to a grave offence that outrages the moral sense of the community.
 - 9. We further certify that in regard to matters relating to security and integrity of the country, we have not been charge-sheeted by any agency of the Government or convicted by a court of law for any offence committed by us or by any of our affiliates. We further certify that neither we nor any of our consortium members have been barred by the central government, any state government, a statutory body or any public sector undertaking, as the case may be, from participating in any project or bid, and that any such bar, if any, does not subsist as on the date of this RfP.
 - 10. We further certify that no investigation by a regulatory authority is pending either against us or against our affiliates or against any of our Directors/ Managers/ employees.
 - 11. We hereby irrevocably waive any right or remedy which we may have at any stage at law or howsoever otherwise arising to challenge or question any decision taken by IHAT in connection with the selection of Agency or in connection with the selection process itself in respect of the above mentioned Project.
 - 12. We agree and understand that the proposal is subject to the provisions of the RfP document. In no case, shall we have any claim or right of whatsoever nature if the Project is not awarded to us or our proposal is not opened or rejected.
 - 13. The Financial Proposal is being submitted in a separate cover. This Technical Proposal read with the Financial Proposal shall be binding on us.
 - 14. We agree and undertake to abide by all the terms and conditions of the RfP Document.

We remain,

Yours sincerely,

Authorized Signature [In full and initials]:

Name and Title of Signatory:

Name of Firm:

Address:

Telephone:

Fax:

(Name and seal of the Applicant/Member in Charge)

Annexure I2: Outline of the Relevant Experience (Refer Section 8)

Details as per the following format shall be submitted for each of the projects. This is a suggested format and the bidder may append additional details as required.

Project Title: <i>(Attach separate sheet for each project)</i>	
Country: States:	
Name and address of the client:	Duration of the Assignment:
Approx. value of the contract (In current INR):	
Type of Project	Government, semi-government or multilateral organization:
Whether project was dealing in public health	Yes/No
Start Date (month/year):	End Date (month/year):
Team size deployed for the project	
Narrative description of the Project:	
Description of the actual services provided by the staff within the assignment	
Relevance of Assignment	

*Please attach copy of work order/completion certificate for each assignment.

Signature:

Name & Designation of the Authorised Signatory:

Name of Agency:

Address:

SEAL of the Agency:

Date:

The following project experience details to be filled by the Bidders for Technical Evaluation:

Summary of experience in similar projects

S.No	Name of the project	Name of the client	Type of Project (Software Integration/ Design & Development) a	Year of commencement of operations	Was project related to public health (Y/N)	Year of end of operations (if any)	Value of Works executing/executed

Annexure I3: Financial Capacity of Bidder

(To be certified by the statutory auditor)

(In Rs. Lakhs)

Bidder Name	Net Worth	Average Turnover of Three Financial Years Immediately Preceding the Bid

Signature of Statutory Auditor

Name of Statutory Auditor

Name of Company

Name & address of Bidder's Bankers:

Instructions:

1. The Bidder shall attach copies of the balance sheets, financial statements and Annual Reports in accordance with to the RfP. The financial statements shall:
 - a) reflect the financial situation of the Bidder
 - b) be audited by a statutory auditor
 - c) be complete, including all notes to the financial statements; and
 - d) Correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).

Annexure I4: Core Team structure and composition – proposed Team Leader Cum Project Manager, Solution Architect, Test Engineer, Database Developer, UI/UX Developer, Programmer as well as minimum technical resources for maintenance and support services after Go-live for the period of 2 years (format to be used for each resource separately)

Details as per the following format shall be submitted by bidder:

Bidder Name		Team Size

Details of the Team Composition

Name		
Appointment/Role		
Educational Qualification		
Years of experience		
Type of Employment		
Skill areas		
Date of Employment with Present Employer		
Name of Institutions/ Organisation/Sector he/she has worked for:	Period from.....to.....	Description of role/responsibilities

**Attach separate sheet for each*

Signature:

Name & Designation of the Authorised Signatory:

Name of Agency:

Address:

SEAL of the Agency:

Date:

Annexure I5: Qualification of proposed Team Leader Cum Project Manager, Solution Architect, Test Engineer, Database Developer, UI/UX Developer, Programmer as well as minimum technical resources for maintenance and support services after Go-live for the period of 2 years (format to be used for each resource separately)

Details as per the following format shall be submitted by bidder:

Professional Experience:

S.No.	Name of the Manager	Total Experience in Years	Relevant experience	Experience working in UP	Team Mgmt/ Project Lead experience

Academic Qualification of < >:

S.No	Name of Course	Name of institute

Project Experience:

S.No	Name of the project	Name of the client	Type of Project	Project Related to Govt Agency(Yes/No)	Year of commencement of operations	Year of end of operations (if any)	Value of Works executing/executed

Signature of Authorized Person

Name of Authorized Person

Name of Company

Name & address of Bidder

Instructions:

1. The Bidder shall attach copy of the Manager resumes

Annexure I6: Eligibility Criteria

Sr. No.	Evaluation Criteria	Documents To Be Submitted	Compliance to Minimum Criteria? (Yes/No)	Document submitted as proof for evaluation
1	Minimum 5 years of experience in executing projects comprising of design, development, integration, implementation, operations and maintenance of projects and providing Change Management support for mobile /web applications to government, semi-government bodies, NGO and Private sector	suitable documents in terms of work orders, completion certificates, Go Live certificates		
2	Projects worth 50 Lakhs, 25 lakhs or 15 lakhs, complying the following criteria: <ul style="list-style-type: none"> completed projects each (with project completion certificate) Preferably projects in public health (government/semi-government) 	Work Order, Go Live Phase completion certificate, certificate for ongoing projects		
3	Bidder must have at least 25 full time technical employees in its pay roll. The technical Skills of these employees must cover server administrators, android and web developers (preferably JAVA), test engineers, project managers	Self-undertaking		
4	Bidder should be registered in India under companies Act 1956/2013 or Partnership firm registered under the Partnership Act of 1932 or registered (converted to) under the Indian Limited Liability Partnership Act, 2008 or Societies Registration Act of 1860	Certificate of incorporation		
5	Bidder should not be blacklisted by Multi-Lateral Funding Agency / Govt. Of India/ any State Government / PSU's as on the date of bid submission	Self-undertaking		
6	The Bidder must have average annual turnover of Rs. 1 Crore in last three financial year ending at 31/03/2022 from IT Services.	Self-certified copies of the balance sheet and profit & loss statement for the last 3 completed financial years		
7	The Bidder must have positive net in last 3 financial years ending at 31/03/2022	CA certificate with UDIN for positive net worth for each year from the last 3 Financial years		

8	Acceptability of all conditions contained in the Tender Document by the Bidder. No further deviations to any mentioned clause shall be sought for.	Declaration in this regard by the authorized signatory of The Responder		
9	The bidder will not Sub-Contract the work/contract awarded. An undertaking to this effect has to be submitted by the successful Bidder.	Self-undertaking		
10	The bidder should have ISO 9001:2008 certification OR ISO 27001 Certification.	ISO certificate		
11	Qualifications of proposed Manager: a. Post-graduate in relevant field with minimum 10 years of experience in IT preferably in Public Health sector b. Citation of at least 2 projects with a project component in following categories: <ul style="list-style-type: none"> Public Health sector Government/Semi-Government 	Detailed Resume of the Proposed Team Leader		
12	The Sole Bidder or the Lead Member of consortium should possess the CMM level 3 or above certifications which are valid as on last date of bid submission.	CMM level 3 or above certification document		
13	Presentation of the Proposed Solution, Approach & Methodology: Overall approach towards data acquisition, Application development, installation, implementation and maintenance of the solution and project management plan)			

Appendix I7: Scope of Work

S. NO	Activities	Compliance (Yes/No)
1	Understanding the project requirement	
2	Feasibility Study on project implementation on both software and hardware grounds	
3	Requirement Gathering	
4	Design Solution architecture	
5	Development	
6	Operational and Functional testing	
7	Functional acceptance signoff	
8	Deployment on Production	
9	GO LIVE	
10	Implement a robust Service Management System for incident management, service request management, and change management to generate tickets for maintenance service requests with response tracking with date and time stamping	
11	Capability in transitioning the current deployment of application to the new environment with minimum downtime through a technical presentation/note	
12	Maintenance & Management of application both web and android	
13	Change Management in the application on any new requirement	
14	Preparing documents according to the client needs	
15	Integration with other platforms	
16	Server Maintenance and ensuring uptime of the server	
17	Extensive knowledge in Cloud Server Management	
18	Provisioning of Enterprise level support or Equivalent for software licenses as mentioned in the RFP. Covering updates, upgrades, security patches, issue resolution at software level, bug fixing etc.	
19	24x7x365 Support, Cloud service Provisioning, de- provisioning, up-dations, auto-scaling, security, firewall, anti-virus, bandwidth etc.	

Annexure II: Standard Formats for the Financial Proposal

Annexure II1: Letter of Financial Proposal Submission Form

Annexure II2: Financial Proposal

Annexure II1: Financial Proposal Submission Form

[Date]

To,

India Health Action Trust,
404, 4th Floor, Ratan Square Building,
Vidhan Sabha Marg, Lucknow,
226001

Dear Sir,

Subject: Services for [name of assignment].

We, the undersigned, offer to provide the services for [name of assignment] in accordance with your Request for Proposal dated [date] and our Proposal. Our attached Financial Proposal is for the sum of [amount(s) in words and figures].

Our Financial Proposal shall be binding upon us subject to the modifications resulting from arithmetic correction, if any, up to expiration of the validity period of the Proposal, i.e. [date].

We undertake that, in competing for (and, if the award is made to us, in executing) the above assignment, we will strictly observe the laws against fraud and corruption in force in India namely —Prevention of Corruption Act 1988.

We understand you are not bound to accept any Proposal you receive.

Yours sincerely,

Authorized Signature [In full and initials]:

Name and Title of Signatory:

Name of Firm:

Address:

Annexure II2: Financial Proposal

Financial Implications for scope of work defined in RfP should be as per below formats:

Table i: Format for Development Cost

S.no	Activity	Cost INR in Figures	GST in percentage	GST in Figures	Total	Cost INR in words (inclusive of all taxes)
A	B	C	D	E	F=C+E	G
1	Design / development / implementation/ Integration of Web application					
2	Design and Development of Mobile Application (Android/iOS)					
3	Total					

Table ii: Format for Annual Maintenance Cost

S.no	Resource	Cost (INR in Figures)	Cost 2 years (INR in Figures)	GST in percentage	GST in Figures	Total	Cost INR in words (inclusive of all taxes)
A	B	C	D	E	F	G=D+F	H
1	20% of Project cost Table i: Row 3 Column C		=C*2				
2	Total						

Table iii: Format for Change Management Cost

S.no	Resource	Cost (INR in Figures)	Cost 2 years (INR in Figures)	GST in percentage	GST in Figures	Total	Cost INR in words (inclusive of all taxes)
A	B	C	D	E	F	G=D+F	H
1	Per Man Day Cost						
2	Total						

Table iv: Overall Project Cost:

S.no	Activity	Total cost exclusive of taxes (INR in Figures)	Cost INR in words (exclusive of all taxes)	Total cost inclusive of taxes (INR in Figures)	Cost INR in words (inclusive of all taxes)
A	B	C	H	D	H
1	Development Cost (Table i, Row 3, Column C)				
2	Annual Maintenance Cost				

	(Table ii, Row 2, Column D)				
3	Change Management Cost (Table iii, Row, 2, Column D)				
3	Total				

Note: This is the suggestive commercial proposal format which may be amplified by the bidder based on the proposal.

Notes:

- The prices stated in the Contract shall be deemed to include all amounts.
- Bidder must submit their financial bid for the total scope of work.
- Taxes would be payable at the applicable rates as may be in force from time to time
- Annual Maintenance Cost after Go LIVE to be 20% of the total project cost.
- 20 man-days to be included within the AMC for any change management tasks.
- Beyond 20 man-days within an AMC Change Management to be on per man day basis costing.
- AMC cost for both years shall remain same.
- **The total amount mentioned in Table iv under column C will be considered towards evaluation, i.e. total development, AMC and change management cost.**

Annexure III: Illustrative Flow Charts

Annexure III1: ILLUSTRATIVE POSITION and COMPETENCY-LEVEL for OSCE ASSESSMENT MAPPING

POSITION-COMPETENCY MAPPING for OSCE ASSESSMENT (ILLUSTRATIVE)					
EMPLOYEE	POSITION	ROLE	ACTIVITIES	ROLE mapped to COMPETENCY (COMPETENCY-LEVELS)	OSCE ASSESSMENT ID
E1	P1	R1	Activities Mapped to R1, R2	C523 (L3 - L5)	OA1
				C524 (L1 - L2)	
				C525 (L1 - L2)	OA2
				C520 (L1 - L1)	OA3
		R2	All Activities for P1 will be Unique	C521 (L1 - L2)	OA4
				C523 (L1 - L2)	OA1
				C524 (L3 - L5)	
				C525 (L3 - L4)	OA2
E2	P2	R3	Unique Activities mapped to R3	C520 (L2 - L3)	OA3
				C523 (L3 - L5)	OA1
				C524 (L3 - L4)	
				C525 (L3 - L4)	OA2
E3	P3	R4	Unique Activities mapped to R4	C522 (L1 - L1)	OA5
				C523 (L1 - L2)	OA1
				C524 (L3 - L5)	
				C525 (L3 - L3)	OA2
				C525 (L1 - L2)	OA6
				C526 (L1 - L1)	
				C527 (L2 - L3)	
E3	P3	R4	Unique Activities mapped to R4	C528 (L1 - L5)	

ASSUMPTIONS									
1	A OSCE ASSESSMENT may be associated with one or more Competencies (and Competency Levels)								
2	One Competency (or Competency Level) may be associated with more than one OSCE Assessment								
3	Each Step within any OSCE ASSESSMENT will be linked to only one C-L combination								
LEGENDS									
Purple Competencies appeared twice in the chart paired with same OSCE (OA3)									
Black Competencies appeared only once in the chart									
Blue Competencies appeared four times on same OSCE									
Maroon Competencies appeared twice in the chart paired with different OSCE (OA2 and OA6)									

Annexure III2: ILLUSTRATIVE OSCE-STEP TO POSITION MAPPING

OSCE to POSITION MAPPING (ILLUSTRATIVE)									
SN	OSCE ASSESSMENT		COMPETENCY		COMPETENCY LEVEL	C-L ID	ACTIVITIES	ROLES	POSITION
	ID	OSCE STEP ID	(C)	(L)					
1	OA3	OA3_01	C520	L1	C520-L1		A1	R1, R2	P1
2		OA3_02		L1	C520-L1		A2		
3		OA3_03		L2	C520-L2		A3		
4		OA3_04		L3	C520-L3		A4		
5		OA3_05		L3	C520-L3		A5		
6		OA3_06		L3	C520-L3		A6		
7		OA3_07		L3	C520-L3		A7		
8		OA3_08		L3	C520-L3		A8		
9		OA3_09		L3	C520-L3		A9		
10		OA3_10		L3	C520-L3		A10		
11	OA4	OA4_01	C521	L1	C521-L1		A11	R1	P1
12		OA4_02		L1	C521-L1		A12		
13		OA4_03		L2	C521-L2		A13		
14		OA4_04		L2	C521-L2		A14		
15		OA4_05		L2	C521-L2		A15		
16		OA4_06		L2	C521-L2		A16		
17		OA4_07		L2	C521-L2		A17		
18		OA4_08		L2	C521-L2		A18		
19	OA5	OA5_01	C522	L1	C522-L1		A19	R3	P2
20		OA5_02		L2	C522-L2		A20		
21		OA5_03		L3	C522-L3		A21		
22		OA5_04		L4	C522-L4		A22		
23		OA5_05		L4	C522-L4		A23		
24		OA5_06		L5	C522-L5		A24		
25		OA5_07		L5	C522-L5		A25		
26	OA1	OA1_01	C523	L1	C523-L1		A26	R1, R2, R3, R4	P1, P2, P3
27		OA1_02		L2	C523-L2		A27		
28		OA1_03		L3	C523-L3		A28		
29		OA1_04		L4	C523-L4		A29		
30		OA1_05		L5	C523-L5		A30		
31		OA1_06	C524	L1	C524-L1		A31	R1, R2, R3, R4	
32		OA1_07		L2	C524-L2		A32		
33		OA1_08		L3	C524-L3		A33		
34		OA1_09		L4	C524-L4		A34		
35		OA1_10		L5	C524-L5		A35		
36	OA2	OA2_1	C525	L1	C525-L1		A36	R1, R2, R3, R4	P1, P2, P3
37		OA2_2		L1	C525-L1		A37		
38		OA2_3		L2	C525-L2		A38		
39		OA2_4		L2	C525-L2		A39		
40		OA2_5		L3	C525-L3		A40		
41		OA2_6		L3	C525-L3		A41		
42		OA2_7		L4	C525-L4		A42		
43		OA2_8		L4	C525-L4		A43		
44		OA2_9		L4	C525-L4		A44		
45		OA2_10		L4	C525-L4		A45		
46	OA6	OA6_1	C526	L1	C526-L1		A46	R4	P3
47		OA6_2		L1	C526-L1		A47		
48		OA6_3		L2	C526-L2		A48		
49		OA6_4		L2	C526-L2		A49		
50		OA6_5		L3	C526-L3		A50		
51		OA6_6		L4	C526-L4		A51		
52		OA6_7		L5	C526-L5		A52		
53		OA6_8		L5	C526-L5		A53		
54		OA6_9	C527	L1	C527-L1		A54	R4	
55		OA6_10		L2	C527-L2		A55		
56		OA6_11		L3	C527-L3		A56		
57		OA6_12		L3	C527-L3		A57		
58		OA6_13		L3	C527-L3		A58		
59		OA6_14		L3	C527-L3		A59		
60		OA6_15		L4	C527-L4		A60		
61		OA6_16		L5	C527-L5		A61		
62		OA6_17	C528	L1	C528-L1		A62	R4	
63		OA6_18		L2	C528-L2		A63		
64		OA6_19		L3	C528-L3		A64		
65		OA6_20		L4	C528-L4		A65		
66		OA6_21		L5	C528-L5		A66		
67		OA6_22	C525	L1	C525-L1		A36	R4	
68		OA6_23		L1	C525-L1		A37		
69		OA6_24		L2	C525-L2		A38		
70		OA6_25		L2	C525-L2		A39		

Attempt is made to do logical colour coding in accordance with POSITION to OSCE MAP

Annexure III3: ILLUSTRATIVE OSCE ASSESSMENT MARKING

OSCE ASSESSMENT ILLUSTRATED USING AN IMAGINARY OSCE						OBSERVATION OF ASSESSOR (1 for Correct, 0 for Missed or Incorrect)	COMPETENCY-LEVEL WISE SCORE	CUMMULATIVE SCORE	FEEDBACK ON MISSED STEPS	FEEDBACK COMMENT GIVEN IN BRIEF	
S/N	OSCE ASSESSMENT ID	OSCE STEP ID	COMPETENCY (C)	COMPETENCY LEVEL (L)	C-L ID						
1	OA6	OA6_1	C526	L1	C526-L1	1	2	22			
2		OA6_2		L1	C526-L1	1					
3		OA6_3		L2	C526-L2	1					
4		OA6_4		L2	C526-L2	0			2	OA6_4	One critical point missed
5		OA6_5		L3	C526-L3	1			1		
6		OA6_6		L4	C526-L4	0			1	OA6_6	Lacks proper understanding on this step
7		OA6_7		L5	C526-L5	0				OA6_7	Took Longer time than expected
8		OA6_8		L5	C526-L5	0			2	OA6_8	Took Longer time than expected
9		OA6_9	C527	L1	C527-L1	1	1				
10		OA6_10		L2	C527-L2	1	1				
11		OA6_11		L3	C527-L3	1	3				
12		OA6_12		L3	C527-L3	1					
13		OA6_13		L3	C527-L3	1					
14		OA6_14		L3	C527-L3	0			OA6_14	Improper communication to patient	
15		OA6_15		L4	C527-L4	1			1		
16		OA6_16		L5	C527-L5	0			0	OA6_16	Improper communication to patient
17		OA6_17	C528	L1	C528-L1	1			1		
18		OA6_18		L2	C528-L2	1			1		
19		OA6_19		L3	C528-L3	1	1				
20		OA6_20		L4	C528-L4	1	1				
21		OA6_21		L5	C528-L5	0	0		OA6_21	Lacks proper understanding on this step	
22		OA6_22	C525	L1	C525-L1	1	2				
23		OA6_23		L1	C525-L1	1					
24		OA6_24		L2	C525-L2	1					
25		OA6_25		L2	C525-L2	1	2				

Annexure III4: ILLUSTRATIVE IMPROVEMENT PLAN

IMPROVEMENT PLAN (EXAMPLE)									
EMP	COMETENCIES	LEVEL TO BE ACHIEVED	END LINE MARKS (BEFORE MENTORING)	PASS MARKS (BASE LINE)	GAP (BASE LINE - END LINE)	OSCE ID associated with COMPETENCY	ASSIGNED MENTORING CYCLE	MENTORING ASSESSMENT DATE	BASE LINE MARKS (END OF MENTORING)
E1 at P1	C523	L5	4	7	-3	OA1	OSCE 1	07-Feb-23	8
	C524	L5	9	8	1				
	C525	L4	10	10	0	OA6 for L2 , OA2 for L4			
	C520	L3	5	6	-1	OA3	OSCE 3	20-Apr-23	5
	C521	L2	6	5	1	OA4			
E2 at P2	C523	L5	9	7	2	OA1			
	C524	L4	9	8	1				
	C525	L4	6	8	-2		OA6 for L2 , OA2 for L4	OSCE 4 and OSCE 2	17-Dec-23
	C522	L1	5	6	-1	OA3	OSCE 3	20-Apr-23	2

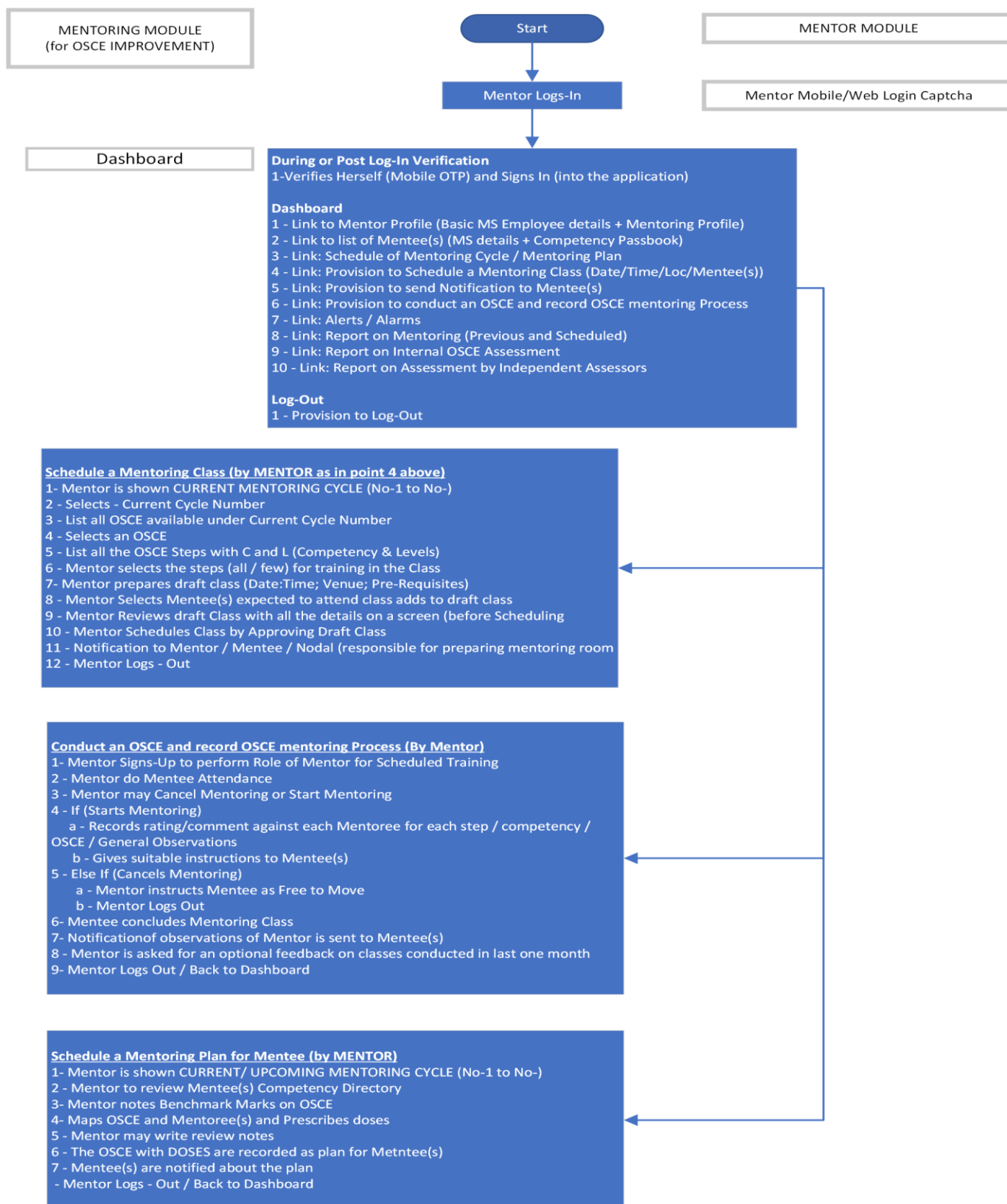
ASSUMPTIONS

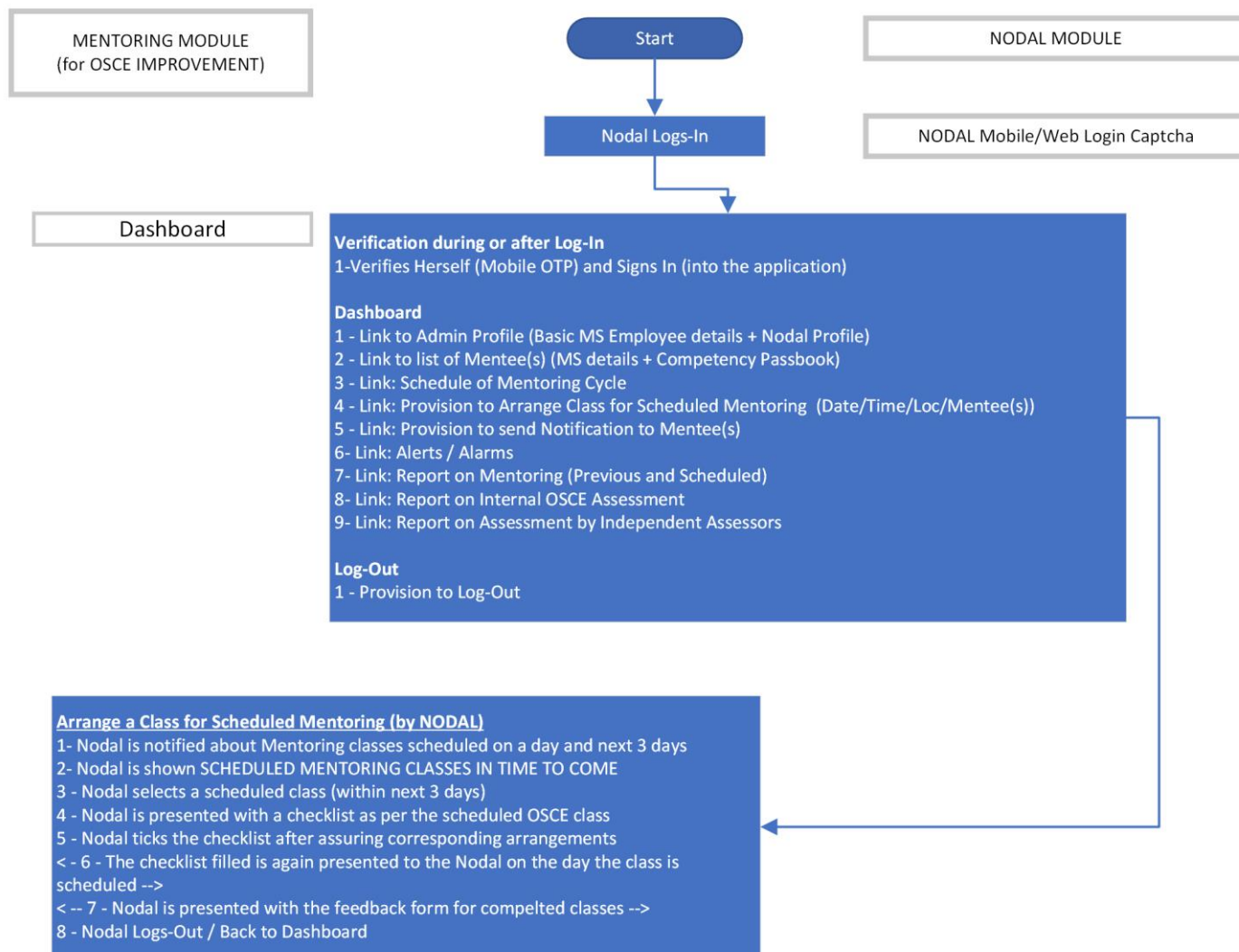
- 1 ONE SINGLE OSCE ASSESSMENT (for ONE OSCE ID) may be associated with one or more Competencies
- 2 One Step in the OSCE ASSESSMENT will be linked to only one C-L combination

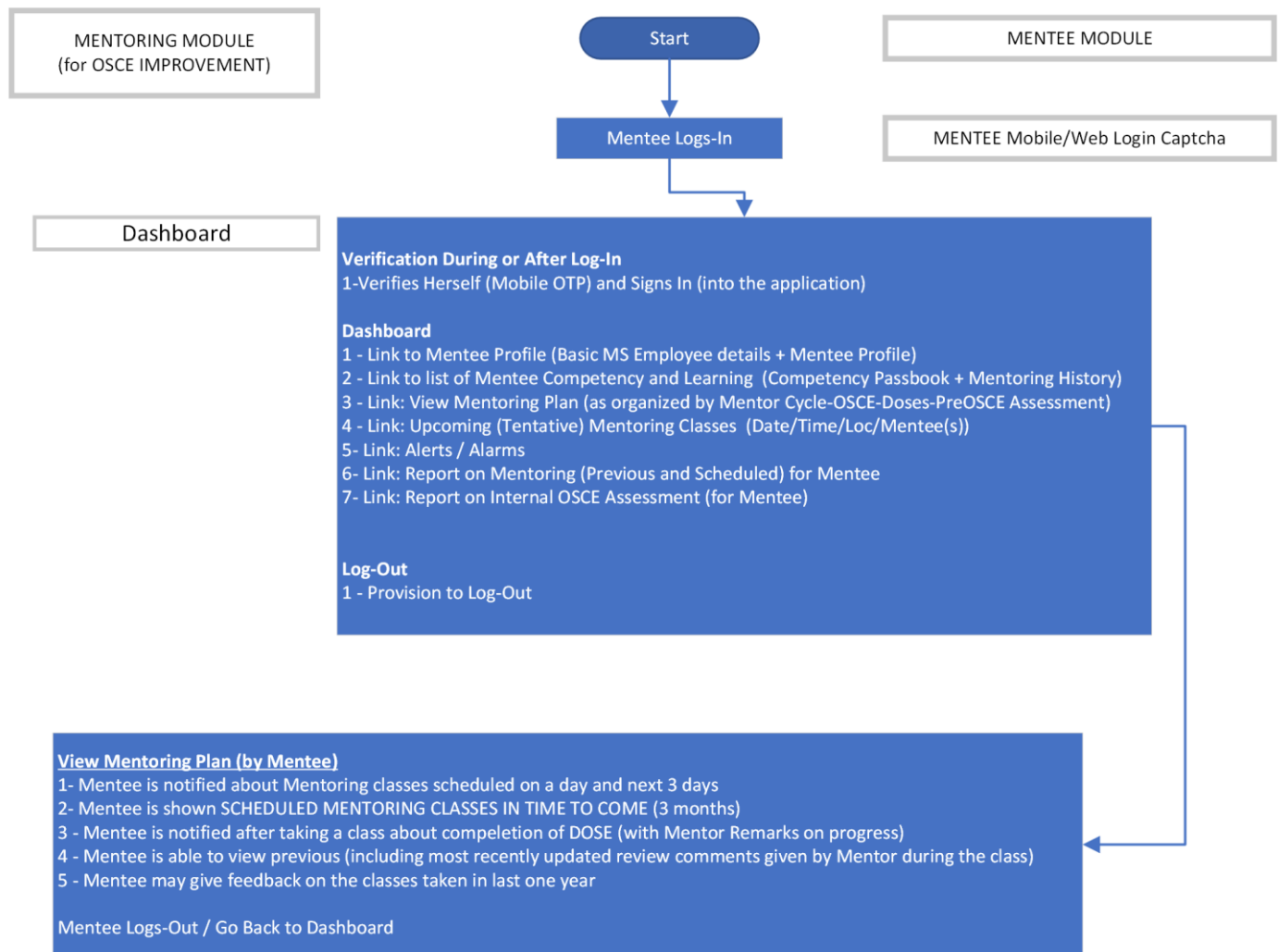
Annexure III5: ILLUSTRATIVE MENTORING CYCLE

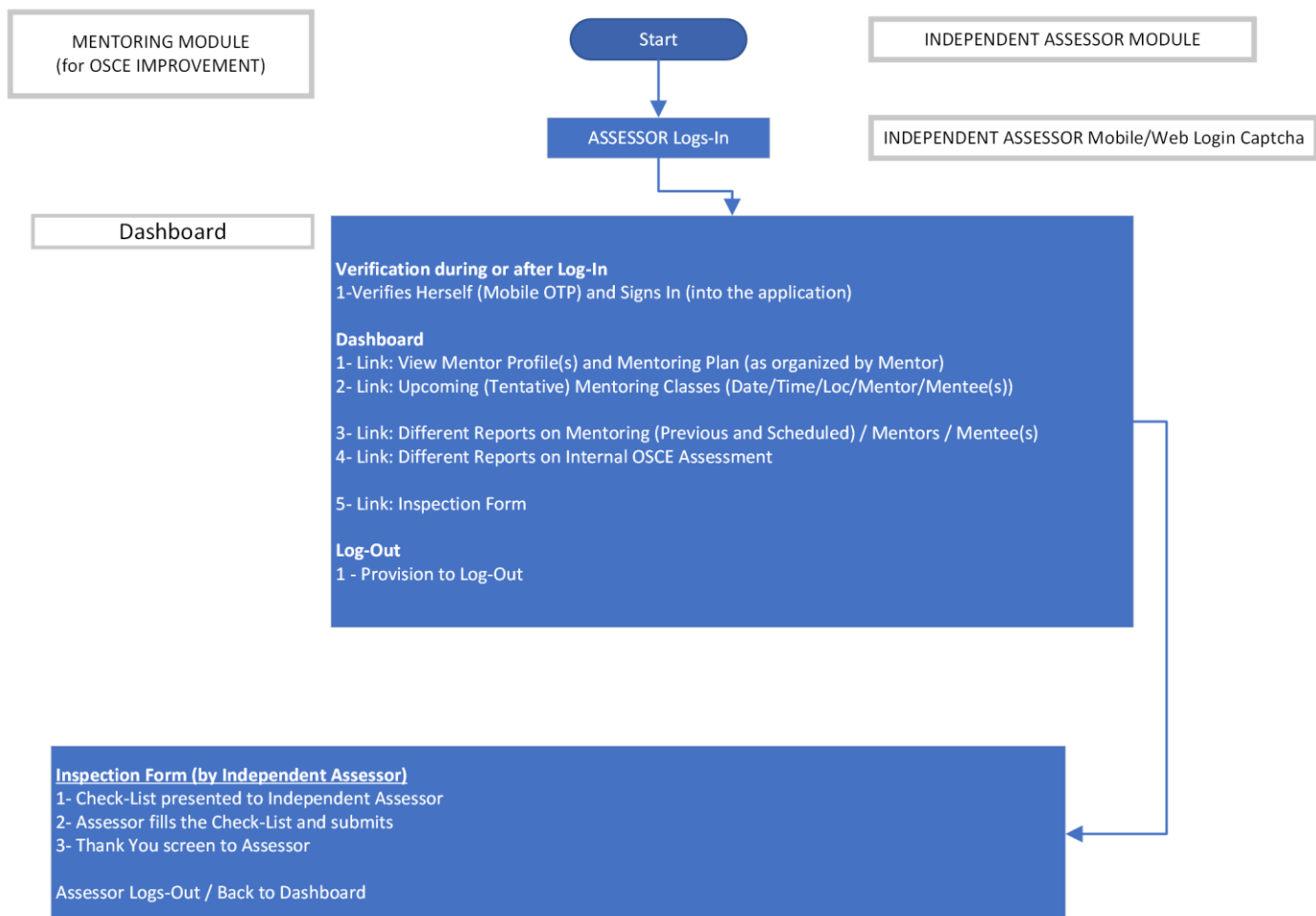
MENTORING CYCLE SCHEDULER (EXAMPLE)		MENTORING EXAMPLE					PERIOD DURING MENTORING CYCLE FOR MENTOR ASSESSMENT (EXAMPLE)	
CYCLE	OSCE	START DATE	DOSE 1	DOSE 2	DOSE 3	END DATE	FROM	TO
CYCLE 1	OSCE 1	01 January 2023	01 - 15 Jan 23	16 - 31 Jan 23	01 - 15 Feb 23	28 February 2023	15 February 2023	28 February 2023
CYCLE 2	OSCE 2	01 March 2023	01 - 15 Mar 23	16 - 30 Mar 23	01 - 15 Apr 23	30 April 2023	15 April 2023	30 April 2023
CYCLE 3	OSCE 3	01 May 2023	01 - 15 May 23	16 - 31 May 23	01 - 15 Jun 23	30 June 2023	15 June 2023	30 June 2023
CYCLE 4	OSCE 4	01 July 2023	01 - 15 Jul 23	16 - 31 July 23	01 - 15 Aug 23	31 August 2023	15 August 2023	31 August 2023
CYCLE 5	OSCE 5	01 September 2023	01 - 15 Sep 23	16 - 30 Sep 23	01 - 15 Oct 23	31 October 2023	15 October 2023	31 October 2023
CYCLE 6	OSCE 6	01 November 2023	01 - 15 Nov 23	16 - 30 Nov 23	01 - 15 Dec 23	31 December 2023	15 December 2023	31 December 2023

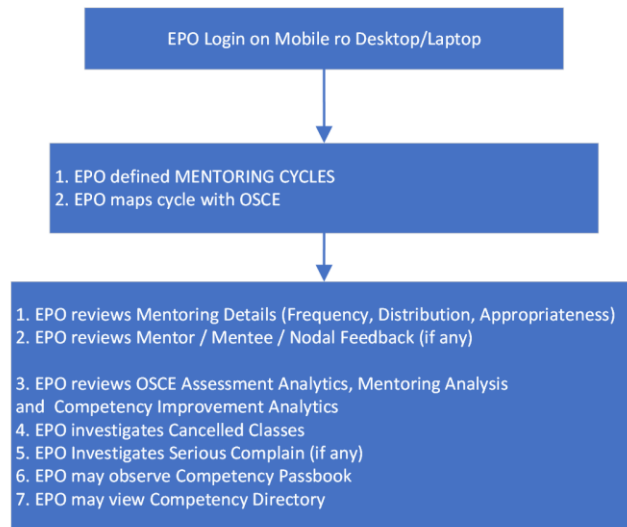
Annexure III6: ILLUSTRATIVE MENTORING WORK-FLOW







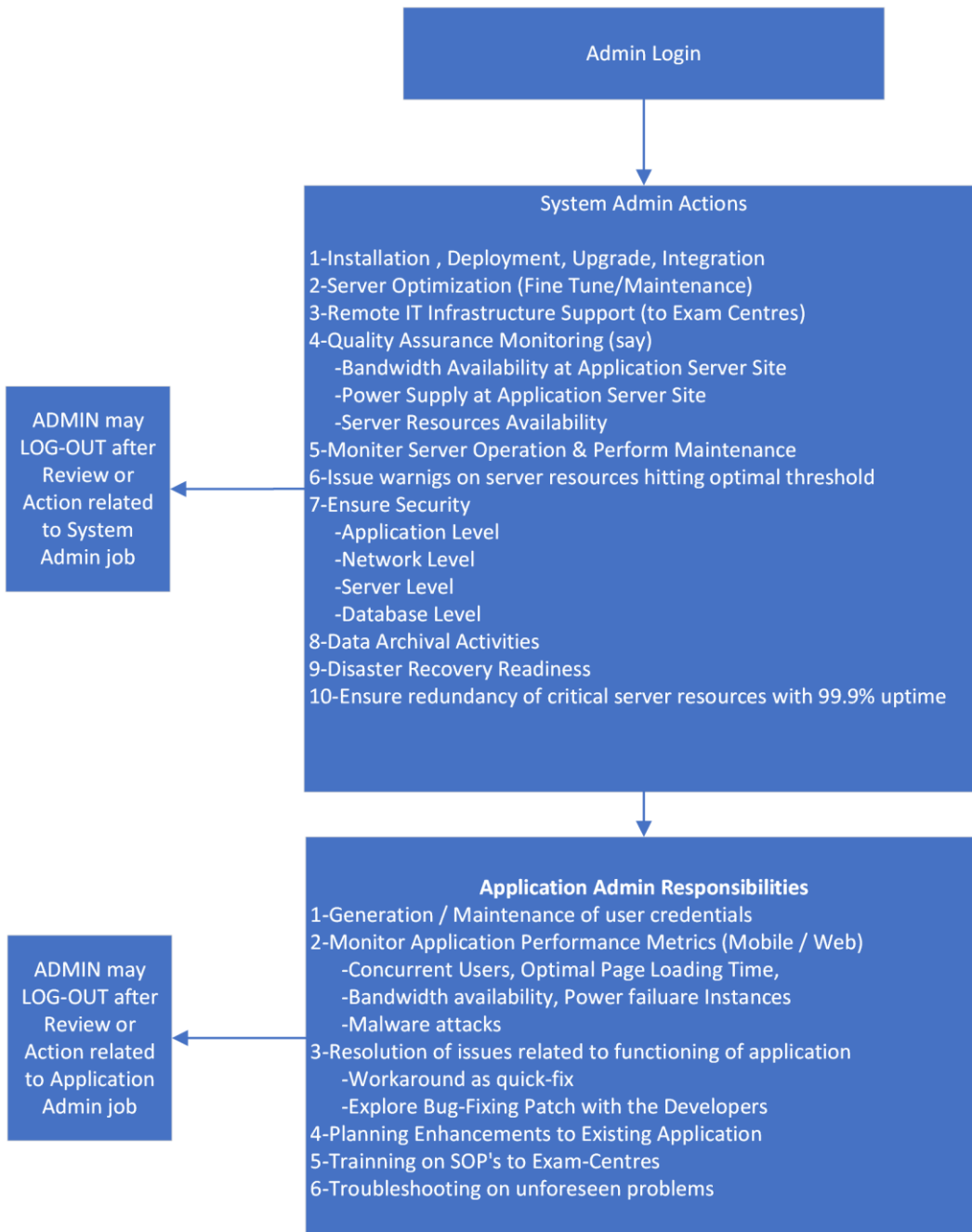




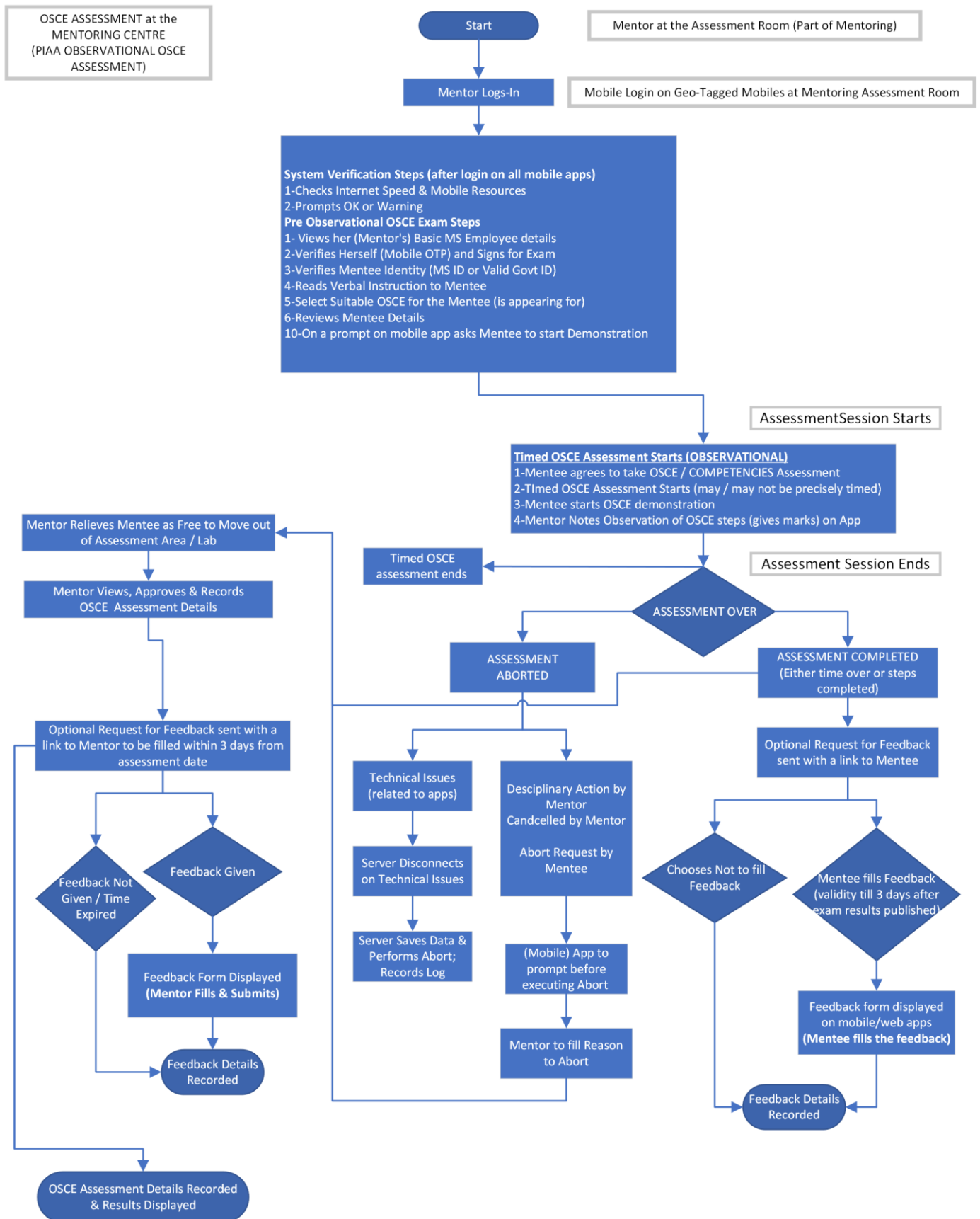
Exam Process Owner (EPO)

Process Owner for MENTORING
MODULE(S) undertaken for OSCE
Improvement for Mentoring Centre

Application Administration & System Administration (ADMIN ROLE)



Annexure III7: ILLUSTRATIVE FLOW FOR OBSERVATIONAL OSCE ASSESSMENT



EPO Login on Mobile or Desktop/Laptop

Exam Process Owner (EPO)

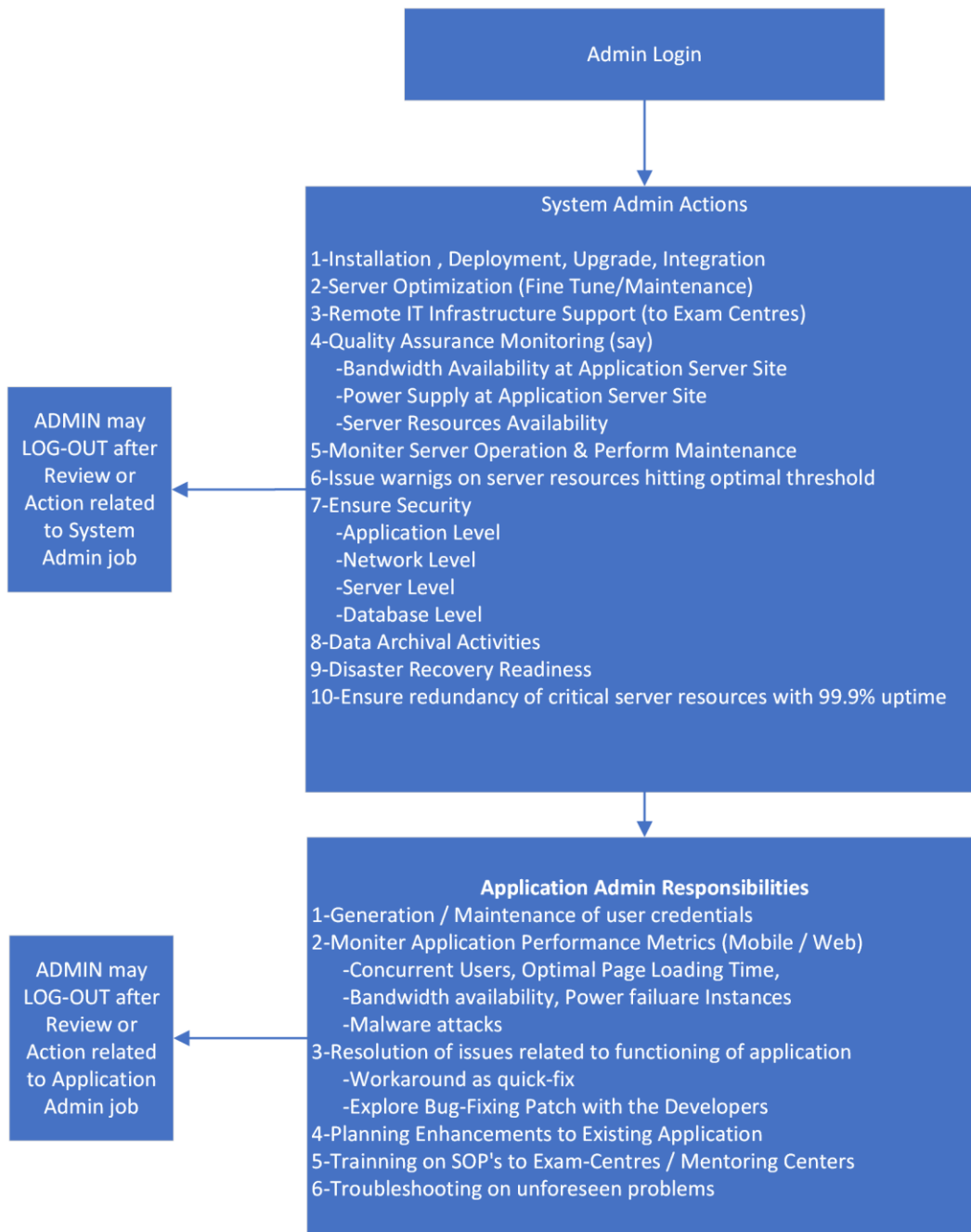
IN-CHARGE of MENTORING &
OBSERVATIONAL OSCE

General Review of Details Submitted
by Mentor for Approval and Result
Generation

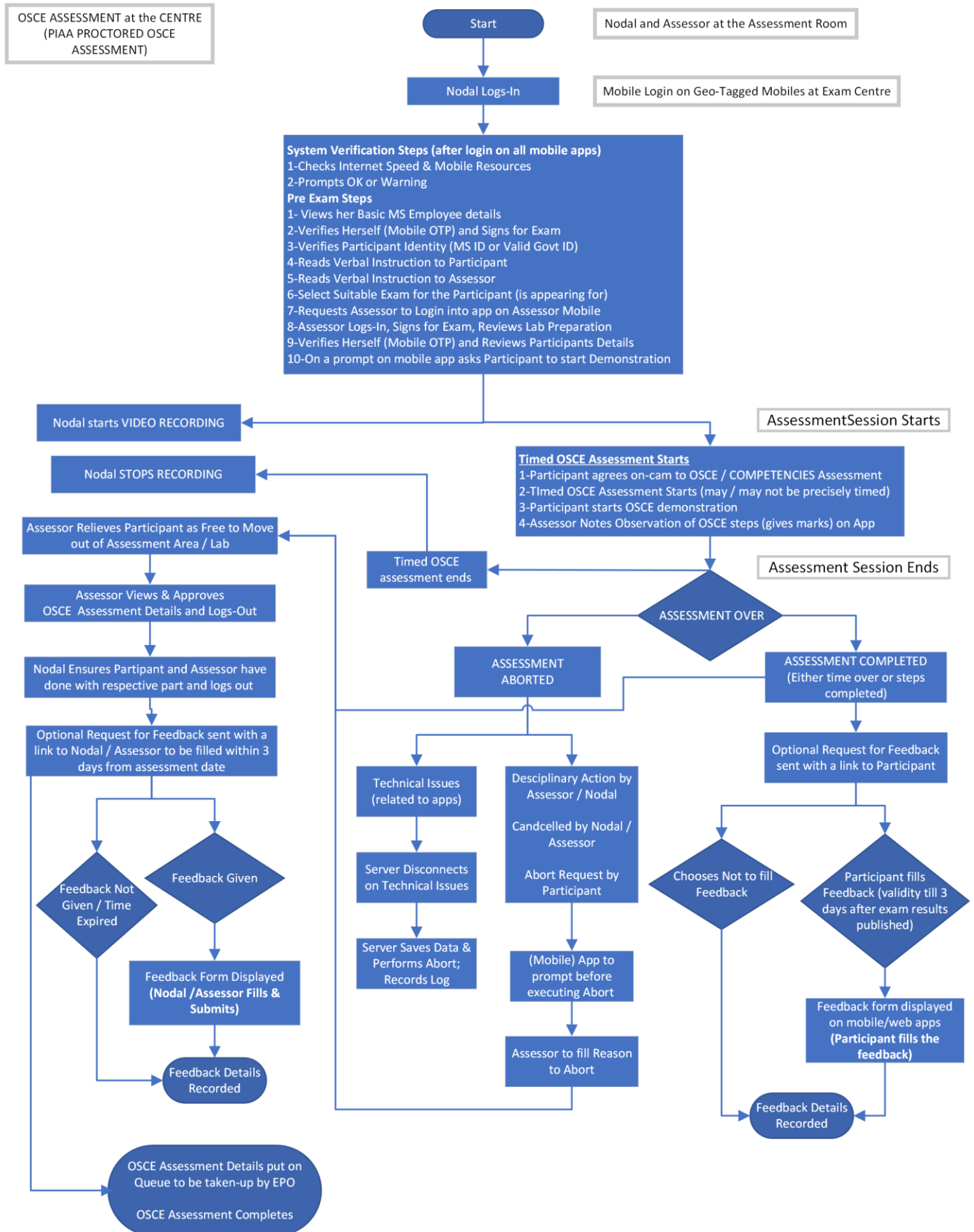
1. EPO defined MENTORING CYCLES / Possible Doses
2. EPO maps cycle with OSCE / OSCE Assessment at Mentoring Centre
3. EPO reviews Observational OSCE Assessment Details (during Mentoring) as Reports
4. EPO reviews Evaluation (done by Mentor)
5. EPO reviews Mentor / Mentee Feedback (if any)
6. EPO reviews OSCE Assessment Analytics / Competency Analytics
7. EPO investigates Aborted Assessment (if required)
8. EPO Investigates Serious Complaint (if any)
9. EPO may observe Competency Passbook
10. EPO may view Competency Directory

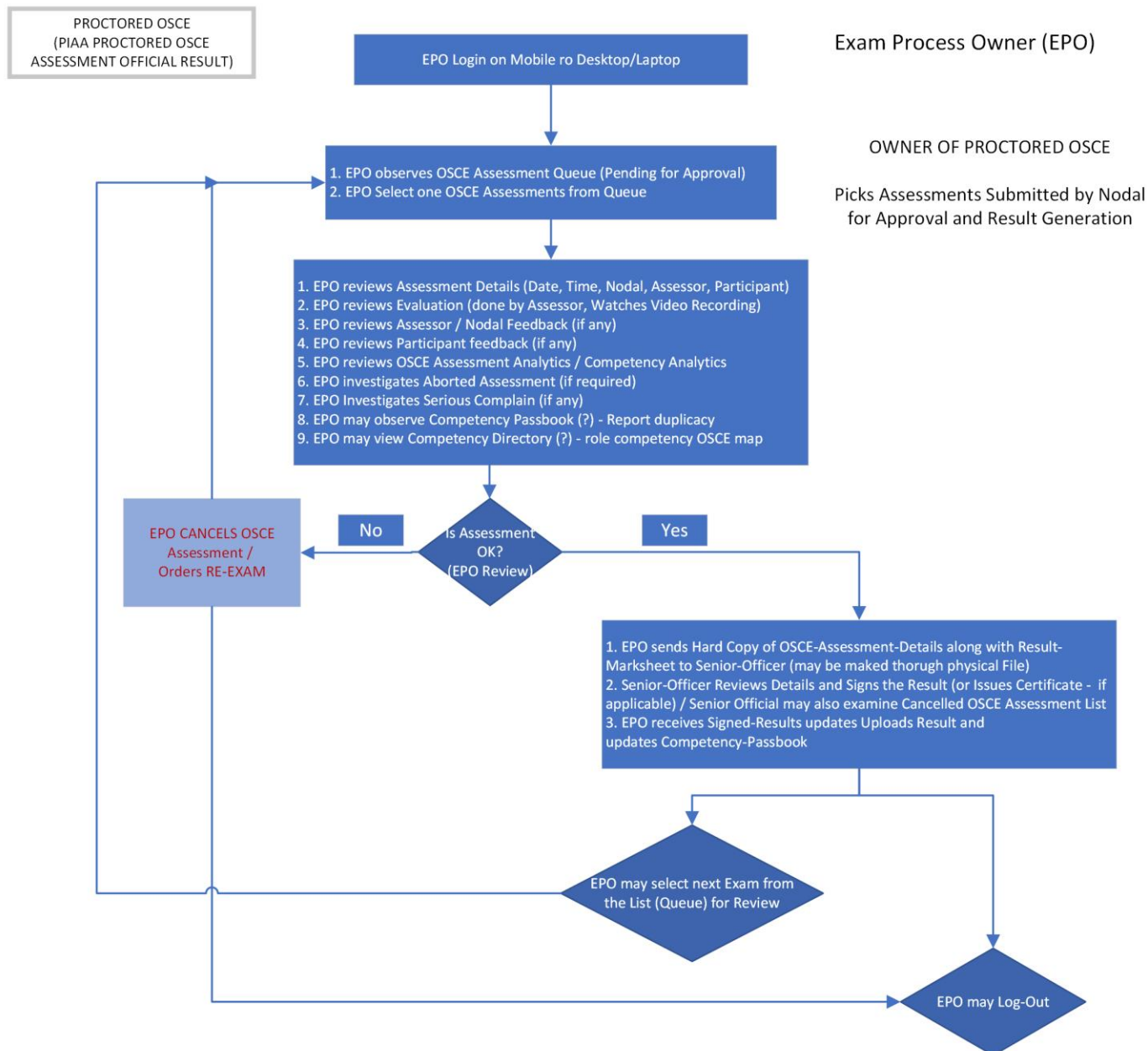
EPO may Log-Out

Application Administration & System Administration (ADMIN ROLE)



Annexure III8: ILLUSTRATIVE FLOW FOR PROCTORED OSCI ASSESSMENT





State Training Officer (STO), Medical Academy, UP

Responsible for: -

1-Competency Directory

2-OSCE-Competency Map

STO Login

1-Observes - details on competency directory (**From MS/Other System**), analytics of competency passbook (**From MS/other sys**), data on assessment (**CL Score/OSCE**)
2-Assesses threshold for OSCE certification
3-Analysis data on OSCE-Competency Mapping
 Across role- **Doctor/ANM/Nurse...**
 Across levels- (**say**) **L1 to L5 (for K,S)**
 Across groups- **Region/ Experience / Other Filters / Data Analytics**
4-Individuals OSCE Steps
 Classification of Level, Average Demonstration Time
5-Observes patterns of feedbacks/complaints
6-Observes SOP for conducting OSCE Assessment
7-Plans Change Management for Adoption of Best Practices
8-Reviews Mentoring Outcome and availability of funds

STO may perform any/
all/none of the actions
during a login session

1- Develops a Comprehensive Understanding on OSCE Assessment Operation
2- Issues official Statistics & official Report on PIAA (WRITTEN, PROCTORED OSCE) / Nurse Mentoring and OBSERVATIONAL OSCE

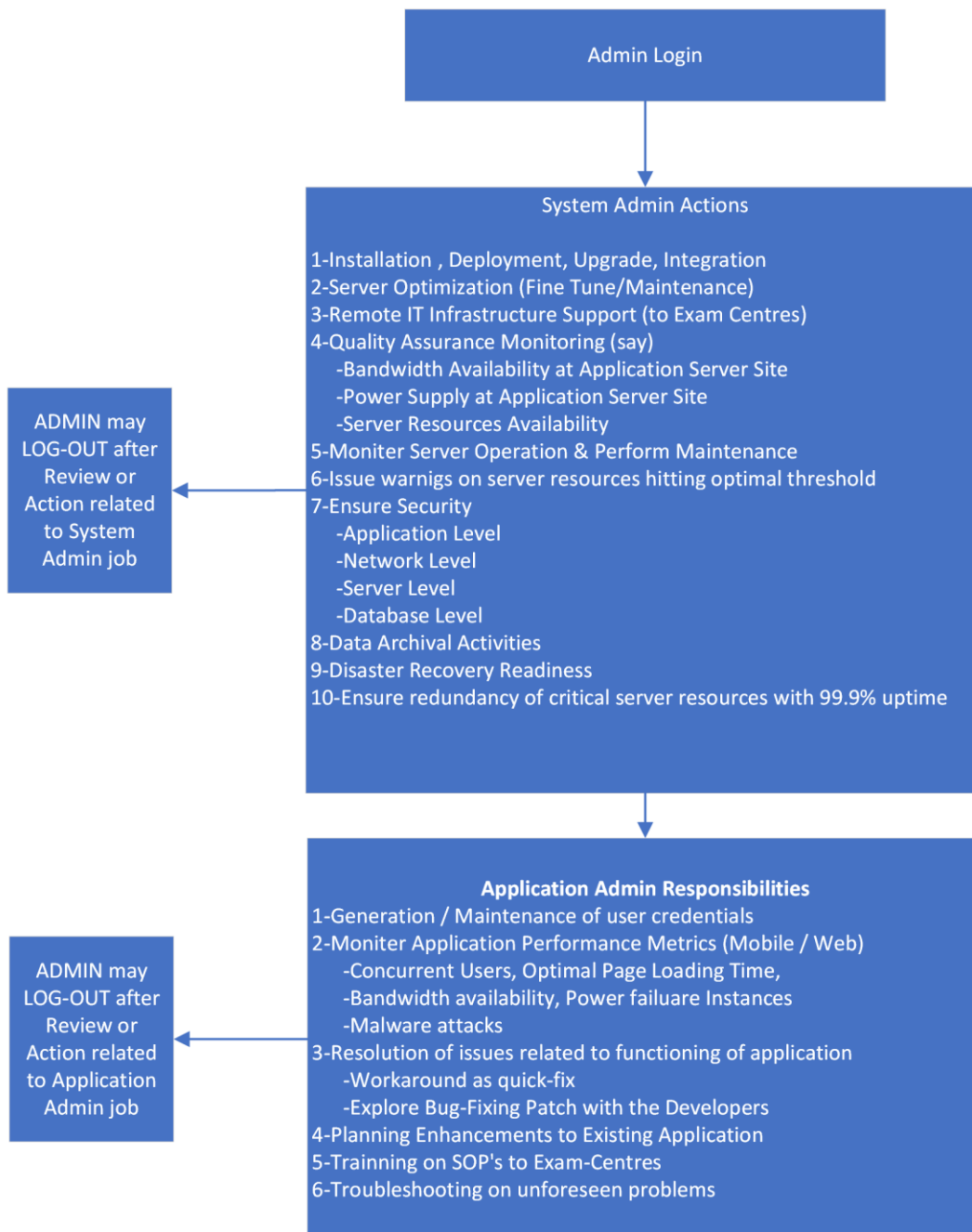
1-Updates Competency Directory
2-Resolves issues with Competency Passbook
3-Sets and updates Threshold for certifications related to PIAA (OSCE/MCQ)
4-Issues Standards and Guidelines on PIAA Assessments / Nurse Mentoring
5-Inspects examination centres
6-Approves pilot on PIAA / Nurse Mentoring Application - new versions

Management of OSCE Steps & Competency Mapping

1-Assessment of OSCE Steps in context of Local Environment of Nurses in UP
2-Classification OSCE / OSCE Steps (Levels/Roles / Mapped Competencies)
3-Evaluation & Changes to OSCE Assessment Room Infrastructure
4-Engagement of experts to review effectiveness of PIA OSCE Assessment / NM
5-Suggesting reforms and change in policies for Medical and Healthcare service improvements

STO may prefer to Log-Out any time after Review or (after taking) Action on any of the above Functions

Application Administration & System Administration (ADMIN ROLE)



./*****/