



Request for Proposal (RFP)

Selection of Program Management Consultant (PMC) for National Digital Health Mission (NDHM)

Volume I: Scope of Work

RFP No: S-12019/85/2020

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The Bidders shall bear all costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the NHA or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and the NHA shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding Process.

About this RFP

This RFP is meant to invite proposals from interested organizations capable of delivering ‘**scope of work**’ of Program Management Consultant as prescribed in this document. The content of this RFP has been documented as a set of three (III) volumes explained below.

- **RFP Volume I: Scope of Work:** Volume I of RFP provides details on the proposed scope of work and other requirements that NHA deems necessary to share with the potential bidders.
- **RFP Volume II: Evaluation and Bidding Process:** Volume II of RFP provides details that may be needed by the potential bidders to understand their eligibility, bidding process and formats for preparing the bids.
- **RFP Volume III: Contractual and Legal Specifications:** Volume III of RFP provides the contractual and legal terms that NHA wishes to specify at this stage.

This is Volume I.

Abbreviations

Abbreviation	Description
API	Application Program Interface
APM	Application Performance Management
APT	Advanced Persistent Threat
AYUSH	Ministry of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy
AYUSH-CCIM	AYUSH- Central Council of Indian Medicine
CDN	Content Delivery Network
CDS	Clinical Decision Support System
CEO	Chief Executive Officer
COTS	Commercial off the Shelf
CPPP	Central Public Procurement Portal
DAM	Database Activity Monitoring
DDOS	Distributed Denial of Service
DLP	Data Leak Prevention
DPR	Detailed Project Report
DR	Disaster Recovery
DSS	Digital Service Standards
DSC	Digital Signature Certificates
EMD	Earnest Money Deposit
EMR	Electronic Medical Record
GIS	Geographical Information System
GSTN	Goods and Services Tax Network
HFR	Health Facility Registry
HIE	Health Information Exchange
HIPS	Host Intrusion Prevention System
HIS	Hospital Information System
HSM	Hardware Security Module
IAM	Identity and Access Management
ICT	Information and Communication Technology
IPC	Indian Penal Code
IPR	Intellectual Property Rights
IT	Information Technology
KT	Knowledge Transfer
LMS	Learning Management System
LoA	Letter of Award
LoI	Letter of Intent
MoHFW	Ministry of Health and Family Welfare
MSP	Managed Service Provider
NCD Registry	Non-Communicable Diseases Registry
NDA	Non-Disclosure Agreement

RFP: Selection of PMC for NDHM

Abbreviation	Description
NDHB	National Digital Health Blueprint
NDHE	National Digital Health Ecosystem
NDHM	National Digital Health Mission
NHA	National Health Authority
NHP	National Health Policy
NHS-UK	National Health Service- United Kingdom
OSS	Open Source Software
PBG	Performance Bank Guarantee
PFMS	Public Financial Management System
PHR	Personal Health Record
PIM/PAM	Privileged Identity Management/ Privileged Access Management
PMC	Program Management Consultant
PM-JAY	Pradhan Mantri Jan Arogya Yojana
PMU	Program Management Unit
POC	Privacy Operations Center
QCI	Quality Council of India
RFP	Request for Proposal
SECC	Socio-Economic Caste Census
SHA	State Health Agency
SLA	Service Level Agreement
SMS	Short Message Service
SOC	Security Operations Center
SSL VPN	Secure Sockets Layer Virtual Private Network
UAT	User Acceptance Testing
UHID	Unique Health ID
UIDAI	Unique Identification Authority of India
UT	Union Territory
VAS	Value Added Service

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1 About Us

1.1 About NDHM

1.1.1 Background

1. In 2017, the Government of India announced National Health Policy (NHP) with the following goal: “The attainment of the highest possible level of health and wellbeing for all at all ages, through a preventive and promotive health care orientation in all developmental policies, and universal access to good quality health care services without anyone having to face financial hardship as a consequence.”
2. The NHP prescribed specific goals for adoption of digital technologies. Taking that as reference the Ministry of Health and Family Welfare constituted a committee to create an implementation framework for the National Health Stack. This effort resulted in creation of the National Digital Health Blueprint (NDHB). The Blueprint comprises the details of building blocks to fulfil the vision of the NHP and an action plan to realize digital health in a comprehensive and holistic manner.
3. Taking forward the NDHB, Government of India recommended setting up of a NDHM (National Digital Health Mission) by leveraging technology to set-up digital health eco-system that supports universal health coverage in an efficient, accessible, inclusive, affordable and timely manner through provisioning of a wide range of data, information, and infrastructure services.

Bidders are requested to refer the NDHB report (Refer https://main.mohfw.gov.in/sites/default/files/Final%20NDHB%20report_0.pdf) for understanding of various building blocks of NDHM.

1.1.2 NDHM Vision

“To create a national digital health ecosystem that supports universal health coverage in an efficient, accessible, inclusive, affordable, timely and safe manner, that provides a wide-range of data, information and infrastructure services, duly leveraging open, interoperable, standards-based digital systems, and ensures the security, confidentiality and privacy of health-related personal information”.

1.1.3 NDHM Objectives

In order to achieve its objectives, in particular, to strengthen the accessibility and equity of health services, including continuum of care with citizen as the owner of data, in a holistic healthcare programme approach leveraging IT & associated technologies and support the existing health systems in a ‘citizen-centric’ approach, the NDHM envisages the following specific objectives-

1. To establish state-of-the-art digital health systems, to manage the core digital health data, and the infrastructure required for its seamless exchange;
2. To establish registries at appropriate level to create single source of truth in respect of clinical establishments, healthcare professionals, health workers, drugs and pharmacies;
3. To enforce adoption of open standards by all national digital health stakeholders;

4. To create a system of personal health records, based on international standards, easily accessible to individuals and healthcare professionals and services providers, based on individual's informed consent;
5. To promote development of enterprise-class health application systems with a special focus on achieving the Sustainable Development Goals for health;
6. To adopt the best principles of cooperative federalism while working with the States and Union Territories for the realization of the vision;
7. To ensure that the healthcare institutions and professionals in the private sector participate actively in the building of the NDHM, through a combination of prescription and promotion;
8. To ensure national portability in the provision of health services;
9. To promote the use of clinical decision support (CDS) systems by health professionals and practitioners;
10. To promote a better management of the health sector leveraging health data analytics and medical research;
11. To provide for enhancing the efficiency and effectiveness of governance at all levels;
12. To support effective steps being taken for ensuring quality of healthcare; and
13. To leverage the information systems existing in the health sector, by ensuring that they conform to the defined standards and integrate with the proposed NDHM.

1.1.4 Envisaged benefits and impact

1. The implementation of NDHM will result in an improvement in the efficiency, effectiveness, and transparency of the overall healthcare service delivery. Patients will be able to securely store and access their medical records (such as prescriptions, diagnostic reports, discharge summaries), and share them with health care providers to ensure appropriate treatment and follow-up. They will also have access to more accurate information on health facilities and providers. Further, they will have the option to use services remotely using tele-consultation and e-pharmacy. NDHM will empower individuals with accurate information to enable informed decision making and enhance accountability of the healthcare providers.
2. Similarly, health care professionals across disciplines will have better access to patient's medical history (with the necessary consent) for prescribing more appropriate and effective health interventions. The integrated ecosystem will also enable better continuum of care. NDHM will help digitize the claims process and faster receipt of reimbursement. This will enhance the overall ease of providing services amongst the health care providers.
3. At the same time, policy makers and programme managers shall have better access to data, enabling more informed decision making by the Government. Better quality of macro and micro-level data shall enable advanced analytics, usage of health-biomarkers and better preventive healthcare. It shall also enable geography and demography-based monitoring and appropriate decision making. It will ensure designing of more effective policies and strengthen implementation of current programmes and policies.
4. Finally, researchers will greatly benefit from the availability of such aggregated information as they will be able to study and evaluate the effectiveness of various programmes and interventions. NDHM would facilitate a comprehensive feedback loop between researchers, authorities, and providers.

1.2 About NHA

1. National Health Authority is the apex body responsible for implementing India's flagship public health insurance/assurance scheme 'Ayushman Bharat Pradhan Mantri Jan Arogya Yojana'. NHA has been set-up to implement the PM-JAY at the national level.
2. An attached office of the Ministry of Health and Family Welfare with full functional autonomy, NHA is governed by a Governing Board chaired by the Union Minister for Health and Family Welfare. Chief Executive Officer (CEO), an officer in the rank of Secretary to the Government of India manages its affairs. The CEO is the Ex-Office Member Secretary to the Governing Board.
3. To implement the scheme in the State, State Health Agencies (SHAs) in the form of a society/trust have been set up by the States. SHAs have full operational autonomy over implementation of the scheme in the State including extending the coverage to non SECC beneficiaries.
4. NHA is entrusted to implement the NDHM.

1.2.1 Key functions of NHA with respect to NDHM

NHA shall lead the implementation for NDHM and coordinate with different ministries/departments of the Government of India, State Governments, and private sector/civil society organizations. NHA shall have the following key responsibilities:

1. Administrative and technical leadership to the National Digital Health Mission
2. Propose policy directions as required to the Mission Steering Group, Empowered Committee and MoHFW
3. Development of models for self-financing of National Digital Health Mission
4. Implementation of policies and decision approved by the Mission Steering Group and Empowered Committee
5. Coordination with MoHFW and the States/UTs
6. Engagement with all stakeholders including private sector and civil society organizations, and develop strategic partnerships to achieve the objectives of NDHM
7. Resolution of technical and operation issues
8. Recruitment of resources from Government and private sector at competitive market rates
9. Management of day-to-day operations of NDHM
10. Capacity building of various stakeholders for health informatics

1.2.2 Organizational Structure of NHA

1. The National Health Authority is divided into seven verticals. Each vertical is headed by an Executive Director and staffed by personnel skilled and experienced in their specific area of work.
2. The organizational structure of NHA through which these functions are delivered is as shown on the diagram below-

Organizational Structure of NHA

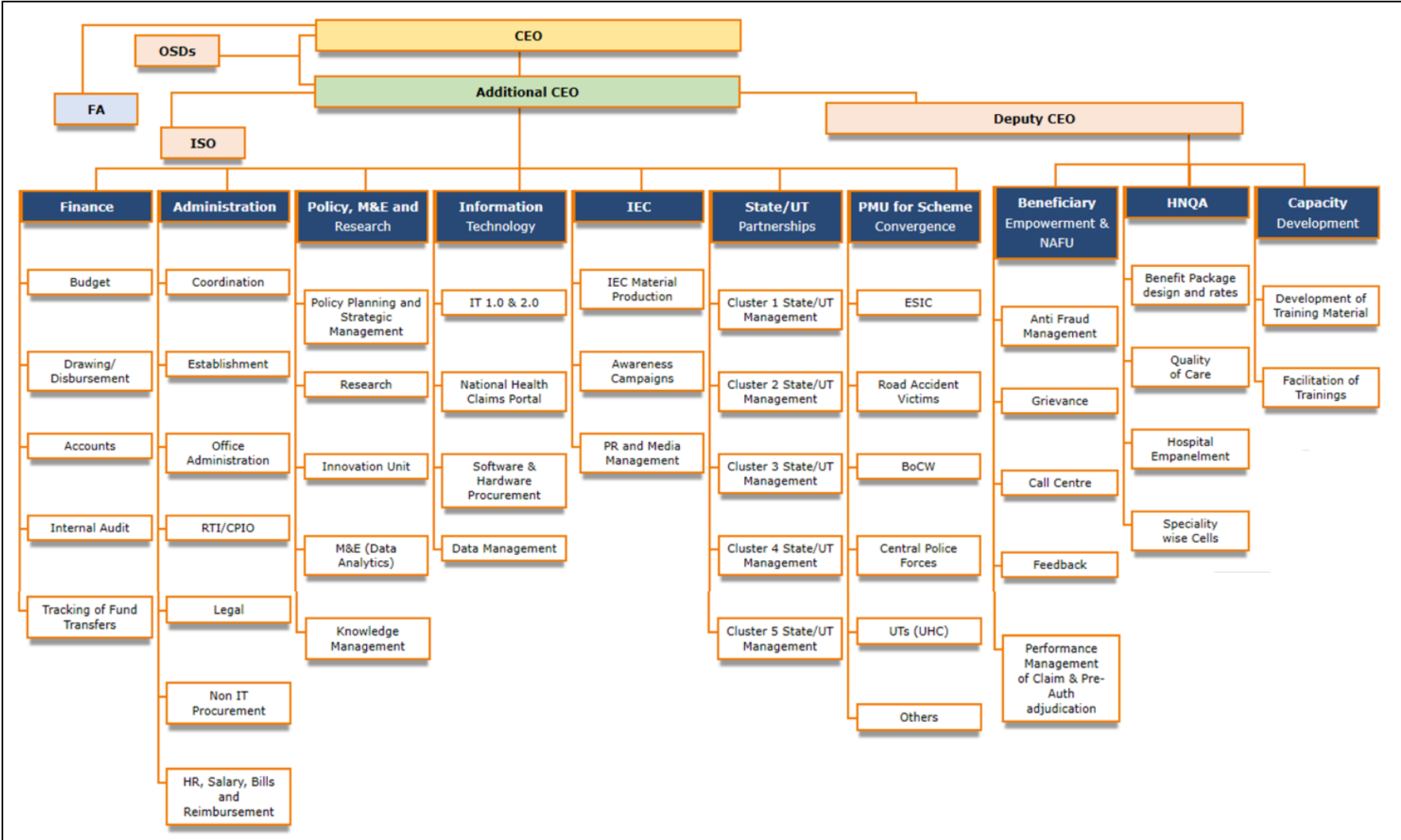


Figure 1: NHA Organizational Structure

2 Scope of Work

1. NHA intends to appoint a consulting agency (hereinafter referred as “agency” or “PMC” or “Consultant”) for delivering consulting services for project development and project management activities, as explained in this section, in order to assist NHA in an effective project implementation and governance of NDHM.
2. This section provides the scope of work to be executed by the Program Management Consultant (PMC/Consultant/PMU) during the contract period.
3. It is clarified that the scope of work is not exhaustive, and the PMC shall undertake such other tasks, within the scope of the RFP, as may be necessary to implement the scope and the project efficiently and effectively in order to achieve the desired outcomes of the project.
4. The project shall be for a **duration of 36 months** from the start of the project (on-boarding of consultant at NHA) and further extendable by another 2 (two) years (one year at a time), However, the discretion for extending the contract shall rest with the NHA on the same terms and conditions provided under this RFP and acceptance of both the parties.
5. The working hours of the Consultant shall be co-terminus with the working hours of ‘NDHM’ project/NHA i.e. from 9:00 am to 5:30 pm on working days. Saturdays and Sundays are defined as non-working days.
6. A total of 12 leaves (average 1 per month) per year shall be permissible to each resource of Consultant so deployed under the PMU. No other leaves shall be allowed. These leaves will not be carried forward to next year.
7. The resources must be deployed at NHA/NDHM premises for the entire project period.
 - a. The Resource must follow the working hours, working days and Holidays of NHA/NDHM
 - b. Leave entitlement and computation will be effective from date of start of project. Leaves shall be subject to NHAs approval
8. Overall, the scope of PMC is divided in to three phases viz. –
 - a. Phase 1: Project Development
 - b. Phase 2: Project Management (Implementation support)
 - c. Phase 3: Project Management (Post Implementation support)
9. Broad scope of activities for the PMC would include, but not limited to, the following-
 - a. Phase I-
 - i. Assessment of NDHM current state i.e. as-is study
 - ii. Report on study of best practices (national and global) for similar projects like NDHM
 - iii. Undertake system study and process study, and prepare an FRS for all the building blocks and components of NDHB to be implemented by NDHM as per the indicative architecture shown in **Annexure I**.
 - iv. Develop an appropriate Implementation Model for NDHM.
 - v. Support NHA in conduction a consultation with stakeholders and improve the requirements and implementation model incorporating the suggestions received during the consultation.
 - vi. Develop a DPR and RFP(s) for selection of MSP
 - b. Phase II- Assist in selection of MSP (bid process management) and Project management of implementation (including transition) of NDHM solution/building blocks to be developed and implemented by MSP (to be selected by NHA for the purpose) in accordance with the RFP

- c. Phase III- Project management of operations, maintenance and enhancements of NDHM solution (to be operated, maintained and developed by MSP)
- d. Scope of work for phase II and III shall also include-
 - i. Provide project monitoring functions consistent with the requirements of NDHM
 - ii. Strengthening project management support on the NDHM and on various projects undertaken for implementation of NDHM.
 - iii. Assist in drafting, implementation and monitoring of various policy documents, stakeholder's consultation etc.
 - iv. The PMC shall also assist NHA in various procurements, contract/project management, SLA Monitoring, legal assistance related activities.
- e. The categories and number of personnel's are provided in the RFP (refer volume II, section 3.2.2.2) and the PMC/Consultant shall adhere to the same always and every time.
- f. The responsibility of ensuring that the highest quality is maintained in the design and development of the various components and artefacts of the proposed ecosystem of NDHM, taking full care of the upstream and downstream linkages.
- g. The responsibility under this RFP does not lie only and exclusively on the shoulders of the team deployed by the PMC on NHA/NDHM premises. The responsibility shall be with the management of the consultancy firm providing the PMC services. This is to be ensured in the following manner-
 - i. Participation of the senior representative of the management of the consultancy firm in all key/ strategic meetings to be specified by the NHA.
 - ii. Regular monitoring of the progress of the project by the management of the Consultant Firm and sending reports to NHA management of the same, and bring to the notice of NHA any issues needing immediate action/ intervention at a high level.
 - iii. Taking responsibility for timeliness of the deliverables, as time is the essence of this RFP

The following shall be the detailed scope of work for PMC-

2.1 Phase I: Project Development

2.1.1 NDHM As-Is Assessment Study

The PMC shall conduct as-is (i.e. current state) assessment of current state (refer annexure II of Volume I) and all components of NDHM solution developed and implemented till on-boarding of PMC and the PMC shall also submit its assessment report on relevance, fulfillment of objectives, developmental efficiency, effectiveness, impact and sustainability. The as-is assessment and gaps compared to the expected outcomes and project deliverables including assessment with respect to following-

1. Compliance to functional and technical requirements
2. Compliance to NDHB requirements
3. Compliance to various policies laid down in regard to NDHM
4. The PMC shall also assess the compliance to DSS in the as-is
5. End user experience on implementation of the existing NDHM solution
6. Critical examination and evaluation of the existing NDHM solution
7. Gaps, non-compliances and identify reasons and its mitigation

8. To identify changes, redundancies, additional requirements with regard to future roadmap of NDHM and expectation of all stakeholders in terms of-
 - a. People
 - b. Process
 - c. Technology
 - d. Non-functional/ operational / strategic requirements

In addition to the above the assessment report should also discuss, provide conclusions and recommendations on the following-

1. **Effectiveness:** To what degree did the activities meet the objectives and results (as outlined in the strategy & framework documents)?
2. **Matching needs:** Did the project/activities meet relevant needs of the beneficiaries?
3. **Relevance:** Was the project designed in a way that is relevant to reach its goals?
4. **Efficiency:** Was the project run in an efficient way?
5. **Sustainability:** Are the results achieved so far sustainable?
6. **Internal coherence:** Were the result indicators and their means of verification adequate? What possible adjustments would the consultants recommend?
7. **Impact and spill over:** Were there any unforeseen positive/negative effects of the activities?
8. **Identify unmet needs:** Which unmet needs did the consultants identify that would be relevant to look into in an eventual continuation of the project?
9. Key learnings and recommendations of PMC (ideas that can be adopted)
10. It may be noted that the pilot implementation of NDHM would have been at its very initial stage by the time the PMC comes on board. Hence the PMC is required to study the modules / services implemented by NDHM till that stage and develop/ project the requirements for the remaining modules in keeping with the overall intent of NDHB. The scope of the PMC in relation to assessment of current state reflected in this section (2.1.1) shall be construed accordingly.

2.1.1.1 Methodology of conducting the assessment

The PMC shall conduct the impact assessment study as per following methodology-

1. PMC shall undertake both desk study/assessment and a field visit/assessment (for assessment of end user experience)
2. Prepare a list of all the stakeholders involved in the project implementation in consultation with the NHA and existing implementation partners.
3. Engage with following stakeholders, including but not limited to, not only to collect information and insights, but also to make a (collective) sense of the project-
 - a. End users
 - b. State/ UT Governments
 - c. Health Facilities -Hospitals, PHC's, Nursing homes, Clinics, Diagnostic Centers, Imaging Laboratories
 - d. IT Industry-Healthcare Technology Providers etc.
 - e. Doctors, Medical Association, State Medical Councils, Health Care Professionals
 - f. Regulatory Licensing and Certification Authorities
 - g. Insurance Companies

- h. Development Partners and Donor Agencies
- 4. Engagement and stakeholders consultation is envisaged to understand the following:
 - a. Their engagement in the process and how it fits with their own work/aims.
 - b. The difficulties they have endured to engage in the project (internal and external).
 - c. Their perspectives on the issues.
 - d. The capacity, awareness, relationships and resources developed during their engagement with the project and what they have been able to do with that
- 5. The assessment should be built on interviews with various stakeholders. In order to engage, consult and involve various stakeholders the PMC shall-
 - a. Prepare questionnaires to be circulated to various stakeholders
 - b. Plan and coordinate for getting responses feedbacks from various stakeholders
 - c. Feedback analysis

2.1.1.2 Deliverables

#	Deliverable	Timelines
1	As-is state assessment Report	30 days from the date of on-boarding

2.1.2 Report on study of best practices (national and global) for similar projects like NDHM

1. The PMC shall study best practices relevant to the scope of NDHM which are implemented previously at national and international level.
2. The PMC shall conduct this activity in parallel to the current state assessment (deliverable # 1)
3. The scope of work requires preparation of a report on best practices which may include, but not necessarily be limited to, the following elements-
 - a. Identification of best practice relevant to the scope of the NDHM
 - b. The context where the best practice has been adopted
 - i. Problem statement leading to adoption of practice
 - ii. Health system involved, including regional- and district-level institutions
 - iii. Systems/ functions impacted within the health system, such as supply chain management, doctors or health workforce management, patient reports etc.
 - iv. Current status
 - c. The people impacted: health system stakeholders and various actors
 - d. The technology used to create or interact with the health system-
 - i. Existing digital health systems and applications being used
 - ii. ICT platforms, systems, and applications outside the health sector, but relevant to the adoption of the best practice
 - iii. ICT applications and systems that are currently being designed and developed
 - iv. Data and Technology architecture adopted
 - v. Standards adopted for interoperability of health data
 - vi. Consent management methodology and tools
 - e. Strategies used to address emerging issues/ challenges
 - f. Document key lessons learned & recommendations based on the study (ideas that can be adopted)

4. Indicative best practices that can be studied to evaluate the relevance & the in line with the scope of work includes (but not limited to):

- a. At national level- e-Health IT platform adopted by Kerala; National Health ID & various other digital health initiatives adopted in the states of Rajasthan & Tamil Nadu.
- b. For International best practices- NHS UK & Korea healthcare system can be reviewed to assess best practices relevant to scope of the RFP.

Deliverable includes a final report outlining the details of the best practice covering the key elements as mentioned above.

#	Deliverable	Timelines
2	Best practices study report	30 days from the date of on-boarding

2.1.3 Development of Scope

2.1.3.1 Interim Draft: Scope of Work

1. Based on the impact assessment report and best practices study report the PMC shall draft the “to-be” scope of work for the MSP for NDHM.
2. Scope of work shall include, but not limited to, the following elements-
 - a. Re-engineered processes and workflows along with process maps in standard notation.
 - b. Technology recommendations, including the detailed design of the Federated Architecture envisaged by NDHB and the detailed design, specification, standards and interfaces of each of the building blocks shown in the indicative architecture given in Annexure I.
 - c. Overall Solution Architecture
 - d. Deployment Model, adopting federated architecture model.
 - e. Technology management plan
 - f. Deployment Architecture and Specifications for:
 - i. Data center/Disaster recovery center /Business Continuity Planning
 - ii. Secure Networks
 - iii. Information Systems Security
 - iv. Interfaces with external systems
 - g. IT Infrastructure requirements along with the specifications
 - i. Software (COTS / OSS/Be-spoke)
 - ii. Hardware (servers, storage etc.) or cloud (to be decided by NHA/NDHM)
 - iii. Security components
 - h. Service Levels identification
 - i. Detailed Functional & Technical Requirements for NDHM
 - j. Governance & Implementation structure
 - k. Project Roll-out and Implementation Plan
 - i. Project implementation plan
 - ii. Change Management Plan
 - iii. Capacity Building Plan
 - l. Project Plan
 - i. Prioritization Framework
 - ii. Functional Phasing of the project components
 - iii. Project timelines and deliverables
3. Implementation Strategy
4. Strategy for e-forms and standardization (going digital in healthcare)

5. Roll-out strategy and early or phase wise adoption by states
6. Legal and other enabling provisions (Legal and contractual requirements)
7. Estimation of project cost and proposed payment model for MSP

#	Deliverable	Timelines
3	Scope of work (Interim draft)	Within 15 days (including all consultations) from the date of approval of current state/as-is assessment and best practices study reports

2.1.3.2 Stakeholder Consultations

8. NHA understands that for designing the “to-be” scope of work requires stakeholder consultation with multiple stakeholders.
9. NHA and/or MoHFW shall organize various consultations (which shall be conducted in parallel to various deliverables prescribed) with internal and external stakeholders such as State/ UT Governments, IT Industry, professional bodies (like IMA, major speciality-wise associations, healthcare professionals, internal NHA teams and stakeholders mentioned in section 2.1.1.1 etc.) for discussing the envisaged scope of work.
10. The consultant shall prepare a draft document on “NDHM Implementation Strategy”, which shall be sent to the stakeholders and shall also be published on the web for public to give their comments in 1 (one) weeks.
11. PMC shall assist NHA/MoHFW in organizing such consultation programs.
12. On the basis of the inputs received from stakeholders’ consultations the PMC shall consolidate the inputs, in discussion with NHA, and shall deliver a revised draft of ‘NDHM Implementation Strategy’ to NHA.
13. The PMC shall also submit a ‘stakeholders consultation report’ (including the recommendations received and incorporated in the RFP)

#	Deliverable	Timelines
4	Deliver final draft of scope of work and implementation strategy (Including stakeholder consultations report)	Within 15 days (including all consultations) from the date of submission of interim draft of scope of work (deliverable # 3)

2.1.3.3 Draft Request for Proposal (RFP)

On the basis of the scope of work/strategy the PMC shall prepare the draft RFP (request for proposal) for selection of MSP for development of NDHM building blocks. The “Request for Proposal” shall be based on the procurement guidelines of Government of India and shall cover the following indicative aspects-

1. Objective of the Project
2. Scope of Work & Deliverables
3. Implementation methodologies, including Agile and DevOps methodologies.
4. Project Timelines
5. Contractual conditions

6. Bidding and evaluation formats
7. Payment Terms
8. Service Levels

2.1.3.4 Draft Detailed Project Report (DPR)

The PMC shall also deliver a DPR and the following are envisaged to be key elements, but not limited to the following, for DPR-

1. Vision, Objective of the Project and the overall outcomes
2. Key Stakeholders and their expectations
3. **Current State/As-is Assessment** and gaps compared to the expected outcomes and project deliverables (as per current state assessment report drafted by PMC)
4. **To-Be scope of work** (as per section 2.1.3.1 and 2.1.3.3)
5. Study of comparable solutions (based on best practices study)
6. Strategy for e-forms and standardization
7. Roll-out strategy and early or phase wise adoption by states
8. Legal and other enabling provisions
9. Formulation of Requirements-
 - a. Envisaged solution architecture
 - b. Design requirements
 - c. Data migration plan and strategy
 - d. Mode of operations
10. Estimation of project cost
11. Strategy for accelerating the adoption of NDHM by the stakeholders

#	Deliverable	Timelines
5	DPR and RFP	Within 15 days from the date of approval of final draft of scope of work (deliverable # 4)

End of Phase I is defined as the date of submission of last deliverable i.e. **deliverable # 5 to NHA. The Phase II shall start from this date.**

2.2 Phase II and III: Project Management Support

(Phase III shall start from go-live date of NDHM solution by MSP and phase II shall end on the same day)

The scope in sections 2.2.1 and 2.2.2 is part of phase II only-

2.2.1 Bid Process Management

Once the RFP for Selection of MSP is approved and published by NHA, the PMC shall provide support in conducting the following activities-

1. Assistance in pre-bid meeting
2. Assistance in preparing responses to the queries of bidders and corrigendum's (if any)
3. Assistance in opening and evaluation of bids

4. Facilitating contract signing between MSP and NHA/NDHM

#	Deliverable (MSP Selection)	Timelines
1	Draft responses to pre bid queries	Mutually agreed between NHA and PMC
2	Drafting corrigendum's	
3	Bid evaluation report	
4	Contract signing	

2.2.2 Transitions and Handover Management

Since the new MSP shall design, develop and implement the new NDHM solution (as per scope that shall be defined in the RFP) the new MSP is also expected to undergo a transition phase (as may be decided as part of scope of RFP or MSP). The MSP shall deliver a transition plan including key activities of handover and smooth exit of existing implementation partners. The PMC shall ensure the following-

1. To assist NHA in evaluating, implementation, monitoring and effective execution of the transition plan (to be submitted by the new MSP) in order to assess the approach of the incoming vendor.
2. To coordinate, facilitate and manage the transition and knowledge sharing sessions of new MSP with incumbent implementation partners of NDHM as per the project timelines.
3. To facilitate support to new MSP from outgoing implementation partner in consultation and support from NHA.
4. To oversee and supervise the mobilization of resources of the new MSP for transition and that the new MSP has ensured a proper resource mapping with the incumbent for an effective transition.
5. Ensuring prompt hands-off between various resources of the new and old partner.
6. To facilitate transfer of IT, software and all assets (including all documents) to the new MSP from the existing partner.

2.2.3 Implementation and Operations Support

The following scope shall be a **common scope for phase II and phase III** activities-

2.2.3.1 Technical Support Activities

1. To act as product managers/building block managers (envisaged to be done by Health Informatics Expert-core team) for various building blocks under NDHM to facilitate, coordinate the designing, development, implementation, operations, new enhancements with the MSP
2. Facilitate the implementation of NDHM solution development and implementation activities as per scope defined in the RFP document
3. To coordinate and monitor the activities of MSP and to assist in managing the implementation of various digital building blocks under NDHM
4. Strengthening project management support by delivering day to day functioning of various building blocks/applications and to also support in managing issues, grievances for managing business as usual
5. Timely coordinating with MSP under NDHM and to maintain 'Trackers' for digital building blocks and regularly update such trackers in order to support NDHM for any informational related needs at any point of time i.e. 'on the fly' basis
6. Strengthening technical and functional support for various building blocks/applications and related functionalities

7. Support in conceptualization of solution by identifying and analyzing needs for change requests and support in drafting functional requirements for any new releases/change requests
8. To assist NHA in managing new releases in agile cycle viz. Sprint release planning and monitoring
9. Monitoring compliance to digital service standards (DSS) as published by government of India
10. Assist NDHM in reviews of various documents/deliverables. This may also include various technical documents, test plans, acceptance plans etc.
11. Conducting researches and assessment study- similar to the scope defined in section 2.1.1 and 2.1.2
12. Providing support to NHA during the acceptance of the solution/ application and to support to NHA for incorporating feedbacks in UATs (User acceptance testing and/or sprint acceptance)
13. Assist in annual audits, certifications and user surveys as may be reasonably aligned with the objectives of the service delivery needs of NHA. Also, PMC shall ensure that periodic assessments are done to ensure compliance to standards and guidelines, security requirements, capacity management and such other planned tasks.

2.2.3.1.1 IT Security, Privacy and Strategic Control Policy

1. NDHM may establish standards and policy for IT Security, Privacy and Strategic control. PMC shall assist NHA in assessing compliance to various policies related to IT Security
2. To assist in conducting security audit through 3rd party agencies appointed by NDHM
3. To assist NDHM in compliance monitoring of IT Security, policy and standards so established by NDHM and adherence to Aadhaar Act, MeitY guidelines, NHA information security and data privacy policy and will comply with any standards and regulations notified by Govt of India and NHA/NDHM.
4. To oversee various IT Security related operations
5. To support in IT Security solutioning, governance, SLA monitoring, conduct information security risk assessment

2.2.3.1.2 Data Quality Assessment

1. PMC shall assist NHA/NDHM in data quality assessment
2. The PMC shall assist in preparing the scope of work for engagement of third-party assessors to carry out data quality audits.
3. If a third-party assessor is hired, the PMC would be required to assist the third-party assessor in carrying out the audit. If any issues are identified during the third-party assessment, PMC shall also assist in coordination for resolution of issues

2.2.3.1.3 Establishing the Innovation Unit

PMC will provide assistance to NHA for establishing an Innovation unit. The main task of this unit will be to leverage the emerging technologies like artificial intelligence, machine learning, internet of things (IoT), blockchain and big data in an appropriate manner in the health sector at the earliest opportunity. The unit shall comprise members from the NDHM, PMC and the implementation MSP. The unit shall function as under-

1. The Innovation unit shall carry out ideation based on emerging technologies and propose the idea to NHA/NDHM.
2. Post approval of the idea, PMC and MSP team shall prepare a strategy and planning document for the same which will also include the plan for running a pilot for the idea.
3. PMC shall monitor the implementation of pilots by MSP

4. PMC shall ensure that the idea is included in the overall NDHM framework post successful completion of the pilot.
5. Enough attention/ emphasis has to be laid on use of emerging technologies in the healthcare space. Open API's and access to labelled and anonymized datasets for innovation to happen. PMC shall propose a clear strategy for the same.

Following aspects shall be covered by the Innovation Unit:

1. Keeping abreast of the developments in the emerging technologies with special focus on their efficacy in the health sector
2. Assisting NHA in undertaking PoCs (by MSP and/or implementation partners) in the deployment of emerging technologies where required
3. Creating sandbox environments by MSP and/or implementation partners to try out these technologies.
4. Identification and notification of areas where value added service (VAS) based on VAS policy would be possible and viable
5. Use of AI for empowerment of field functionaries to provide more effective extension services in the rural areas and developing user friendly and trustworthy clinical decision support systems.

2.2.3.1.4 Change Management and Capacity Building

Change Management relates to change in the mindset of people that reduces barriers to early adoption of the new systems of NDHM like EMR/EHR/ PHR etc. hence, change management is pivotal to the effective implementation of NDHM and is one of the key challenges that NDHM needs to scale. PMC shall prepare a Capacity Building and Change Management strategy. It is envisaged that the PMC/Consultant shall also prepare and deliver RFP's for the same, and supports NHA in selection of the agency (bid process management). For building the strategy and RFP the following aspects shall be covered, including but not limited to-

1. Identification of stakeholders to be trained
2. Identification of training needs/ topics
3. Training dissemination plan for the components
4. Capacity building strategy and policy assessment
5. Recording changes in change request forms and approval of change requests
6. Impact assessment due to the change
7. Executing and testing changes
8. Rollback procedures
9. Documentation of changes

#	Deliverable (Change Management and Capacity Building)	Timelines
5	DPR and RFP	Mutually agreed between NHA and PMC
6	Draft responses to pre bid queries	
7	Drafting corrigendum's	
8	Bid evaluation report	
9	Contract signing	

2.2.3.2 Operational Support activities

1. Regular reporting of project progress to NHA
2. Monitor Performance: PMC shall ensure measurement of the SLAs and shall, at all times, ensure the reliability and accuracy of such measurements. PMC shall ensure that the measurements are formally recorded in support of the award of incentives and/ or penalties to the MSP.
3. Corrective Measures: In case the performance parameters are not found to be conforming to the required levels, the PMC shall proactively, after approval from NHA, inform the MSP and suggest appropriate corrective measures and ensure that these are implemented.
4. Escalation: Escalate project issues to the MSP and/or to NHA to monitor resolution thereof in a timely and conducive manner.
5. Exception Management: Assist NHA to manage exceptional and contingency situations.
6. The PMC shall also plan for review of the performance of MSP under the terms of the contract
7. Participating in day-to-day business activities, taking notes and related documentations
8. Routine problem solving of day-to-day matters and delivering capacity building on operational processes related to managing NDHM digital building blocks/applications
9. Monitoring various timelines and early identification of risks, escalation management and coordinating problem resolution

2.2.3.3 Contract/Other Support Activities

2.2.3.3.1 Legal, Procurements and Contracts Management

1. **Support in Payments to MSP:** Based on these measurements and conclusions drawn thereon, the PMC shall support NHA in payments related to various milestones, service levels etc. to be made to the MSP.
2. **Contract Management-** To assist in **Project/Contract management** of the MSP. The PMC shall assist NHA in contract administration throughout the duration of this project. The PMC shall be responsible for continuous risk monitoring, performance measuring and milestone reviews as defined in the signed terms and conditions of the contract and SLA and relevant contracts to ensure that the work being done is as per design and timelines
3. Besides the MSP for NDHM and service provider for change management and capacity building, NHA shall also undertake multiple procurements and the PMC shall support NHA in procurements of such goods and services under NDHM.
4. PMC shall also deliver legal assistance to NHA
5. Assist in drafting, implementation and monitoring of various policy documents, stakeholder’s consultation etc.
6. The PMC shall also assist NHA in contract administration throughout the duration of this project.
7. The PMC shall be responsible for continuous risk monitoring, performance measuring and milestone reviews as defined in the signed terms and conditions of the contract and SLA and relevant contracts to ensure that the work being done is as per design and timelines by the vendor.
8. The PMC shall also plan for ongoing review of the performance of various vendors under the terms of the contract.

#	Deliverable (for phase II and III)	Timelines
10	Status report (incorporating list of all activities as defined in section 2.2)	Monthly

3 Payment Terms

1. Payments to the PMC shall be made as per phase-I (Milestone based) and Phase II and III (Time and Material) as specified in this section
2. The payment/invoicing shall be done on a quarterly basis upon submission of invoice by the agency/PMC to NHA.
3. GST shall be paid (as per applicable rate) to the agency/PMC by NHA on their invoices however all other taxes, cesses, levies, duties and any other incidental direct/indirect costs shall be borne by the agency/PMC.
4. NHA shall make payments after withholding tax deductible at source as appropriate as per the applicable taxation laws.
5. Advance payments will not be made.
6. In case of disputed items, the disputed amount shall be withheld and will be paid only after settlement of the dispute.
7. Agency/PMC shall execute the work as per RFP.
8. Payments as stipulated above shall be subject to meeting the service levels by the agency as provided herein (section 3.3) and appropriations to the amount being paid shall be done (if applicable). Any penalties/ liquidated damages, as applicable, for delay and non-performance, as per the criterion mentioned in this bidding document, will be deducted from the payments.
9. Out of Pocket expenditure (OPE) for outstation or local travel would be reimbursed by NHA at actual. Any outstation or local travel must be pre-approved by NHA for being considered for payments as OPEs. OPEs shall include travel, boarding and lodging, food, daily allowance for people travelling and shall be governed as per policy of NHA/NDHM. OPE will be as per entitlement based on the professional level of the traveller and maximum ceiling as applicable to the entitlement of Deputy Secretary level officer of Government of India.
10. The payment towards expenditure incurred on travelling shall be reimbursed as per the provisions of travelling rules of NHA.

3.1 Payments applicable during Phase-I (Project Development)

1. This section specifies the payments applicable during phase-I of the PMC
2. Payments during phase-I are linked to milestones (defined in this section) and service levels (refer section 3.3)
3. Payments shall be applicable only if the relevant milestones are delivered to NHA subject to PMC meeting the service levels.
4. The below table describes various milestones and associated payments-
 - a. Payments are specified as % of payment for the cost discovered for phase-I in the commercial bid of the selected agency/PMC
 - b. It is clarified that a particular milestones as per below table shall be deemed to be completed if all preceding milestones are completed and deliverables related to that milestones are completed
 - c. Timelines (in the below table) indicate- maximum time allotted to complete a deliverable.

- d. It is clarified that applicable amount shall be paid to PMC only after completion of a particular milestone. Payments shall be done on completion of milestones only and upon submission of invoice by PMC to NHA
- e. For ex. Milestone # 1 shall be deemed completed if both the deliverable 1 and 2 are completed

#	Deliverable	Timelines	% of payment*
Milestone 1			
1	As-is state assessment report	30 days from the date of on-boarding	10%
2	Best practices study report	30 days from the date of on-boarding	10%
Total payable for Milestone # 1			20%
Milestone 2			
3	Scope of work (Interim draft)	Within 15 days (including all consultations) from the date of approval of current state assessment and best practices study reports	20%
4	Deliver final draft of scope of work and implementation strategy (Including stakeholder consultations report)	Within 15 days (including all consultations) from the date of submission of interim draft of scope of work (deliverable # 3)	20%
Total payable for Milestone # 2			40%
Milestone 3			
5	DPR and RFP	Within 15 days from the date of approval of final draft of scope of work (deliverable # 4)	40%
Total payable for Milestone # 3			40%
Total			100% of the cost of phase-1

*% of payment for the cost discovered for phase-I in the commercial bid of the selected agency/PMC

3.2 Payments during Phase-II and III (Project Management)

Quarterly payments to the PMC, during phase II and III shall be made as under-

1. PMC shall be paid on quarterly basis calculated on the basis of number of resources deployed and meeting service levels (refer section 3.3 of volume I) i.e. on Time and Material basis
2. The payments for the resources deployed at NHA would be made to the agency/PMC on the basis of the discovered rates against the roles deployed on the project. No extra payment will be considered by NHA.
3. In case NHA/NDHM request for additional resources (either from the list of core resources or from additional resources) the same shall be paid at the cost of that resource (and for the time period) discovered during commercial evaluation stage (as quoted by the PMC)
4. The payment shall be done based on man-months served. Man-month would be defined based on the number of effective working days in the month in line with NHA office working days. In case resources are deployed for a period which is less than a whole number (ex. 0.5 or 2.5) then the man-month rate shall be pro-rated (as per discovered/matched rates) to that effect for calculation of payments.
5. The requisite payment will be released by the NHA upon receipt of the invoice which would be verified from the attendance records within 2 weeks of receipt of the invoice.

- The payment shall be subject to submission of deliverables by PMC as under i.e. no payment shall be made if deliverables are not submitted as per timeline-

#	Deliverable	Timelines/Frequency
1	Draft responses to pre bid queries	Mutually agreed between NHA and PMC
2	Drafting corrigendum's	
3	Bid evaluation report	
4	Contract signing	
5	Status report (incorporating list of all activities as defined in section 2.2)	Monthly

3.3 Service Levels

- The service levels stated in below table shall be applicable on the PMC
- The service levels specify the expected levels of service (Target) to be achieved by the PMC
- Payments payable to the PMC is linked to the compliance with the service levels metrics laid down herein
- One Service level cannot be offset against the other service level within a reporting period/quarterly/Phase.
- The applicable penalties shall be deducted from the PMCs payment during applicable reporting period/ quarterly/Phase
- Penalties are capped at 10% of the total cost of project.
- It is to be noted that if the overall penalty applicable at any time exceeds 10% of the total contract value then NHA shall have the right to terminate the contract.
- NHA reserves the right to modify the service levels in terms of addition, alteration or deletion of certain parameters, based on mutual consent of both the parties i.e. NHA and PMC.

Service Levels					
#	Service level	Definition	Measurement Criteria	Baseline	Applicable Penalty
1.	On-boarding of all Core resources and Commencement of services for phase-I	Commence the service as per # of resources, man-month effort (as per resources committed by the PMC in its bid for phase-1), scope of work indicated in the work order	Within 15 days of signing of contract Target: 15 days or less	Within 15 days	Nil
				Delay of every day beyond 15 days	INR 20,000/- per day per person for the number of days and resources
2.	On-boarding of all Core resources and Commencement of services for phase-II, III	Commence the service as per # of resources, man-month effort (as per resources mandated for phase-II), scope of work indicated in the work order	Within 1 day of end of phase-1 Target: 1 days or less	Within 1 days	Nil
				Delay of every day beyond 1 day	INR 20,000/- per day per person for the number of days and resources
3.	Timely Completion of phase-I deliverables	As per timelines defined in the section 2 (scope of work-phase 1) of volume 1 of the RFP.	Calculated on the basis of actual number of days of delay.	Within defined timelines	Nil
				Delay of up to 3 days (i.e. <=3 days)	0.5% of deliverable payment
				Delay of up to 7 days (i.e. >3 and <=7 days)	1% of deliverable payment
				Delay of up to 15 days (i.e.. >7 and <=15 days)	2 % of deliverable payment
				>15 days and <=30 days	5 % of deliverable payment
				>30 days	10 % of deliverable payment
4.	Timely Completion of phase-II,III deliverables	As per timelines defined in the section 2 (scope of work-phase 1) of volume 1 of the RFP.	Calculated on the basis of actual number of days of delay.	Within defined timelines	Nil
				Delay of up to 3 days (i.e. <=3 days)	0.5% of quarterly payment
				Delay of up to 7 days (i.e. >3 and <=7 days)	1% of quarterly payment

Service Levels					
#	Service level	Definition	Measurement Criteria	Baseline	Applicable Penalty
				Delay of up to 15 days (i.e.. >7 and <=15 days)	2 % of quarterly payment
				>15 days and <=30 days	5 % of quarterly payment
				>30 days	10 % of quarterly payment
5.	On-boarding of additional resources as required by NHA	Onboarding of resources (core or additional) as per work order issued by NHA	Within 15 days of issue of such work order Target: 15 days or less	Target: 15 days or less	If the resource is provided beyond the stated 15 days target- <ul style="list-style-type: none"> • INR 20,000/- per day per person for the number of days and resources
6.	Replacement of personnel. Outgoing resource to exit only when proper handover, KT is done with the incoming resource.	Replacement of PMC personnel on being asked by NHA	Within 15 days of issue of instructions Target: 15 days or less	Target: 15 days or less	If the resource is provided beyond the stated 15 days target- <ul style="list-style-type: none"> • INR 20,000/- per day per person for the number of days and resources
7.	Availability of resources at NHA premises	Manpower availability measures the availability at NHA of the required resources as per contract.	<ul style="list-style-type: none"> • Shall be measured on per resource basis • Number of leaves taken per month must be from the pool of allocated leaves 	100% attendance	No penalty
				For every additional leave taken up to 5 leaves in a month	0.5% penalty of per man-month cost of resource

Service Levels					
#	Service level	Definition	Measurement Criteria	Baseline	Applicable Penalty
			<ul style="list-style-type: none"> No payment shall be done for the period a particular resource takes leaves beyond the allocated leaves Formulae- Number of working days in a month- (minus)-number of leaves taken per month (beyond allocation) to a resource 	For every additional leave taken >5 in a month	1% penalty of per man-month cost of resource for each leave taken
8.	Customer Satisfaction	<ul style="list-style-type: none"> Key stakeholders (NHA officials) will be identified and they will provide their feedback on the performance of PMC on a quarterly basis. PMC will be required to attain a minimum specified average customer satisfaction score, beyond which there will be penalties. 	Customer Satisfaction will be calculated on a scale of 1-10 with 10 being highest and 1 being lowest, across multiple parameters. Different parameters like, punctuality, attendance, initiative, quality of deliverables etc. would be used by the respective NHA/NDHM officials to evaluate the PMC resources deployed in their teams. Basis this evaluation, the penalty will be levied which could be 0.5% of the quarterly payment for the consultant. It is expected that a minimum score of 7 would be maintained by the consultants.	Customer satisfaction score- =7 and above	Nil
				< 7	Penalty would be 0.5% of per man-month cost of resource according to the score assigned by NHA to him/her.

4 Annexures

4.1 Annexure I- About National Digital Health Blueprint

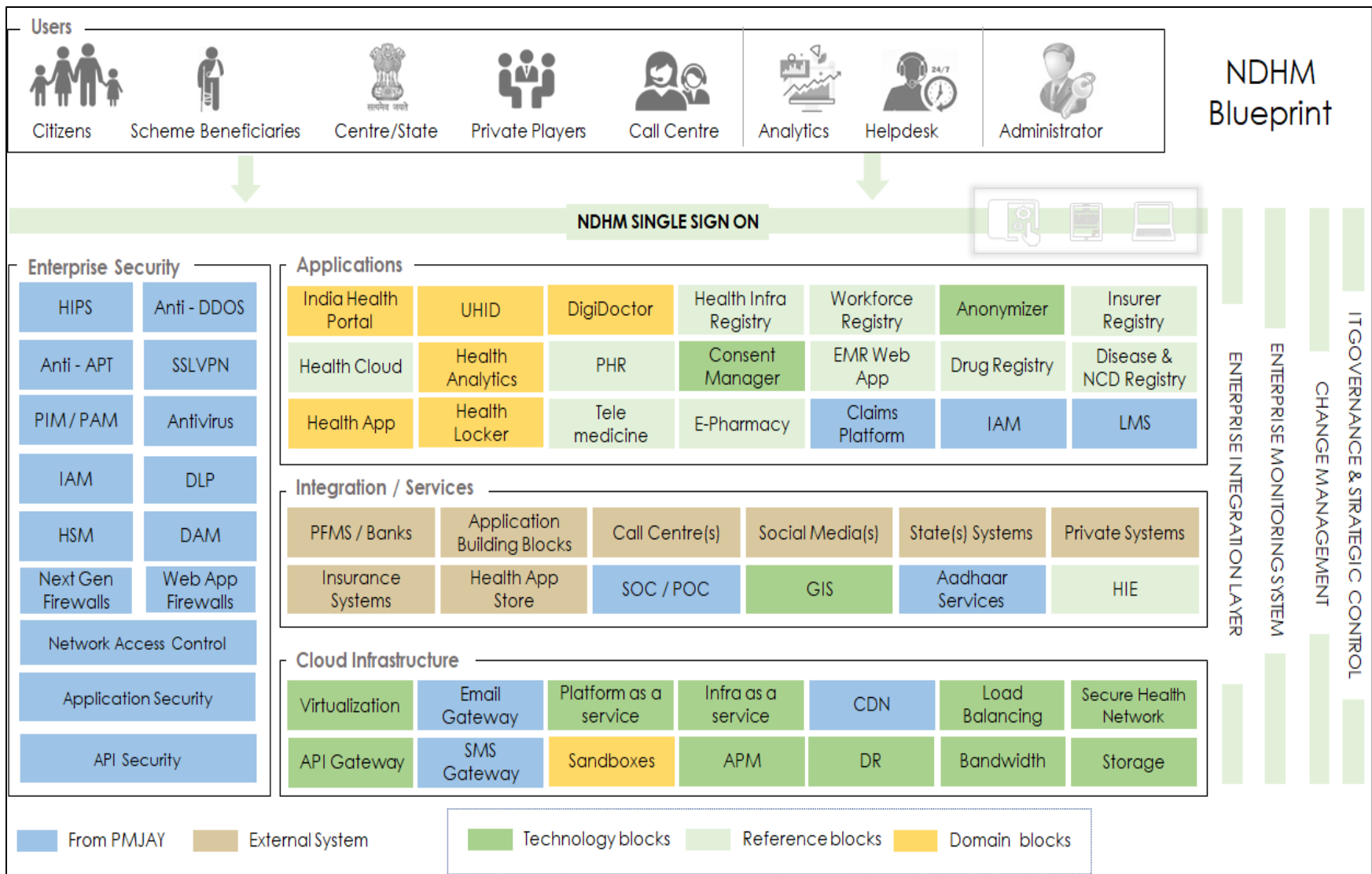
1. The National Health Policy (NHP) 2017 had defined the vision of 'health and wellbeing for all at all ages'. Continuum of care is a concept strongly advocated by the policy. Citizen centricity, quality of care, better access, universal health coverage, and inclusiveness are some of the key principles on which the NHP is founded. All these aspirations can be realized principally by leveraging the power of the digital technologies. In the Indian context, due to its size and diversity, this mammoth task requires that a holistic, comprehensive and interoperable digital architecture is crafted and adopted by all the stakeholders. In the absence of such architecture, the use of technology in the health sector continues to grow in an uneven manner and in silos.
2. In the above context, the Committee constituted by the Ministry of Health and Family Welfare recognized the need for creating a framework for the evolution of a National Digital Health Eco-system (NDHE) – an Eco-system and not a System. The result is the National Digital Health Blueprint (NDHB), which in addition to being an architectural vision, also provides specific guidance on its implementation. NDHB recognizes the need to establish a specialized organization, called National Digital Health Mission (NDHM) that can drive the implementation of the Blueprint, and promote and facilitate the evolution of NDHE.
3. The Blueprint keeps the overall vision of NHP 2017 at its core and recommends commencing with a pragmatic agenda to start with, adopting the principle of 'Think Big, Start Small, Scale Fast'. To this end, it has been designed as a layered framework, with the vision and a set of principles at the core, surrounded by the other layers relating to digital health infrastructure, digital health data hubs, building blocks, standards and regulations, and an institutional framework for its implementation. The document also contains a High-Level Action Plan to put these elements into motion in a time-bound manner.
4. In the context of the evolution of a digital ecosystem, building blocks are reusable frameworks or artefacts that most stakeholder groups need to rely upon for designing, developing and delivering their services. Building blocks constitute the core of NDHB. The Blueprint identifies the minimum viable set of building blocks required for the NDHE to evolve and describes their capabilities at a high-level. It is for the NDHM, as a specialist organization, to work towards the design, development and establishment of these building blocks. Conformance to both the NDHB Principles as well as to the NDHB Standards and Regulations is critical for an efficient design and development of the building blocks. The Blueprint has identified 35 building blocks.
5. Healthcare providers create health data for patients/individuals during each encounter. Most providers issue a physical copy of a health report to patients as part of the treatment. These commonly include diagnostic reports, discharge summaries, prescriptions, and clinical notes. In-patient case files such as OT notes are currently not shared unless requested by the patient. The Mission will require healthcare providers to share a digital copy of any health reports being physically shared with the patient to enable creation of longitudinal health records.
6. NDHM will implement a federated health records exchange system that will enable patient data to be held at point of care or closest possible location where it was created. Health records will be accessible and shareable by the patient with appropriate consent and complete control of the records will

remain with the patient. An appropriate digital consent framework as per standards will be adopted for consent management.

The details like structure, core principles, business principles, technology principles, federated architecture and building blocks are defined in NDHB¹ document in detail and should be utilized for driving this project.

The following is the blueprint of NDHM-

¹ <https://main.mohfw.gov.in/newshighlights/final-report-national-digital-health-blueprint-ndhb>



4.2 Annexure II- Implementation of NDHM

This section describes the on-going and envisaged implementation of NDHM. The implementation of NDHM solution by MSP shall include transition, handover of existing solution (as per transition plan of MSP) and the MSP shall also develop the solution as per the scope of work defined in the RFP for MSP-

For further clarification please refer to <https://ndhm.gov.in/>, https://ndhm.gov.in/assets/uploads/NDHM_Strategy_Overview.pdf)

1. The Mission is following the approach of 'Think Big, Start Small, Scale Fast'. This is to ensure a fast-paced and agile implementation and provide learnings continually. The implementation of NDHM is planned to be in 3 phases. Phase 1 is a pilot in the following areas with a total of 5 services-
 - a. Andaman & Nicobar Islands
 - b. Chandigarh
 - c. Dadra & Nagar Haveli and Daman & Diu
 - d. Lakshadweep
 - e. Ladakh
 - f. Puducherry
2. Phase 2 and Phase 3 will be taking forward the pilot in additional States and subsequently a nationwide rollout with the target of operationalizing and converging with all health schemes across India along with promotion, on-boarding, and acceptance of NDHM across the country.
3. As a part of the phase-1, NDHM will get the technological platforms and build capacities of the stakeholders in the selected Union Territories to start using the Health ID, PHR and Registries as defined in the Chapter 2 of the NDHB. The approach of implementation shall be staggered in nature.
4. The plan for rollout is as under:
 - a. With the development completion, field testing of the product at field level will be initiated in select public and private institutions.
 - b. Initially, large-scale public institutions as well as major private healthcare service providers in the specified UTs will be onboarded on the platforms.
 - c. Subsequently, expansion across the UTs shall be initiated, i.e. parallel emphasis shall be on the following two core objectives in a time-bound manner:
 - i. Utilization of the platforms by all stakeholders and users, e.g. Health IDs being generated for all willing individuals, new records being pushed to health accounts mapped to Health ID, registered doctors e-signing on web/mobile and generating e-prescriptions, e-discharge summaries, other medical documents – and getting the same pushed to the PHR of the individuals.
 - ii. On-boarding of all willing healthcare service providers in the UTs and their capacity building & empowerment for maximum usage of the NDHM components.
5. The following services are envisaged to be part of implementation:
 - a. All individuals will be able to get a Health ID (with option to get it verified with AADHAAR).
 - b. All doctors will be able to enroll on the DigiDoctor platform.
 - c. All hospitals and labs will be able to enroll in the Health Facility Registry.

- d. Software in all Hospitals, Common Service Centres and all institutions successfully registered under Health Facility Registry will have facility to issue Health ID. Other institutions may also be empaneled by NDHM to issue Health IDs.
- e. Doctors will be able to access health records of an individual with requisite informed consent and push new health data to the Personal Health Record linked to the concerned person's Health ID.
- f. Labs, Diagnostic Centres, Imaging Centres etc. will be able to push the reports directly to the individuals' Personal Health Record.