

## **Expression of Interest for Hospital Information System (HIS)**

The Ministry of Health, Royal Government of Bhutan invites expression of interest from interested Information Technology (IT)/Healthcare firms (preferably consortium of local and International), having valid licenses to possibility of undertake an IT project on customization and implementation of an (Health Information System) HIS for a period of 5 years from the date of signing a formal agreement under the provisions and conditions given hereunder upon the award of contract.

### **Overview**

The use of IT in the various facets of governance has greatly advanced over the years. In the health setting, the application of ICT has shown significant impact in combating social, geographical and economic barriers in access to healthcare services. Apart from enhancing 'access to' and 'delivery' of healthcare services, digitization services has also resulted in more sharper control over monitoring, evaluation and supervisory initiatives. Due to this, the 58<sup>th</sup> World Health Assembly (WHA) in 2005 passed a resolution acknowledging the e-health potential in improving health system and safety, quality and efficiency in health care delivery.

The Royal Government of Bhutan has accorded priority to tapping the potential of ICT options in various sectors. Guided by the vision of the nation with the best health, health sector emphasizes the importance of using ICT-enabled solutions to improve delivery of quality care to the people of Bhutan. The National Health Policy of Bhutan 2011 states that,

*"The Royal Government of Bhutan shall provide 100% nationwide access to a health care professional through technology-enabled solutions.....Digitized Health record and information system shall be instituted in all the health facilities for faster and effective health information generation to support decision making"* (National Health Policy of Bhutan 2011).

The Constitution of the Kingdom of Bhutan mandates free healthcare to the citizens. Bhutan has a three tier health system of primary, secondary and tertiary care. Service starts at the grass root level (in villages) from Clinic or smaller Basic Health Unit (BHU II) then at bigger Basic Health Unit (BHU I) and Hospitals and then Regional and National Referral where National Referral is the highest and best hospital in the country preceding as Primary level of care includes BHUs and Subposts, Secondary level with district hospitals and other hospitals while Tertiary level of care includes care provided by the two regional referral hospitals and one national referral hospital. Patients can also access service from any of these centers and often referred both ways depending on situation/condition. In case the treatment is beyond capacity of hospitals within Bhutan, patients are referred outside Bhutan with expenses fully covered by the government. The HIS system should capture all these services.

MOIC is the parent agency and all IT personnel of the government report to Department of Technology. The Ministry of Health has few hospitals that has small IT team which looks after over all ICT services. There are no separate IT/eHealth Department/Division unlike in other nations/hospitals to spearhead IT initiative in hospitals so ICT Division of the Ministry is mandated in rolling out and monitoring the IT/eHealth Programs for whole of government and in health facilities in Bhutan along with other stakeholder. The ICT Division is to be supported by ICT Division in JDWNRH and ICT personal in periphery. Currently, existing e-health solutions include DHIS2 (with Web-based MCH Tracking System), Disease Surveillance System, Laboratory Information System , Picture Archiving and Communication System , Health Help Center System, Blood Transfusion System, Doctor Appointment App, Inpatient Department (IPD) Reporting System, Medical Supplies Inventory System.

Despite these developments, there remains challenges around health information system and quality services delivery, which include paper-based approach, lack of patient-based data platform, poor patient follow-up practices and poor treatment outcomes, indirectly resulting in inefficiencies and ineffectiveness in the delivery of healthcare to the people. Given this background, the Ministry of Health endeavors to introduce electronic Patient Information System (ePIS), HIS solution that shall cater to improved access to quality of data, generate evidence-based information for medical interventions, research and decision-making, thereby, contributing to achieve the overall national health goal of *Universal Health Coverage* (UHC) and also World Health Assembly in Astana Declaration.

The major partner (donor) for this project is Asian Development Bank on whose grant of USD 4 Million is provided to strengthening health systems (IT) for healthcare service sustainability. The World Health Organisation and the Government of Bhutan also provides remaining additional funds for connectivity, capacity building and HR with an aim to scale up the project in each facility in 12 Five Year Plan (June 2018-July 2023)

## **Description and Scope of work**

This 5 years turnkey project will consist of two phases of procurement phases, viz 1. Expression of Interest (Eoi) and International Tender Bid (ITB) where this is the first phase of tender.

The first phase of the project will invite Eoi from interested firms to submit proposal and showcase the products (HIS) where 5 competent firms that meet the requirement of the project will be shortlisted. The Eoi phase for participating firm will involve in submission of the proposal, presentation of the proposal/product and showcasing/demo (of HIS integration with radio and lab machines). The process of shortlisting will be evaluation of all three above steps.

The second and final phase of project will be to call for IFB amongst the shortlisted firms where the project mandates these firm/firms to undertake **consortium with at least one Bhutanese IT firms after the Eoi shortlisting** who shall be responsible for submitting the tender/quote for the selective services or whole package required by the project. The project will be turnkey project where all the shortlisted firms shall submit the RFP and the selected single international firm in Consortium with Bhutanese Firm in the end shall be awarded work to implement the project within five year period. Since it is going to be government tender, the project shall be conforming to Royal Government of Bhutan procurement rule and regulation.

The customization of the System shall be based on client's (MoH & Hospitals/HFs) requirements including the configuration of servers and databases, training and supporting the maintenance of the system within the project timeline.

In the Eoi proposal, presentations and demo, participating firms are to show the project what solutions are provided and what are the possibilities to overcome the challenges Bhutanese Hospitals are facing currently. The RGoB is planning to deploy one centralised HIS across all the Health Facilities of Bhutan.

## **Information Requested**

The interested firms shall provide the information as per the format provided in the Annexures, templates and instructions in subsequent pages.

## **Response to EOI**

MoH shall recommend complete response in English only. Additional information shall be appreciated but should be submitted as an appendix. Completed responses shall be sent to

the address provided below latest by 21st February 2019 at 2:30 PM BST via email and subsequently by post to the following address:

***The Assistant Procurement Officer  
Directorate of Services, Ministry of Health  
PO Box 726, Kawangjangsa, Thimphu, Bhutan  
Post Code: 11001***

*Please mark your organization's name on the inside envelope, clearly stating a return address.*

#### **POST**

Please submit the 3 sets of sealed hard copy of the EOI by registered post or courier to the address provided above. The first copy should be original and rest copy, with all envelope marked accordingly.

#### **EMAIL**

Please also send a copy of Eoi by email to [ict@health.gov.bt](mailto:ict@health.gov.bt)

*[ \*In case of large file size, please share the files on dropbox or other similar cloud storage services ]*

#### **Privacy Statement**

Any information related to this submission is for the purpose of the project and that the MoH shall assure privacy is maintained at all levels of the project.

Any questions may be addressed to:

Email: [ict@health.gov.bt](mailto:ict@health.gov.bt)

Phone No: +975 2 322602 (Ext 113/501) during office hours

( Please check office timing at [www.health.gov.bt](http://www.health.gov.bt))

**Annexure A: Form for Expression of Interest  
(Template to be printed on the organization's letterhead)**

Date: date/month/year

The Project Manager  
ePIS Project, ICT Division  
Ministry of Health  
Thimphu, Bhutan

Sir,

With reference to your invitation for EoI (provide reference number), we are very pleased to participate in submitting our EoI in the prescribed format.

We have read and understood all the condition of TOR and fully understand and agree that shortlisting in EoI does not necessarily entail award of the contract.

We look forward to engaging in further dialogue on the specifics of this project.

Looking forward to more information.

Sincerely,

**Name Person:**

**Designation**

**Firm Name:**

**Contact Address:**

## Annexure B: Format for Expression of Interest

<b>Expression of Interest to setup HIS in Bhutan</b>	
<b>Section 1: Organizational Details</b>	
1.1	Full Name of the Prime Respondent and Consortium Details, if applicable
1.2	Proposed role of the Consortium members, if applicable
1.3	Contact Details: <ul style="list-style-type: none"><li>● Mailing address</li><li>● Telephone</li><li>● Fax number</li><li>● Email address</li></ul>
1.4	Year of establishment and constitution
1.5	Description of business and business background
1.6	Consortium agreement/MoU amongst partnered Firms, if applicable
<b>Section 2: Firm Registration &amp; Financial Details (Provide details of both partners)</b>	
2.1	Valid trade registration number/business license, and valid tax clearance certificate.
2.2	Annual Turnover/ Financial Statement in the last 3 years:
2.3	Attested copies of the Audit Reports shall be required.
<b>Section 3: Organizational Experience &amp; Profile</b>	
3.1	Summary of projects related to Electronic Patient Information System (e-PIS) or HIS implementation executed successfully in the past five years using the proposed solution; focusing on brief descriptions of assignments and experience in similar conditions. (At least one Hospital must be 350+ bedded Hospital and the software must support at least 1200 beds. This is to verify the scalability of the system) <ul style="list-style-type: none"><li>i. Organization Name</li><li>ii. Source of funding</li><li>iii. Project brief and magnitude of work</li><li>iv. Estimated delivery time(Work Plan)</li><li>v. Actual time taken for delivery</li><li>vi. Project budget</li><li>vii. Implementing partners (if any)</li><li>viii. Client references</li></ul>

ix. Technology and Platform
<b>Section 4: Methodology, Technical Details of the Integrated Electronic Patient Information System (HIS) solution proposed integration with (Picture Archival and Communications System (PACS) and Laboratory Information System (LIS)</b>
<p>4.1 Description of Solution/Product:</p> <ul style="list-style-type: none"> <li>i. Technology platform</li> <li>ii. Scope and modules available</li> <li>iii. Licensing schemes</li> <li>iv. Hardware and Network requirements</li> <li>v. Third Party software (reporting tools, databases), if applicable</li> <li>vi. Integration with medical devices and systems</li> </ul> <p>4.2 Working Methodology (a write up of maximum of 3 pages only)</p>
<b>Section 5: Human Resource Capacity</b>
<p>5.1 The details of the top management with their professional qualification and experience</p> <p>5.2 Profile of personnel with certificates, qualification &amp; experience with pictures and contact (phone and email), who may be assigned to the project.</p> <p>5.3 Append functional organogram of the firm/organization.</p>
<b>Section 6: System Demonstration</b>
<p>6.1 The minimum qualifying percentile for the selection is 70% of 100% EoI demonstration.</p> <p>6.2 The available modules or prototype within the proposed system shall be demonstrated to the client during their presentation to determine the competency of the vendor to deliver the system successfully.</p> <p>6.2 The vendor shall demonstrate the proposed system on site to both IT and business users to enable face-to-face interaction.</p> <p>6.3 Demo will focus on integration with medical devices and systems. <i>Eg. MRI machine</i></p>

**Note:**

1. *In case of non Bhutanese firms, the participating firm has to have all the document notarized by legal firm.*
2. *In case of consortium, please provide document for all the parties involved.*
3. *Shortlisting evaluation criteria will be based on relevancy of the solution(HIS) to Bhutan, implementation strategy of the firm and sustainability.*
4. *Also submit the document in above sequence*

5. Please note that firms are not required to submit quote /price of your solution in this phase.

### **Eol Activities Schedule:**

<b>SN</b>	<b>Description</b>	<b>Date, Time and Venue</b>	<b>Remarks</b>
1	Floating of Eol	30th Dec., 2018	Can be mailed through EMS or be delivered in person
2	Submission and Opening Eol	21 Feb., 2019 @ 2.30PM BST, MoH, Thimphu, Bhutan	Firm can send representative if interested
3	Evaluation of the Eol Documents	24-28, Feb-2019 Place to be determined	Evaluation will be confidential and no firms will be allowed to be present at the time.
4	Presentation of System	11 Mar ., 2019, Main Conference, MoH, Thimphu, Bhutan (15 mins presentation, 10 mins Q&A)	Firms are to inform us about how many representative will be present at the time
5	Demo of System	4-8, Mar., 2019 Hospital, Paro, Bhutan (30 mins demo and 30 mins of Q&A)	Firms are to showcase how proposed solution can be integrated with lab and radio machines in the hospital. All are requested to inform us how many representative will be present at the time.
6	Shortlisting	18, Mar., 2019, MoH, Thimphu, Bhutan [ Present the findings to eHealth PSC ]	Shortlisted firms will be announced after final endorsement by the eHealth Project Steering Committee. Result will be posted on our website and facebook page of the Ministry.

In case of any questions or any feedback please contact Project team at : [ict@health.gov.bt](mailto:ict@health.gov.bt)

The shortlisting of firms in this Eol phase will be done on following criteria:

<b>SN</b>	<b>Description</b>	<b>Weightage</b>
1	Documentation (Eol Proposal)	35
2	Presentation	30
3	Demo	35
	<b>Total</b>	<b>100</b>

**Note:**

1. Participating firms will have to score minimum 85 to progress to next phase.



2. *The above criterias will further have sub criteria made deemed fit by the panel members.*