



འབྲུག་ཨོལིཔ་མིག་ཚོགས་པ།
BHUTAN OLYMPIC COMMITTEE

BOC/Quot.(10)/2016

Date: 4th August, 2016

To,

Subject: Letter of Invitation for Development of Athlete Information and Human Resource Management System

The Bhutan Olympic Committee (BOC) has a budget provision from RGoB and intends to apply part of the proceeds for the development of an Athlete Information and Management System. The services include the need to **Design, develop and deploy the Athlete Information and Management System, technology transfer, training and documentation.**

The *BOC* now invites eligible **National IT vendors** to indicate their interest in providing the services. Interested consultants/vendors must provide information indicating that they are qualified to perform the services (brochures, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc.). Consultants may associate to enhance their qualifications.

The selection process of a consultant shall be in accordance with the procedures set out in the Procurement Rules and Regulations.

Interested consultants may obtain further information at the address below during office hours 0900 to 1700 hours.

Proposal must be delivered to the address below 30th August, 2016.

Attn:

Head, Administration & Finance
Bhutan Olympic Committee
Changlingmethang
Tel: +9752338064

Response to EOI

Interested IT Solution providers/ IT consultancy firms should respond by providing information according to the format for EOI as per Annexure B based on Terms of Reference (Annexure C). Any additional information which you think are relevant to but not covered in the EOI should be submitted as an appendix.

Address

Expression of Interest with complete information must be sealed and delivered to the address below on or before **12:00 noon, 30th August, 2016** or by post to the following address. Please mark your organization's name on the envelope, clearly stating a written address.

POSTAL:

Secretary General,
Bhutan Olympic Committee,
Changlingmethang
Thimphu Bhutan
PO Box 939

Qualification for RFP

The EOI shall be evaluated against the criteria set by the department based on the procedures set out in the Procurement Rules & Regulation, SRFP, Ministry of Finance, RGoB. Only shortlisted vendors will be qualified for submitting the proposal further (RFP).

Privacy Statement

The information on your organization/firms shall be treated with confidentiality. If you have any concerns on providing the information requested by us kindly contact Namgyal Wangchuk by phone on: +9752338064 or email to program.boc@gmail.com.

For any further queries and questions

Queries and questions can be addressed to Namgyal Wangchuk at +9752338064 or emailed to program.boc@gmail.com. Interested software companies may inquire from 0900 to 1700 hours during working days at Tel +9752338064.

Annexure A:

Form for Expression of Interest (To be printed on the organization's letterhead)

Date:.....

The Secretary General
Bhutan Olympic Committee
Changlingmethang National Stadium
Thimphu, Bhutan

Sir,

We are pleased to submit information about our organization in the format requested as an expression of our interest in developing the Athlete's Information and Human resource Management System.

We look forward to engage in future dialogue on the possible assignment.

Sincerely,

(For Organisation)

Annexure B: Format for Expression of Interest

The respondent(s) shall provide the following particulars along with relevant supporting documentation:

1. Firm Profile

- Full Name of the Firm
- Registration of the firm
- Certifications from recognized IT certifying body (indicating membership, authenticity technical competency, etc.)
- Description of business and business background **preferably** the description of similar assignments carried out in the past or currently being provided.

2. Human Resource Capacity

- Description of firm's capacity to carry out the project
- Profile of personnels with appropriate qualification, skills & experience, who may be assigned to the project.

3. Past Experiences on Software development

- Details of similar projects undertaken
- Organization name and nature of business of the client
- Cost of contract for those projects
- Man-month efforts and actual duration for delivery
- Technology & platform used in those projects
- Client references

4. Details of annual turnover (as attachments): **NOT APPLICABLE**

5. Copies of Tax clearance for the last calendar year and license/certificates of incorporation

6. Commitment on human and other resources:

7. Project timeframe and work schedule of the proposed key professionals

8. Any other relevant information

Annexure C

Terms of Reference

Development of Athletes Information and Human Resource Management System for Bhutan Olympic Committee (BOC)

This document describes the requirements for the development of Athletes Information and Human Resource Management systems for BOC. It provides the foundation for which vendors should base proposals. The document should be read in its entirety to ensure that proposals are based on requirements that are fully understood.

1. Background

The Bhutan Olympic Committee was established in 1983 with 15 National Sports Federations and 12 Sports Associations affiliated to it. Considering the need for efficient and effective human resource management, the BOC seeks to develop a suitable personnel management system to record, update, and monitor and evaluate the details and performance of athletes, coaches, and officials of the Bhutan Olympic Committee, the national sports federations, sports associations and sports clubs. The system will therefore be a comprehensive athlete information management system that will not only be used to monitor and evaluate athletes, coaches and officials across the country but also to efficiently manage human resources at the BOC secretariat, Federations and Dzongkhag Sports Association. The system must also have provisions to enable the federations and sports associations to submit their program reports online so as to enable the BOC to monitor and evaluate the progress of the federations and associations.

2. Statement of Objective

The objectives of developing Human Resource Management and Athlete Information System is to achieve the following:

- Implement appropriate human resource management system to keep records on employees of BOC.
- Allow recording of HR action information in the system
- Allow recording of attendance and leave information
- Generate required MIS reports concerning HR management at BOC
- Streamline the data collection points and maintain records of Athletes
- Ability to view the entire lifecycle of an athlete at any given point of time

- Transform the current manual information keeping and provide improved athletes data availability.
- Generate required MIS reports concerning Athlete information at BOC.
- Update online datas/information on sports activities conducted by National Sports Federations, Dzongkhag Sports Associations and sports clubs.
- Update information online on coaches and athletes in the National Sports Federations, Dzongkhag Sports Associations and sports clubs.
- Update information online on the on the upgradation of coaches levels from different sporting agencies.

The fundamental requirement of Athlete Information System is to maintain comprehensive database on athlete profile and HR system.

3. Scope of the Assignment

The project scope is development of centralized web based system to manage Athlete information and HR information with following priorities:

- A central database of BOC employees
- A central repository of athlete and sport participant data
- The ability to produce a full athlete profile and reports at any point of time

Ability to create information transactions for different HR actions like training, promotion, transfers, leave, attendance, etc. This can be used as a common source of information and requirement of HR system is to have centralized information of all the BOC employees and HR actions related to the employees

The detailed scope of the assignment are specified in **Annexure I**.

4. Work Schedule of the Assignment

The client's expectation of time schedule is produced in **Annexure II**.

5. Project Duration

The assignment is expected to be completed within 6 months from the day of contract signing

6. Technical Requirements:

The proposed software should comply/adhere to following technical requirements/functionalities, but not limited to:

- Use Responsive Web Design technologies,
- Implement data validation for both client and server (e.g. AJAX technologies, Javascript, etc.)
- Don't Repeat Yourself (DRY) principle in coding is recommended
- Implement Search save , Create, Read, Update, Delete (SCRUD) operations

- Adopt Role-Based Access Control (RBAC) to authorize users access to system resources based on roles.
- Maintain consistent aesthetics and UI of the software;
- Ensure compatibility to all the browsers (Mozilla Firefox, Internet Explorer, Google Chrome, Opera, Safari, etc.);
- Software should be scalable and upgradeable as and when the number of users and contents increases;
- Maintain and ensure that the web-based software system supports maximum concurrent users;
- The portal should run optimally (page load time below 30 seconds) on a PC connected to a network with minimum bandwidth of 512 kbps;
- Image and other content customization features should be inbuilt within the system to allow standard content sizes (e.g. standard image sizes for easy uploading and processing).
- The web-based software should have provision to support bilingual (English and Dzongkha) and interactive maps. This requirement can be provisioned both from front-end APIs and backend database system design by incorporating appropriate UTF based locale support.

7. Security Requirements:

The consultant shall adhere to following security requirements:

- The Information Management and Security Policy (IMSP) document during deployment.
- The software should provide audit trails and logs mechanism for content changes performed by system users.
- Maintain time series data so that certain information is not lost with passage of time and repeated updating.
- Include up-to-date CAPTCHA program as a remedy to stop spam and other intrusions wherever required.
- Handle Session Hijacking, session replay, etc.
- Input Validation to prevent attacks such as buffer overflows, cross-site scripting, SQL Injection, etc.

8. Development Platform

The consultant shall comply to the Electronic Government Interoperability Framework (e-GIF)¹ during the development of web portal. Following technologies and standards are also recommended:

- **Development Language:** The portal development is recommended to be implemented using Open Source Languages framework based on Java, PHP, Ruby, etc.. The application is recommended to be implemented using MVC (Model View Controller) based web frameworks since they adequately address protocols and standards including application security and manageability.

¹ The e-GIF focal person/project manager have to provide the information from e-GIF portal

- **Database System:** The database for the application are recommended to be implemented using Open Source Database such as MySQL, PostgreSQL, etc.
- **Database Design and Modelling:** Comply to e-GIF Data standards such as Table naming conventions, data modellings, data types, codes, etc.

9. Development Methodology

Modular based approach and Agile SCRUM development methodology must be used for the design and development of the portal to ensure all requirements and feedbacks of the client are identified and incorporated.

Following are deliverables in agile scrum development methodology, besides project deliverables:

- Provide bi-weekly updates to clients (functional features, presentation of views, demos, etc. of the portal),
- Carry out at least 2 iterations of requirement or specification reviews for each sprint before implementation of next module from the product backlog.

The agile application development process is recommended to be implemented using some agile (preferably, SCRUM framework) project management tools.

10. Deliverables

The following are deliverables of the assignment:

- Software architecture design document; (also include in the Proposal)
- User requirement document (SRS, incremental prototype);
- Setup required hosting environment for the developed solutions(also include in the Proposal);
- User Acceptance Testing
- Maintenance, User Training, data recovery manuals;
- Source codes, database scripts, and relevant documentations (User Manual, System Administrator's Manual; Setup, Backup and recovery manuals) to the client;
- Project completion report.

11. Responsibility

Client

- Shall ensure bi-weekly updates are reviewed and comprehensive requirement specifications are provided within review period;
- Shall maintain the delay register and notify the vendor of all delays in writing;
- Shall appoint the point of contact or project focal person(s);
- Inform the stakeholders and arrange for joint sessions with consultants

Vendor

- Shall set up a dedicated development environment at their premise with proposed team members working on the project.

- b. Shall ensure timely delivery of deliverables;
- c. Shall provide the portal development platform acceptable to client;
- d. Shall maintain the delay register and inform the client on the delays;
- e. Shall appoint a project manager who shall be the point of contact; and
- f. Shall recommend suitable hosting environment (server specifications and similar) to host the Portal safely and efficiently.

12. Downstream Work

- **Warranty**

Provide one year of warranty after the user acceptance signoff. During this period, the vendor is responsible for following technical support:

- Update patches,
- Fix bugs,
- Make some minor changes such as changing of label names, adding simple labels on the page and tweaking color combinations, etc.

- **Change Management**

The next enhancement of the system, if required, will be awarded directly to the same vendor.

- **Ownership of Source Code and IP rights**

The Bhutan Olympic Committee shall be the sole owner of the source code. Intellectual Properties rights shall remain with Bhutan Olympic Committee and any other agency designated by Bhutan Olympic Committee.

Annexure I

Detail Scope of the Assignment

This assignment is to design, develop and deploy the comprehensive Athletes Information and HR Management System. The detail of the scope of assignment includes following:

1. System Requirement Specification

The requirements provided as part of this ToR are very generic requirements. The consultant, as part of project deliverable shall study/understand main functions of Athletes Information and HR management system of the BOC, conduct comprehensive assessments and come out with detailed requirement in the form of Software Requirement Specifications (SRS) for system development.

The major system feature includes, but is not limited to:

Elite Athlete Information

There is certainly some sport specificity, but it is possible to group most of the information required under the following headings:

- Athlete demographics (name, address, e-mail, date of birth, etc.)
- Athlete affiliation (National Sports Federation, squad, team, sports discipline, stage in the FTEM framework, etc.)
- Performance analyses (competition results, fitness assessments, skills analysis, progress, etc.)
- Technical information (equipment used, settings, etc.)
- Training diary
- Performance lifestyle
- Medical records

Athlete Information

Athlete Information module should provide functional feature for:

- Capture and retrieve person profile, attributes and contact information, e.g. name, DoB, dietary requirements, passport details, etc.
- Ability to access historical records for an individual
- Easy setup of relationship and linking data e.g. assigning an athlete to a squad with minimal clicks
- Access timeline for an athlete for the data contained in the system
- Easy navigation to cross reference details on an athlete for a number of disciplines
- Workflows in place to streamline the data collection process, e.g. information entered into fields may trigger another field for information capture
- Ability to store files / images against an athlete record, e.g. scanned passport image
- Capture supporting athlete particulars through various text / number / date fields, e.g. current address, security access, bank account details, anti-doping history
- Ability to send reminder information using different channels
- Capture educational details, employment details, courses, professional development records, etc.
- Athlete calendar function providing a diary view of an athlete's activities (trainings attended, competitions, camps, medical treatments, etc.)
- Capture travel records
- Capture specific athlete biomechanics data (height, sitting height, weight, arm span, etc.)

Training Diary

- Capture and monitor training records for an athlete such as frequency, type, duration, intensity, test results
- In-country /ex-country trainings
- Capture important notes and comments on training for an athlete
- Data capture for fatigue, soreness, sleep and stress
- Training attendance
- Capture session plans, session information and non-training days' information
- Capture athlete self reported illness (type and severity)
- Capture self reported injury (location and severity)

Medical Records

- Capture of athlete medical profile
- Capture basic form of diagnosis
- Capture of athlete's blood test results
- Capture of immunization records
- Capture / Generation of medication details and history
- Capture / generate athlete medical summary for immunization / allergies / acute and chronic illnesses
- Ability to export medical information
- Ability to store scanned documents against a medical record
- Capture athlete Physiotherapy data
- Capture regular medical test records

Competitions / events and Results

- Capture competition data (local and international competitions)
- Capture results data (local and international)
- Capture ranking data
- Medals and achievement data for athlete and squad
- Capture number of caps / appearances for athletes / squads
- Capture conditions of competitions
- Ability to bulk upload competition / results data
- All for capture of missing specifics / comments associated with a result e.g. athlete came second after falling off bike with 2 kms to finish
- Ability to view competitions / events in a calendar format
- Ability to link competitions /results data to an athlete or squad
- Ability to store benchmarks to assist in identification and monitoring performances
- Export data

Squad

- Ability to form squad from the athlete in the system and assignment of sports in the squad
- Ability to assign multiple athletes to a squad
- Ability to create and view a calendar of events for squads
- Update squad travel plans
- Update competitions and results for squad members

Coaches Information

- Capture coach information
- Capture coaching contract information
- Ability to link a coach to athletes and squads
- Ability to attach files for a coach record
- Ability to capture coach plans (training plans, practice sessions)

Discipline Information

- Update records of discipline related information on any athletes
- Parameterization of discipline related information to provide insight during selection and squad formation
- Validation based on discipline scoring
- Records on suspensions, bans and administrative actions

MIS Reports

MIS report for AIS should also consist of input parameter section and pre-defined output parameters to be displayed in the output. Typical reports will include:

- Details of Athlete participation in competition (individual over time and all athletes on a time period)
- Details of Athlete Medical Records (individual over time and all athletes on a time period)
- Athletes Performance in competitions (individual over time and all athletes on a time period)
- Camps, training and competition details for Grassroot and Community Athletes
- Sport wise ranking of athletes
- Athlete Profile comprising of all information in the system for any athlete

2. Backup & Recovery

The vendor will be required to assure adequate backup procedure. A full portal and its contents backup must be performed frequently. The vendors shall train system administrators to perform backups and troubleshooting.

3. Technology Transfer

At least two officials will be deployed to harness Transfer of Technology. This is mainly to learn the details of the design and modules so that at later stage small corrections can be done in-house. The consultant must not bank on their skills for implementing the system. But, it is also necessary for the consultant to involve these officials actively in the assignment.

4. Deployment of the Athletes information and HR management system

After the development, the system will be first tested in the premises of client by the testers from consultant/vendor. Any bugs shall be identified and fixed before final deployment. Consultant should also support client in terms of stabilization and making system acceptable by the end users.

5. Training

The vendor is required to provide training on the system management and administration to staff of the client. This is to provide an understanding of the system, database and infrastructure configurations used during the implementation of the system.

6. Documentation

Content Design Document (high level design, data model, etc.), User Manuals and any other documentation of the assignment has to be completed and handed over to client.

7. Technical Support

The consultant shall render all support activities related to the following up until the warranty period expires:

- Troubleshooting at both application level and user level,
- Assist focal official/client in operation of the portal,
- Fixation of bugs, incorporation of minor changes, etc.

Annexure II

Total duration of this project is 6 months. The implementation schedule for the Athletes information and HR management system development is as follows:

S/N	Activity	Timeline	Deliverables
1	Assignment kick-off, Initial Assessment and Software Requirement Specification(SRS)	Commencement Date + 1 Week	SRS Document
2	Architecture Design and Prototype Development	4 weeks	Proposed prototype
3	System Development and Deployment, Testings	12 Weeks	Completed system
4	Stabilization & user Acceptance Testing (UAT)	6 Weeks	UAT sign-off
5	User Trainings/Workshops	4 Weeks	Training Documentations and Manuals
6	Project Completion Report	2 Weeks	
7	Support and Maintenance	1 year	
	Assignment Exit Sign-off	After Warranty	

[1] *The consultant can contact BOC*

PROJECT DURATION & WARRANTY

- a. **Timeline:** The selected vendor must complete the assignment on or before **6 months** from the date of signing the contract.
- b. **Warranty:** After the acceptance by the project team, the vendor must provide free support for a warranty period of **1 year**. *This excludes agreed duration for stabilization period after the UAT sign-off.*

Team Composition

- **1 Project Manager,**
- **1 Fulltime/part time Asst. Project manager/project lead**
- **1 System analyst, 1 Security & Network Expert with experiences to design and setup secure hosting environment**
- **5 Developers/designers**
- **3 Trainers**