خدمات مطار البحرين
BAHRAIN AIRPORT SERVICES

Request for Proposal

Develop a Mobile Application for BAS

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1. Introduction

1.1. Background

Bahrain Airport Services (BAS) was founded in 1977 to provide fully integrated airport services at Bahrain International Airport with the highest levels of safety and security. Supported by a human capital of approximately 3000 staff, BAS is an ISAGO accredited Ground Service Provider, which owns and operates six distinct business units.

1.2. Objectives

With the dispersed geographical location and large number of manpower, BAS is looking to introduce a mobile application to facilitate the services provided to their staff anytime anywhere. The Mobile Application will be made available as self-service application for all BAS Staff and Manager Service. It is expected that the new application will facilitate and provide following capabilities:

- Suitable for Android / iOS/ Web Application
- Seamless integration with software (s) using Web Services
- Run with optimum security, reliability and performance

A major expectation from this project is to:

- Develop & Implement Mobile App in Android, IOS and Web platform.
- Develop & Implement Web Services.
- Train ICT BAS Staff to develop Web service and Mobile App.

1.3. Structure of Document

1.3.1. This document is a formal request for proposal for the supply and implementation of an integrated solution(s). The document is divided into two broad sections:

1.3.1.1. The main section addresses the actions required by bidders, what the expectations are in terms of the proposals sought and provides background information on the future direction.

1.3.1.2. The annexures contain additional information provided to the vendors which will help them provide more appropriate solution as well as some returnable section of the proposal, i.e. the specific parts that need to be completed by the vendors and submitted as part of their proposal.
'Annexure A' contains the requirements that must be met by the product(s), '**Annexures B** through F' seek information about the vendor, proposed solution, recommended hardware, implementation, training, reference customers and cost implications.

2. Proposal Guidelines

2.1. Proposal Content

For a competitive evaluation of vendors' proposals it is expected that BAS receives similar information from all vendors and hence BAS wants the vendor's to follow the following structure for their responses:

2.2. Management summary

2.2.1. This section contains a summary of the vendor's proposal (not more than 6-7 slides/ pages) written for non-technical personnel and should contain:

2.2.1.1. Bidder organizations background and experience of similar implementations
2.2.1.2. Overall scope of work
2.2.1.3. Methodology, approach and delivery model for implementation
2.2.1.4. How the solution is geared to meet BAS's requirements and stands out against other competitors
2.2.1.5. Timelines of implementation
2.2.1.6. Scope limitations, if any
2.2.1.7. Summary of cost of the proposed solution

2.3. Proposed Solution

2.3.1. This section contains detailed description of the proposed software solution and implementation approach. The following should be included:

2.3.1.1. List of applicable features and functionalities/ modules supported by Annexure A provided in this RFP document
2.3.1.2. The completed software vendor profile as per **Annexure B**
2.3.1.3. The completed recommended server hardware questionnaire contained in **Annexure C**
2.3.1.4. Vendor's implementation methodology and approach supported by **Annexure C**
2.3.1.5. The implementation project plan – Refer section 2.6 of the RFP (In addition to **Annexure C**)
2.3.1.6. List of reference customers as per **Annexure F** (preference is provided for reference customers with same or similar business as BAS). Also outline why implementations with such other clients were successful and what were the experiences learned
2.3.1.7. Cost summary questionnaire as per **Annexure F**

2.4. Vendor profile

2.4.1. This section contains a profile of the vendor organization and any partners. The following should also be included:

2.4.1.1. The completed vendor questionnaire contained in **Annexure B**.

2.4.1.2. Outline markets served, strategic partnerships or alliances with other companies. Refer section 2.9

2.5. Proposed cost

2.5.1. This section should provide the schedule of the one-time and ongoing costs associated with the proposed solution. The following should also be included/considered:

2.5.1.1. The location for the implementation will primarily be the Bahrain Airport Services Head Office in Bahrain.

2.5.1.2. Completed cost summary questionnaire contained in **Annexure F**.

2.5.1.3. The implementation costs should include the design and develop mobile application IOS/Android ,Web application ,web services and training costs, if any, to meet the business requirements of BAS, as stated in the process listing - **Annexure A**; Also elaborate based on your understanding of the requirements, the level of customization needed

2.5.1.4. Please note that BAS wish to have at least three month of on-site post-implementation support and costs of this support should be mentioned in the 'Post go-live support (per month)' column of **Annexure F** under the post go live support item and should be quoted on monthly services basis

2.5.1.5. Vendors are responsible for providing sufficient samples and supporting documentation to facilitate a thorough evaluation of the proposed system. Also, vendors are responsible for obtaining from BAS any additional information needed for preparing the vendor's proposal. It is expected that the vendor will provide a detailed price breakdown for the proposed solution. Items that are not produced directly by the vendor should be indicated as such.

2.5.1.6. BAS is currently looking at optimizing their technology portfolio to best serve the company's business needs and costs. Therefore, you are requested to provide your pricing in the following matrix:

- Complete solution as set out in the requirements as per **Annexure F**;
- Cost for the platform on-premise.
- Vendor's are expected to take a note of the following:
  - All prices must be in BHD (Bahraini Dinar)
  - Prices for proposals shall be inclusive of all costs to be charged, such as cost of software, software licenses, design, develop web service, register to installation, training, maintenance, software updates, supplies, and any

other item that could be interpreted as the real cost for the completion of the project and any on-going expenses incurred by the vendor.

- The implementation and training costs should be inclusive of all the out of pocket expenses (such as travel, accommodation, per Diem etc.) and any ongoing expenses incurred by the vendor.
- Along with the solution cost and the implementation cost, BAS also requires the budgetary estimate of the proposed hardware required for implementation.
- All details requested in the **Annexure F** should be provided. Failing to complete the break up requested in the **Annexure F**, submission will stand disqualified and we'll not be able to correspond with the bidder further.

2.6. Installation and implementation details

2.6.1. The proposal submitted should, in addition to **Annexure F**, contain a proposed implementation project plan to include:

2.6.1.1. Timeline and detailed effort estimate
2.6.1.2. Task level detail which displays the work breakdown structure of the vendor's implementation methodology
2.6.1.3. Basis for estimates
2.6.1.4. Assumptions
2.6.1.5. In scope & out of scope items
2.6.1.6. Task and/or activity level deliverables
2.6.1.7. Main milestone activities
2.6.1.8. Training details
2.6.1.9. BAS resource requirements
2.6.1.10. Vendor's resource requirements

2.6.2. The project plan should cover all major activities from agreement of the contract to full system hand over to BAS. The vendor should also state the responsibility for each activity. The information provided should be as per **Annexure C** for the installation and implementation details. Information will be required particularly regarding:

2.6.2.1. The proposed delivery dates and installation timetable for the application software
2.6.2.2. Any systems investigation the vendor expects to have to carry out and the cost of such investigation which must be borne by BAS
2.6.2.3. Strategy for data backup, mapping and integration
2.6.2.4. How and when the alerts and messages related to project progress will be generated and delivered

2.6.2.5. User training timetables and synopsis of the training programs thought necessary
2.6.2.6. Recommendations for the appointment of BAS personnel to the project team for installation
2.6.2.7. Project controls proposed
2.6.2.8. System testing
2.6.2.9. When and where this will take place
2.6.2.10. Responsibility for checking results
2.6.2.11. System sign-off procedures and
2.6.2.12. Full application software acceptance
2.6.2.13. Proposed method and timing for data conversion or loading, and the assistance the vendor can provide.

2.7. Reference customers

Vendors are requested to complete **Annexure F** and to provide, ideally, three reference sites, which can be contacted or visited for a further demonstration of the proposed solution. These should preferably be operations similar in size and scope to BAS.

2.8. Proposal Preparation

The vendor's proposal is central to the evaluation and selection process. Therefore, it is important that the vendor carefully prepares the proposal and answers the questionnaires in the Annexures completely. The quality of the vendor's proposal will be viewed as an indicator of the vendor's business capability. Missing information and vague answers will only delay the evaluation of a proposal and may impair the vendor's chances of success.

2.9. Prime contractor responsibility

A single prime vendor must respond to the RFP and take responsibility for the entire project. If your proposal includes software or services marketed and/or supported by other companies or individuals, you should enclose a statement that you will act as prime contractor for the delivery, installation and maintenance of the entire system. Sub-contractor roles and responsibility should be clearly identified in the proposal. A duly authorized corporate official legally capable of binding the vendor must sign the proposal. The original letter from all the sub-contractors (i.e. software vendor, implementer, etc.) stating their willingness to work with the prime contractor should also be included in your proposal.

2.9.1. Prime contractor is defined as:

2.9.1.1. The entity that will co-ordinate and manage all external-to-BAS resources for this initiative.
2.9.1.2. The entity that will have responsibility for the successful (on time, within budget, delivering expected business benefits) implementation of the system.
2.9.1.3. The selected prime contractor will be responsible for the following:
2.9.1.4. Provide the agreed-upon application system

2.9.2. Ensure successful and timely system implementation, which includes the following:

- 2.9.2.1. Business process mapping
- 2.9.2.2. Design and development of system modifications
- 2.9.2.3. Initial testing of the software system(s)
- 2.9.2.4. Migrate data from the existing systems to proposed systems
- 2.9.2.5. Training of users and operators
- 2.9.2.6. Design, development and implementation of future software enhancements including updates to documentation, testing and follow-up training and
- 2.9.2.7. Post-implementation support correction of errors not detected during the initial systems testing
- 2.9.2.8. SLA (Service level agreement), for which the costs should be separately quoted
- 2.9.2.9. Providing hardware and operating system, and
- 2.9.2.10. Recommend implementation environment and pre-requisites

2.10. BAS Requirements (Annexure A)

Vendors should refer to the system features listing provided in **Annexure A** and should confirm the availability of the feature and functionality to address the BAS process requirements. It is understood that the vendor will provide a classification if the following can be addressed through the standard product or will require customizations. Where applicable vendor should maintain the listing and share the response in a table format to categorize these into standard features or customizations. The answers to feature listing in **Annexure A** should be provided in a table format, clearly highlighting standard or customized features.

2.11. Recommendations on hardware

Vendors are required to recommend the sizing and configuration of server hardware, which can run the proposed solution at the desirable level of performance for the number of users as given below. In addition, vendors must provide the approximate budgetary pricing for the acquisition and commissioning of the recommended server hardware (on premise). This information must be furnished in the form provided in **Annexure C - Hardware Profile Questionnaire**, and the hardware cost section of **Annexure F - Cost Summary Questionnaire**. Any related network changes/ upgrade which BAS should be cognizant of should be highlighted in the proposal

2.12. Clarifications for proposal

The vendor might request clarifications to any part of this document or its contents. All the clarifications will have to be submitted by email, to BAS (Refer evaluation process)
No clarifications will be addressed if received after the due date. Your questions must be precise and must reference the related section of the document.

2.13. Bid Validity Period

Bids shall remain valid for 90 days reckoned from the due date of responses. Bids stating shorter periods of validity can be rejected as being substantially non-responsive.

2.14. Preparation costs

BAS is not under any obligation to pay respondents for information received. This request does not commit BAS to pay for any costs incurred relating to the preparation or submission of the vendor's proposal, nor to procure or contract for services or products.

2.15. Disclaimer/Qualification

2.15.1. Vendors should have the ability to work with other parties under the supervision and management of the BAS Project Manager to achieve the project goals

2.15.2. BAS is under no obligation to accept or consider proposals that are received after the due date. Additionally, BAS reserves the right to cancel the project, at any time, with no obligation to those vendors and companies that have submitted proposals in response to this RFP.

2.15.3. BAS expects the vendor's proposal to follow the same structure as in the RFP, and fulfill, at a minimum, the requirements outlined in it. Vendors are encouraged to think out-of-the-box, be creative and take into consideration future trends and directives

2.15.4. If the proposal is accepted, it will form part of the contract, which will be negotiated subsequently. However, in selecting a vendor to supply products or services to BAS, BAS is neither endorsing nor suggesting that the vendor's product is the best or only solution.

2.15.5. BAS reserves the right to select/reject any and all proposals, in part or whole

2.15.6. BAS is under no obligation to give reasons either for accepting or rejecting any proposal or to proceed with the project or engage in negotiations. BAS reserves the right to accept any or all parts of the proposal individually. As such major components and/or prime contractor's role should be identified separately.

2.15.7. All proposals and accompanying documentation will become the property of BAS and will not be returned. No response may be modified or withdrawn after the deadline for submission of proposals.

2.16. Confidentiality of information

This RFP and all materials issued by BAS must be considered confidential. The vendor shall not forward this RFP to any third party for evaluation or for any other purpose without the express written consent of BAS. Any reproduction by photographic, electronic or other means is permitted only for the purpose of preparing a response. If the vendor does not wish to respond, it should destroy the copy received of the RFP in its entirety. The vendor shall not disclose any information concerning this RFP to anyone, other than the vendor's employees and officers directly connected to responding to this RFP.

Furthermore, the successful vendor must undertake not to make any reference to BAS in any literature, promotional material, brochures or sales presentations without the written consent of BAS.

Any confidential material submitted by the vendor must be clearly marked as such.

3. The Evaluation Process

3.1. Selection procedure and deadlines

The selection will consist of a number of steps, each of which will help BAS to gain a more detailed knowledge of the proposed solution and the prospective vendors. Each step will also allow the vendors to learn more about BAS:

Function
Release of RFP for product evaluation
Deadline for submission of clarifications
Product demonstrations
Finalize vendor evaluation
Vendor finalization, contract negotiations, issue LOI and placement of order

This schedule should be regarded as a guide. BAS plans to adhere to program defined within the schedule given above; however, circumstances might create changes to the schedule.

3.2. Evaluation criteria

The objective of the evaluation process is to select a reliable and experienced vendor who is capable of showcasing strength and fitment of his product to the requirements of BAS, is capable of implement the systems identified, with the functions designated, within a reasonable time frame and to achieve the desired benefits. In addition, the vendor must be willing and capable of providing ongoing maintenance that is responsive enough for BAS to sustain normal business operations.

Based on these objectives, the typical criteria that would be used to evaluate each proposed solution are:

System Functionality • Functional fit • Ease of use • Look and feel • Entry and processing speed • On-line help and documentation • Amount of modification	**Software Design** • Software flexibility • Platform flexibility • Integration between modules and with other systems • Technical platform and open architecture • Error-free design and programming
Vendor Viability • Financial soundness • Product and industry commitment • Breadth and location of installations • Depth of experienced resources to support implementation needs • Customer references where the proposed software have been implemented • Contractual conditions • Commitment to meet time schedule • Demonstrated ability and commitment to form a close working relationship with BAS	**Vendor Support** • Training of end-users and technical resources • Off-site and on-site support • Installation assistance • System enhancement support • System maintenance and upgrades • Size and location of support staff
Cost • Software • Implementation • Hardware • Training • Maintenance and other on-going costs	**Data Security** • Data encryption • Version updates • Audit logs

3.3. Evaluation procedure

The evaluation will include a joint consideration of the proposal submitted, demonstration of the system and reference calls. After careful consideration, the vendor that offers the most desirable solution will be selected. The systems implementation project will commence upon successful negotiation of a contract between BAS and the selected vendor.

3.4. Contract negotiations

At the completion of the selection process, BAS will enter into negotiations with the selected vendor to draw up a formal contract. The final contract must stipulate that the application software and the recommended hardware configuration specified will satisfy the functions as stated in the RFP. Vendors should also be aware that the following documents would be included as attachments to the final contract:

3.4.1. The RFP

3.4.2. The vendor's proposal

3.4.3. The agreed implementation plan identifying the tasks to be completed, the assigned responsibilities and scheduled completion dates, which should be included in the vendor proposal, and

3.4.4. Any other correspondence in terms of emails and letters/faxes that may be used to convey commitments or requirements between BAS and the selected vendor.

4. System Requirements

4.1. General System Requirements and Constraints

4.1.1. As far as possible BAS wishes to use software with covering the main business area in a manner so as to achieve an integrated system environment.

4.1.2. The system should be highly flexible and adaptable. This means that the offered solution should have been designed with flexibility in mind. This designed flexibility should amongst else be reflected in clear, understandable and open system architecture.

4.1.3. The Application should have multi-lingual interface of English and Arabic

4.1.4. The system should provide a high degree of flexibility and drill-in facility in screen-based enquiries.

4.1.5. The system should provide an intuitive user interface, include comprehensive on-line help facilities and supported by clearly written manuals, so that training requirements are kept to an absolute minimum.

4.1.6. As far as possible, the system should be parameter-driven so that BAS is not reliant upon external sources for minor changes in activities.

4.1.7. System should be secure and robust.

4.1.8. The vendor responsibility to create and purchase a developer account for BAS to register this product in Google Play store and Apple Store. This cost should be part of Cost Summary (Annexure F).

4.1.9. All project Source code will be property of BAS.

4.2. Integration with other existing/proposed systems

Where integration with existing systems/proposed systems is applicable proposed vendor/solution provider should support integration.

4.3. Development Platform

4.3.1.Application Platform

The Application should be develop by latest version of Ionic framework and 50% of development should be in the Bahrain Airport Services Head Office in Bahrain.
Any license cost or plugin cost to develop any services in the application should be part of Cost Summary (Annexure F).

4.3.2.Web Service Platform

The Web Services should be develop by ASP.NET Web API as a framework for building HTTP services that can be accessed from browsers and mobile devices and 100% of development for the Web services should be in the Bahrain Airport Services Head Office in Bahrain and should be part of Cost Summary (Annexure F).

4.4. Implementation of proposed system

Refer to the Annexure A, requirement specifications are mentioned below for vendor consideration while creating the proposal.

4.4.1.1. Design

- Vender should submit 3 sample of Layouts/ Templates of the application design.
- Vender should provide the theming standard for the choosing design.
- Design should be easy to use and able to use for mobile and Web application.

4.4.1.2. Implementation

- The solution is to be implemented in-house at BAS ICT data center.
- Build ESS, MSS, Admin Modules (Annexure A).
- Create / Develop Web services and related tools.

4.4.1.3. Testing

The application should be tested on all mobile devices - Phones, iPads, Tablets, etc.

4.4.1.4. Training

The Vender is responsible to train all BAS ICT team to develop Web Services using ASP.NET Web API and develop application using latest version of Ionic framework and best way to design App with all require material for training, before starting the project and in the end of project vender should hand over all development task with all documentations. This cost should be part of Cost Summary (Annexure F).

4.4.1.5. Optional

Display of staff daily attendance (Annexure A - 2.1.1.6) on Smart Watch, can be proposed an additional development with cost factor (Annexure F).

4.5. Number of Users

The proposed system is expected to use for cross module access by existing 2000 concurrent users. We have below provided a use count.

Module	Number of User Required
Admin	10
ESS	2000
MSS	100