



Request for Proposals (RFP)

EXTERNAL QUALITY OF SERVICE MEASUREMENTS INTERNET ACCESS SERVICES

Ref: TOD/RFP/130409

Issued by

**Telecommunications Regulatory Authority
Kingdom of Bahrain**

30 April 2009

Deadline for submitting proposals is: 28 May 2009, 4pm (GMT+3)

Table of Contents

1	Introduction	3
2	Objective	4
3	Requirements.....	7
4	Background	12
5	Deliverables, Expected Timeline and Project Management.....	13
6	Instructions for Respondents	15
7	Invoicing	19
8	Evaluation Process and Outcome.....	19
	Annex A: CV Template	21
	Annex B: Resource Allocation Plan Template	23
	Annex C: Bidder's General Information	25
	Annex D: Bidder's Checklist.....	27

1 Introduction

1. Since 2002 the telecommunications market in the Kingdom of Bahrain has undergone a significant transformation in accordance with the Government policy to stimulate the national economy. In October 2002, the Legislative Decree No 48 of 2002 promulgated the Telecommunications Law¹ that enabled liberalization of the telecommunications sector and the formation of the Telecommunications Regulatory Authority (“TRA”). Further the 1st National Telecommunications Plan² was published in July 2003 and subsequently was updated with the 2nd National Telecommunications Plan³ in February 2008.
2. The Quality of Service Regulation⁴ was published on 22 January 2009 placing obligations on Licensed Operators to monitor and report Quality of Service measurements, with the objective of providing information to assist end users and Licensed Operators with their selection of services, assisting in the maintenance and improvement of telecommunications services in Bahrain.
3. The regulatory functions in the telecommunications sector are vested in TRA. It is an independent body and has a direct responsibility to ensure effective liberalization of the telecommunications market, promote effective and fair competition among licensed operators and protect the interests of subscribers and users of telecommunications services.
4. The Telecommunications sector, specifically in the perimeter of Internet Services has been very active and several players are providing services to consumers and the business via different technology being supported over copper, fibre, WiMax and other wireless technologies.

It is against this background that TRA has decided to implement a specific external monitoring of Internet Quality of Service to complement Quality of Service measurements provided by the industry, ensuring that TRA has the means to validate the data provided by the operators to TRA and/or advertised on the market.

¹http://www.tra.org.bh/en/pdf/Telecom_Law_final.pdf

²<http://www.tra.org.bh/en/pdf/National%20Plan%20v4%20Formatted.pdf>

³<http://www.tra.org.bh/en/pdf/TheSecondNationalTelecommunicationPlanEnglishFinal.pdf>

⁴http://www.tra.org.bh/en/pdf/Quality_of_Service_Regulation_English_Final.pdf

2 Objective

The objective of this RFP is to allow TRA to select the most appropriate consultant, to Design, Build, Operate and Transfer a test platform based on international best practice, with the objective of performing continuous measurements of broadband services of all Licensed Internet Service Providers (ISP) in the Kingdom of Bahrain in order to provide users, residential and business* (as an option*), with performance measurements report in the form of aggregated historical statistics.

5. To achieve this objective, TRA is looking **for the most appropriate test methodology to ensure reliability of the results, fairness and non discrimination between measured ISPs and easiness for users to read and understand results.** Key performance indicators' choice ("KPIs") shall be guided by the International Standards such as ITU Recommendations E.800 defining QoS and ITU Recommendation I.350. The bidder shall refer to other specific standards as appropriate.

Design-Build-Operate and Transfer (DBOT)

6. The Successful Bidder is expected to provide a detailed solution to design, build, operate for a minimum period of one year and transfer to TRA the testing platform(s) in accordance with the project purpose, required service, and background. The proposed solution shall be scalable to grow with the industry in Bahrain. The Bidder's proposal should include all the following requirements.

The project is therefore divided into the different phases: Design, Build, Operate and Transfer:

7. The design phase is essential for defining the relevant test methodology, associated KPIs, having high and low level descriptions of the infrastructure proposed including hardware, software, license, access lines from Operators and test platform(s) location. In effect TRA expect the Design to be provided as part of the answer to this RFP. The Design will be then finalised by TRA and the Consultant in the initial stage of the project.
8. The build phase consists of implementing and testing the solution. The initial scope is restricted to fixed Broadband Residential offers with an option to extend tests to fixed Broadband Business services.
9. The operational phase must ensure seamless and smooth operations for a period up to at least 1 year, or until final term set at TRA's discretion, with the possibility to extend contract duration.
10. The transfer phase shall cover all training, document and contract hand over from the winning bidder to TRA or another consultant.
11. In addition, the Bidder must provide the guarantee that the proposal will be valid for additional years in case TRA decided to renew the contract for additional years of operations.

Test methodology

12. The Bidder is expected to propose a test methodology pertinent to the objective to provide user oriented QoS measurements. As such, measurements shall be performed at Service Access points and be user oriented.

Request for Proposals - Quality of Service

13. The choice of the Broadband packages to be tested shall clearly be articulated with the objective of being the most representative of consumer experience and comparable from one ISP to the other in mind.
14. Testing shall be fully automated and maintained 24/7/365. Only ISPs factors shall be captured; the test methodology shall be designed in such way to eliminate as much as possible or factor for any external element that can be experienced in home environment such as missing ADSL filter, PC hardware specification or PC operating system and software configuration, malicious software running in background, internal wiring quality etc.
15. Captured data shall be collected in a standard way across the testing panel to ensure like for like performance measurements for each ISP.

Test specifications,

16. The bidder is expected to propose a set of KPIs pertinent to the objective within a reasonable range of 10 individual key performance indicators.
17. Each individual set of test shall include, for each measurement, information related to the test itself and information related to external elements such as service provider, date and time etc. A test could include as an example:
 - o Date and time
 - o Supplier / IP address
 - o Download speed
 - o Upload speed
 - o Latency
 - o Packet Loss
 - o Jitter etc.

However this sample does not constitute an exhaustive list of measurement parameters and bidder is expected to propose a set relevant to the objective.

18. The proposed way measurement will be made shall be described and explained. It is expected that no manual intervention will be required for data gathering. Each specific test shall be described in details such as, as an example, explain reasons for the use of TCP instead of UDP for a specific test.
19. Supported test speed shall range from 256Kb to 20Mb and be able to support various access technologies as Operators are or will be using ADSL1/2, ADSL2+, wholesale services from the incumbent including Bitstream and Wholesale DSL, WiMax and PON / GPON excluding Mobile technologies.
20. Tests shall measure QoS parameters such as download speed, packet loss, propagation delay, email parameters etc. within the ISP network and between the Access Point and specific locations in the US, Europe and Asia through the ISP network and International Internet provider, with and without caching.
21. The platform shall be flexible to allow additional Broadband tests on common parameters to be performed and existing tests to be modified via a user friendly man-machine

Request for Proposals - Quality of Service

interface or customizable via simple test scripts, without the requirement for any software re-writing or additional development from the Bidder's or a third party organization.

Generation of a report

22. Specifications shall be sufficiently detailed and include the calculation method used to compute individual test result (Average, 95th percentile, other); the way measurements are aggregated at a Service Provider level shall be clearly explained.
23. It is expected that no or minimum manual intervention will be required to generate QoS Report on a user adjustable frequency ranging from a week to a year including month and quarter as minimum breakdown possibilities.
24. Variability in the results, factoring busy hours and non busy hours, shall be extracted to allow TRA pinpoint specific events affecting the overall results (average) of a specific ISP or otherwise important - e.g. When an operator is experiencing an incident causing latency to change from 40ms to 150ms, impact on quarterly average might not be significant but this is an significant event to highlight.

Results presentation

25. In addition to raw data, test results shall be available in an easy to understand graphical format providing tendency and aggregated results for each individual service supplier and comparing operators and results from a quarter to the other.
26. The presentation format shall allow manual intervention to point on a specific event (e.g. cable cut) and allow TRA to include ad hoc comments.
27. The bidder shall evaluate the opportunity to compile a Broadband Index for Bahrain based on international standards that would allow comparing easily the evolution of Broadband in the Kingdom to other key countries. Please provide details of such Index and example in other countries in your response to this RFP.

3 Requirements

In implementing this consultancy project the Successful Bidder will have to take into account the following elements:

Design

28. TRA expects the key Design components to be provided as part of the answer to this RFP. The technical platform(s) shall be Carrier Class or include reasonable level of redundancy. The location of the platform(s) shall guarantee no discrimination in test result between one licensed operator to another.

High level design / Low level Design

29. To draw the architecture, the Bidder shall define a high and a low level design, as well as a Design to Build. The Bidder shall provide in their response to this RFP the high level design with all necessary explanation on how it meets the objectives of this RFP. Best common practices and references to similar platforms shall be used.

30. High level design includes:

- Solution description: complete description of components with architecture, technologies, standards and protocols used.
- Diagrams: illustration of the main elements of the solution
- Geographical data: defines how the structure is interfacing within and outside of Bahrain, including the main mechanisms.

31. The low level design (which will have to be prepared by the successful bidder and agreed with TRA) should include detailed definitions of all the elements and low level presentations of the different architectures for the global perimeter of the solution. It shall include the list and specification of all hardware and software parts of the solution.

32. The successful bidder will have prepare an Inception Report including but not limited to Project objectives and outputs, sites locations, architecture, other elements of both high and low level designs, methodology and detailed work plan.

Technology

33. The platform(s) shall ensure a good level of redundancy essential for service continuity in case of a system failure.

34. For the solution, availability objective is 99.90% or above. The successful bidder will have to specify co-location environment for the main equipment in the case the technical platform has to be located outside of TRA's technical room. Tier III will be the minimum expected Data Center specification.

35. Depending on the proposed solution and technology, the Bidder in its response to this RFP shall describe all the features and options that it will be able to provide, specifying:

- The features of the architecture
- The material and server infrastructure

Request for Proposals - Quality of Service

- The mechanism of ensuring redundancy
- The “probes” or equivalent elements to generate traffic / capture measurements
- The quality of the service

Equipment

36. The successful Bidder will have secure the manufacturer’s guarantee in favour of TRA, in addition to its own guarantee, that the Equipment supplied under the Contract is brand new, unused, of the most recent or current models and incorporates all recent improvements in design and materials at the time of delivery. The successful Bidder also warrants that all active and intelligent components are manufactured within 12 months from the delivery date to TRA. The successful Bidder further guarantees that the Equipment shall have no defects arising from any act or omission of the successful Bidder or the manufacturer and it further warrants to remedying any defects arising there from upon notification by the TRA within reasonable time. The hardware shall be scalable and upgradeable to accommodate a minimum of two consecutive software releases.
37. The successful Bidder’s guarantee shall remain valid for a period of at least twelve (12) months after the date of issuing a Provisional Acceptance Certificate for the Supplies and Services of the Phase in question, and referred to herein as the Warranty Period. The period of the guarantee shall be extended by such periods during which the Equipment cannot be used due to defects falling under the guarantee. The period of the guarantee shall also be extended for all outstanding items that have not been cleared by the time of the issue, if issued, of an acceptance.
38. The successful Bidder will have to warrant that the Software will be in good working order, free of viruses and bugs, and will operate and perform properly on the Equipment and in accordance with the Contract. The successful Bidder will also have to warrant that any hardware required to fix the software will be provided, installed and tested free of charge.
39. Off the shelf software will be favoured compared to specific code development and Bidder in its response to the RFP shall explain what level of customization is required, if any, to a chosen software package.

Maintenance Support Agreement

40. The successful Bidder shall provide Maintenance and Support.
41. The Maintenance Period for the Supplies and Services of each Phase starts after the Warranty Period is over. The successful Bidder shall provide the TRA with Maintenance and Support for the Supplies and Services of each phase for a period of 2 years renewable on a yearly basis from the date of issuing a Final Acceptance Certificate for each Phase. The Maintenance and Support Agreement should include (but not limited to) the following:
- a. Telephone assistance (24 hours a day, 7 days a week; on call during out of hours) for consultation with the Bidder’s Specialists to solve problems encountered by the TRA using the Supplies and assistance in the use of the Supplies by the TRA to ensure optimum benefits;
 - b. Timely correction of errors/defects in the Supplies, including the making of emergency by-pass or patches in the Software;

Request for Proposals - Quality of Service

- c. Provision of releases of the Software and/or the Documentation which incorporate solutions to all errors and/or defects encountered in the use of the Software as well as improvements introduced by the Bidder;
- d. Preventive maintenance, fault diagnosis and correction to the Supplies;
- e. Escalation Procedures;
- f. Any other matters, material to the effective proper business operation of the Supplies by the TRA;

Insurance

- 42. The Supplies and Services shall be insured for their full replacement value against loss or damage from any cause from transportation, storage (on or off site), to delivery and installation. The successful Bidder's Insurance shall cover the Supplies up to the date of issuing the Provisional Acceptance Certificate.
- 43. The insurance of the successful Bidder must cover against damage to any property or death or injury to any person arising out of performance of the Contract.
- 44. The insurance policy shall include a cross liability clause such that the insurance shall apply to the successful Bidder and to the TRA as separately insured. The successful Bidder shall provide evidence to the TRA prior to the start of work at the Site that the insurance required under the Contract has been put into force and shall, within sixty (60) days of the Commencement Date, provide the insurance policies to the TRA.
- 45. The successful Bidder shall provide the TRA with a copy of the Insurance Policy (ies) and evidence of the Policy (ies) premium.

Taxes, Duties and other Charges

- 46. The Contract lump sum price shall include all foreign and National taxes, stamps, duties, and any other charges and levies on the production, manufacture, sale, import, transport and storage of the Supplies and on the Services performed under the Contract.

Delivery and Transport

- 47. The successful Bidder shall be responsible for the transport, delivery, and unloading at the TRA Premises or any other location in Bahrain as appropriate, of all Supplies and successful Bidder's own equipment needed for the purpose of this Contract.
- 48. The successful Bidder shall apply in writing showing dates of delivery to the TRA for permission to deliver any Supplies or the successful Bidder's own equipment to the sites. No Supplies or successful Bidder's own equipment shall be delivered to the Premises without the TRA's written permission and agreement to the date(s) of delivery.

Build

- 49. For the integration phase, Successful Bidder's processes shall be aligned with common best practices for project management and integration of services infrastructure.

Request for Proposals - Quality of Service

50. During this step, all workshops and interactions shall be coordinated with TRA's project manager as described in Point 5, Project Management section.
51. The platform(s) and functionalities of the platform(s) shall be tested in relation with the objectives of the project and a formal acceptance test shall be performed by the successful Bidder. Any issue or non conformity shall be resolved at no additional charge, based against validated inception report, prior to the platform(s) being put into operations.
52. An Outstanding Items Lists (OIL) should be prepared by the winning bidder to record and follow treatment of any non conformity.
53. Acceptance testing shall take place preferably within TRAs premises and TRA staff shall be able to participate to those tests at the discretion of TRA.

Operation

54. This section covers the main fields of operations that shall be handled by the Successful Bidder who will be responsible for the comprehensive operations of the Technical platform. Due to the high automated nature of the expected platform TRA
55. It encompasses therefore technical and administration operations, its related Service Level Agreement and the dashboards required to manage the platform. In order to provide a high reliable and quality service, Successful Bidder is to align with Industry's Best Practices, standards and guidelines such as ITIL / ISO 20000 for Service Delivery management, ISO 27001 for Security Management, ISO 25999 for Business Continuity
56. Successful Bidder will be responsible to plan, procure in coordination with TRA, and maintain all elements related to the operation of the platform, including if necessary hardware/software maintenance and support, replacement, upgrade, etc.

Technical Operations

57. Technical operations shall be defined by the Bidder (for technical aspects set above), including but not limited to:
 - Platform monitoring
 - Technical design and evolutions
 - Support
 - Change Management
 - Release Management
 - Backup and restore
 - Storage
 - Security
58. A catalogue of defined processes will be established for all operations of the platform by the Bidder. The Bidder will propose its range of services included in the service and the process to manage those changes. The Bidders shall also be able to provide TRA with the system design, performance statistics, utilization and reports.

Security

59. Security remains one of the most important concerns for TRA and the deployed platform(s) must have to be in secure environment(s) to ensure its own security.

Physical security

60. In the case the platform(s) is not located on TRAs' premise; unauthorised persons should be prevented from obtaining access to the platform, equipment and/or reserved space. Minimum security set includes:

- CCTV coverage & recording
- 24*7 security manning or remote control
- Multiple level access control for the site, the room and the rack
- All physical/logical access logs should be maintained and archived for auditing and investigations purposes.

Logical security

61. The system will store the sensitive data; hence it is essential that the platform offers the highest security levels. The architecture shall include but not be limited to the following elements:

- Intrusion Detection/Prevention System
- Firewall

Helpdesk & Support

62. A Single Point of Contact (SPOC) should be provided; it should be capable of handling all issues pertaining to the service. The support should be provided in English, Arabic being as an option. The support should operate 24 hours a day, 7 days a week; on call during out of hours. The Bidders shall provide all details regarding the contact means of this central support (phone, web, fax, e-mail, ticketing, etc.). The Bidder must also indicate the envisaged geographical location of the SPOC.

63. Escalation and resolution procedures shall be established to address any problems in a short time.

64. The platform shall be monitored 24x7 with procedures in place to escalate and solve service issues, resolution times, etc. In addition, the support team shall provide technical consultation/best practices on issues related to the operations. Good response time and resolution time shall be guaranteed by SLA.

Transfer

65. After a minimum period of one year or as otherwise agreed between TRA and the winning bidder transfer of the Operations of the testing platform(s) will be performed by the consultant to TRA.

66. Prior to final acceptance certificate the winning bidder shall transfer to TRA know how of any ongoing management, maintenance and support of the testing platform (s).

67. Specific operational documentation will have to be prepared in English and cover all necessary processes, sub processes and procedures to ensure a seamless handover.
68. Handover training will be provided by the winning bidder at no additional cost covering the operations and maintenance of the platform as well as the specific process and procedures related to the creation and maintenance of specific tests. Knowledge transfer shall commence from the beginning of the operations in order to achieve full transfer of necessary knowledge and skills by the time of handover.

4 Background

69. In order to gain a better understanding of the current Bahrain Broadband market environment the Consultant should refer to the following⁵:
- The information sources referred to in the sections above;
 - TRA's website generally⁶;
 - TRA's Market Indicator Reports⁷;
 - TRA's Market Surveys⁸;
 - Work Plan of TRA (in order to get understanding of other parallel activities undertaken by TRA)⁹.
70. At the time of writing this RFP there are 10 Licensed Operators actively using their ISP license, those are:
- 2Connect
 - Batelco
 - Etisalcom
 - Kalaam Telecom
 - Light Speed
 - Mena Telecom
 - Northstar
 - Nuetel Communications
 - Orbit
 - Zain Bahrain
71. TRA brings the attention of the bidder to the particular dynamic of the Broadband Market in order to ensure the proposed solution will incorporate, but not be restrictive, to the following evolutions or proposed evolution:

⁵ The sources of information listed shall not be considered to provide the final and complete background information required to successfully accomplish the project. The consultant may need to complement this information by its own research.

⁶ <http://www.tra.org.bh>

⁷ <http://www.tra.org.bh/en/marketReport.asp>

⁸ <http://www.tra.org.bh/en/marketSurveys.asp>

⁹ http://www.tra.org.bh/en/pdf/TRA_work_plan_Final_2007-2009.pdf

Request for Proposals - Quality of Service

- a. The incumbent operator Batelco has invested in a NGN, migrated from DSLAM to MSAN platform and is about to launch new Broadband Services based on latest technology.
- b. TRA is conducting a public consultation on the opening Local Loop Unbundling to Licensed Operators to allow Broadband Market competition.
- c. Emergent Operators initially active on new property developments will be providing Broadband Services over Fibre, including Passive Optical Network technologies (PON/GPON).

5 Deliverables, Expected Timeline and Project Management

72. Deliverables and expected timeline:

Item	Date
Deadline for submission of tenders	28 May 2009 4pm (GMT +3)
Appointment of a Consultant	18 June 2009
Kick-off meeting	24 June 2009
Inception Report Prepared	16 July 2009
Technical Platform Validated	30 September 2009
Operational Phase Started	1 October 2009
First year of Operations & Platform Handover	31 September 2010
Project completed	31 September 2010

73. The deliverables shall meet the requirements defined above in “Requirements” Section. The Consultant shall produce the required deliverables to the satisfaction of the TRA Project manager. The deliverables will be considered completed once they are finally approved as such by the TRA Project manager.

74. The Consultant may propose additional activities and deliverables. Any additional activities and deliverables proposed:

- Should be clearly defined within the Bidder's Technical Offer and identified separately within the Bidder's Financial Offer;

Project Management

75. A Project manager with overall responsibility and authority for this DBOT project will be nominated by TRA. The successful Bidder (Consultant) will coordinate all efforts, and communications, with the TRA Project manager.

76. The Consultant will also appoint a project coordinator/manager to be a liaison between the Consultant and the TRA Project manager for all issues, related to the organisation of the project.

77. The selected Consultant will commence the project with a kick-off meeting with TRA. At this meeting the Consultant will be expected to introduce and agree with the TRA Project manager the proposed organisation, methodology of the project and present a draft inception report including a detailed work plan (timetable).

Request for Proposals - Quality of Service

78. The work plan will have to be presented to the TRA Project manager in the MS Project format.
79. The work plan (timetable) of the Consultant will have to accommodate sufficient time for TRA to comment on the inception report and, where necessary, other documents produced by the Consultant. The Consultant will be strongly encouraged to agree the concept of the report and other documents preferable via the face-to-face meetings with the staff of TRA before proceeding to produce the Inception Report and/or other documents.
80. The meetings will have to be documented by the Consultant and minutes for these meetings will have to be presented to the TRA Project manager (unless agreed otherwise by the Consultant and TRA). The TRA Project manager may also ask to provide other documentation supporting the solution provided by the Consultant.
81. The selected Consultant may also be requested to undertake related additional tasks as agreed to be necessary by TRA and the selected Consultant. Additional tasks shall require authorisation from TRA prior to initiation.
82. The selected Consultant will co-operate fully with TRA and other parties, as identified by TRA, in terms of planning, information exchange, documentation, meetings, communications or other related activities that the TRA Project manager considers necessary in order to fulfil the contract and the requirements of this RFP.
83. Any information provided to the public in relation to the project under this RFP will need to be approved by the TRA Project manager.

32 Instructions for Respondents

General

84. General information about TRA may be found on the TRA's web site at www.tra.org.bh.
85. Responses to this RFP should address all of the requirements and deliverables set out in this RFP. Responses shall provide a breakdown of the tasks involved for the completion of this project.
86. Responding consultants are requested to provide a summary of their relevant capabilities and past experiences in related issues as per Annex C: Bidders General Information.
87. Responding consultants shall provide CVs and contact details of all staff involved in the project. The CVs should be as per the CV format in Annex A: CV Template. Changes to any of the proposed staff members shall only be permissible with the consent of TRA. Any staff members replaced must be replaced by alternative staff members with at least equal standing to the original staff member.
88. Consultants may sub-contract elements of the work but shall assume contractual responsibilities for all work and co-ordination of any third parties. Any such sub-contracting must be clearly identified in the proposal.
89. Responding consultants must declare in their proposals that they have conducted all relevant conflict of interest checks and that to the best of their knowledge they face no conflict of interest in accepting the engagement if selected.
90. The selected Consultant will be required to enter into a formal contract with TRA, the terms of which will be supplied.
91. Until any such contract(s) have been executed, this RFP and any responses to it shall not in any way bind TRA.
92. Firms that submit a proposal in response to this RFP are solely responsible for meeting any and all costs incurred in preparing their proposal. No costs incurred by any consultant (successful or otherwise) in preparing and submitting a proposal shall be reimbursable by TRA.
93. Responding consultants may include supporting documents and attachments as Annexes to the proposal.
94. Proposals should be straightforward, succinct and demonstrate the capacity of the Consultant to address the practical requirements of this work.
95. TRA may issue any clarification to all participants as an addendum to the RFP. Such an addendum will be published on the TRA's website and become part of the RFP documents.

Expected profile of and the requirements to the Consultant

96. The successful Bidder (and the specific staff members proposed to be assigned to this task) is expected to:
- Have a thorough knowledge of internet broadband technologies and access/services, international connectivity and other relevant technical fields;
 - Have significant experience in the field of testing and implementing testing on Broadband access/services and/or other similar fields;
 - Have a significant experience in automation, server applications, database, web design & interface;
 - Have a good knowledge of the telecommunications sector.
97. Responding consultants are expected to include non-confidential samples of work on similar projects (e.g. documents describing similar implementations etc).
98. The bidder, submitting the response to this RFP, shall satisfy the following criteria (pre-qualification requirements) and provide evidence thereof (including names of the clients and summaries of the projects):
- 1) The bidder has undertaken at least 3 projects related to broadband access/services testing;
 - 2) The bidder has at least 5 years of experience in consulting in the field of telecommunications engineering;
 - 3) The lead staff member, assigned to this project, has at least 10 years of experience in the field of telecommunications engineering and project management.
99. Proposals not meeting the pre-qualification requirements will not be evaluated and the associated financial proposals will be returned to the respective bidders.

Format and number of proposals

100. Bidders must submit 2 separate proposals:
- A technical proposal which **must only** be submitted in soft format (by email or on CD or DVD). All files shall be compatible with Microsoft Office 2007 suite.
 - A financial proposal in **HARD FORMAT** only in a separate sealed envelope¹⁰.
101. The technical proposal should be submitted to (submission via e-mail only is considered sufficient):

¹⁰ This RFP is issued according to the rules of the Tender Board of the Kingdom of Bahrain, which allows TRA to issue a public tender of an amount not exceeding BD 100,000 (US \$ 264,900)

Request for Proposals - Quality of Service

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 Telecommunications Regulatory Authority (TRA)
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 Diplomatic Area
 P.O. Box 10353
 Manama,
 Kingdom of Bahrain
e-mail: consultancy@tra.org.bh

102. **The technical proposal must reach TRA by the closing date of this RFP.**
103. The technical proposal shall detail how the responding Consultant proposes to manage and complete this project.
104. The structure and content of the technical proposal will, at a minimum, include:

Structure and content of the technical proposal	
1	Covering letter from an authorised signing officer including a declaration that the Consultant satisfies the prequalification requirements
2	Executive overview (maximum 1 page)
3	An explanation of the understanding of the project, the issues involved and the deliverables
4	Proposed Design, Test Methodology, Reporting and timetable by task for the overall project including: <ul style="list-style-type: none"> ▪ Outline of the inception report ▪ working method, including the split of work between the Kingdom of Bahrain and the Consultant home country, and project management; ▪ the main tasks and sub-tasks to be completed with associated timeframe and dates; ▪ deliverables to be submitted with associated completion dates; ▪ critical path
5	The Consultant may suggest additional activities and deliverables to those set out in the RFP, which are required to deliver this project (these activities and deliverables should be clearly identified as such)
6	Man-days resource allocation plan by tasks and individuals assigned (Annex B of the RFP)
7	Required Hardware, Software, License and Maintenance packages
8	Required Broadband Packages
9	Definition of the Operating phase, including a breakdown between remote and local tasks, third party support if any, maintenance agreements.
10	Company overview, its qualifications and experience (Annex C of the RFP)
11	Table of summary CVs and full CV's in the format set out in the relevant Annex of this RFP (Annex A of the RFP)
12	Samples of work on similar projects (e.g. documents on similar solutions etc.) and recommendations from clients for similar projects should be included if available

Request for Proposals - Quality of Service

105. The fixed price financial bid document must be submitted to TRA in a hard copy only in a separate sealed envelope. The separate envelope will be clearly marked "Financial bid in response to RFP – Universal Access Policy [INSERT NAME OF BIDDER]". **The financial bid document must reach TRA within 7 days of the closing date of this RFP.**

106. Bidders shall ensure they complete and include in their technical proposal the Bidder's checklist of Annex D.

107. A tabulated format should be provided to show all costs in United States Dollars (US\$) in a form that can easily be reviewed and compared with other respondents' proposals. The structure and content for the financial bid shall clearly separate in three different subgroups between:

- o Consulting fees covering Design, Built and Transfer phases
- o Costs associated to the platform (Hardware, Software and License components)
- o Cost of one year of operations based on monthly fees (equal monthly instalments)

TRA will directly purchase the necessary Broadband Packages and therefore these packages should not be included in the financial bid.

Consulting shall include as a minimum, for each deliverable, task and proposed sub-task:

- The proposed team member to complete the task;
- An estimate of the number of man days per team member required to complete each task;
- An overall fee for each phase/activity/deliverable;
- A daily fee rate per team member, based on a daily rate inclusive of all the expenses, except for flight tickets to Bahrain and accommodation (hotel) in Bahrain. The flight tickets to Bahrain and accommodation (hotel) in Bahrain will be arranged (or reimbursed) by TRA according to the schedule of visits, included in the agreed Consultant's work plan.

108. The financial proposal separately from the technical proposal should be delivered to (delivery can be made to either the street address or the P.O. Box):

Mr. Mohammed Nasser
Telecommunications Regulatory Authority
Taib Tower, 7th Floor
Diplomatic Area
P.O. Box 10353
Manama
Kingdom of Bahrain

RFP Closing Date

109. The closing date for receipt of proposals is set out in the front page of this RFP.

110. All proposals should be valid for acceptance for a period of at least 60 calendar days from the deadline for submitting responses.

Request for Proposals - Quality of Service

Response Submission and Query Handling

111. It is the responsibility of the respondents to ensure that their responses to the RFP have reached TRA within the required timeframe.

112. Any queries regarding this RFP should be addressed to:

Mr. Mohammed Nasser
Telecommunications Regulatory Authority (TRA)
Taib Tower, 7th Floor
Diplomatic Area
P.O. Box 10353
Manama
Kingdom of Bahrain
e-mail: consultancy@tra.org.bh
Fax: +973 1753 2125

33 Invoicing

113. Invoicing shall be made using the following invoicing profile:

Consulting (except operations element)	% of fixed price financial bid
Kick-off meeting	10%
Inception Report	20%
Platform implementation	20%
Acceptance testing	30%
Final transfer	20%

Technical Platform	% of fixed price financial bid
Ordering	20%
Delivery	40%
Installation	20%
Acceptance testing & documentation	20%

First year of operations	% of fixed price financial bid
Manpower, remote and local and maintenance fees	Equal monthly instalments

34 Evaluation Process and Outcome

114. TRA will only evaluate proposals that meet the pre-qualification requirements (paragraph 98).

115. TRA will evaluate the proposals according to the criteria detailed below, producing a score of 100%:

- 30% - Understanding of the task required in relation to this RFP;

Request for Proposals - Quality of Service

- 50% - Quality of the technical approach outlined in the proposal including the skills and experience of the personnel allocated to the project by the responding Consultant as well as proposed hardware and software solutions;
- 20% - Realistic project plan, division of tasks and allocation of time and personnel.

116. Proposals scoring less than 50% for any individual criterion will be eliminated from the process.

117. Proposals scoring less than 70% overall after the evaluation process will be eliminated from the process.

118. The contract will be awarded to the responding Consultant who submits the proposal offering the best value for money. This will be decided by dividing the technical score by the total price of the proposal.

119. TRA reserves the right, at its sole discretion, to accept any proposal it chooses in full or part, negotiate with any responding Consultant, and accept any alternative proposals. TRA is not bound to accept any proposal or appoint a Consultant.

Annex A: CV Template

Request for Proposals - Quality of Service

CURRICULUM VITAE

1. **Proposed Role in Project:**
2. **Family Name:**
3. **First Names:**
4. **Date of Birth:**
5. **Nationality:**
6. **Civil Status:**
7. **Education:**

Institution (Date from – Date to)	Degree(s) or Diploma obtained:

8. **Language Skills:** Indicate competence on a scale of 1 to 5 (1–excellent; 5–basic)

Language	Reading	Speaking	Writing

9. **Membership of professional bodies:**
10. **Other skills:** (e.g. Computer literacy, etc.)
11. **Present position:**
12. **Years with current firm:**
13. **Key qualifications:** (Relevant to the project)
14. **Project experience:**

Country	Role	Date from – Date to	Project description / achievements

15. **Professional Experience:**

Date from – Date to	Company	Location	Position	Description

16. Other relevant information (e.g. Publications)

Annex B: Resource Allocation Plan Template

Request for Proposals - Quality of Service

TASKS/DELIVERABLES	(Project team memb er 1)	(Project team memb er 2)	(Project team memb er 3)	...	(Project team memb er x)
Deliverable 1: Task Task Task					
<i>Deliverable 1 sub total</i>					
Deliverable 2: Task Task Task					
<i>Deliverable 2 sub total</i>					
Project Totals					

Annex C: Bidder's General Information

Request for Proposals - Quality of Service

Bidder's Contact Details

1. The following information, in this format, is required for each proposal submitted:
 - a) Name, address, email, telephone, and fax number of a Bidder;
 - b) Contact person dealing with the proposal;
 - c) Description of role, or element of contract, to be fulfilled by any member of this project;
 - d) Identification of party who will carry overall responsibility for the contract (in case of consortiums);
 - e) Confirmation of acceptance by the Bidder and any third parties of the terms and conditions of this RFP;
 - f) Confirmation of acceptance by the respondent and any third parties regarding overall responsibility for successful delivery.

Bidder's Profile

2. The following information, in this format, is required by each Bidder (and a member of the bidding consortium) when submitting its proposal:
 - a) Length of time in existence;
 - b) Number of employees;
 - c) Brief description of the company's principal areas of activity;
 - d) Projects completed relevant to the RFP;
 - e) Any additional information in support of this proposal.

Annex D: Bidder's Checklist

Request for Proposals - Quality of Service

Bidder's Checklist

Please make sure that all items are marked completed before submitting the bid to TRA.

No	Item	Completed (Yes / No)
1	<p>Does the Bidder satisfy the pre-qualification requirements and has the supporting evidence been provided in the Technical Proposal (mark Yes/No for each one of the criteria):</p> <ul style="list-style-type: none"> - The Bidder has undertaken at least 3 projects related to broadband access/services testing; - The Bidder has at least 5 years of experience of consulting in the field of telecommunications engineering; - The lead staff member, assigned to this project, has at least 10 years of experience in the field of telecommunications engineering and project management. 	
2	Bidder's check list completed and signed by an authorised person	
3	Does the proposal include a declaration from the bidder indicating that it has conducted all relevant conflict of interest checks and that to the best of its knowledge it faces no conflict of interest in accepting the engagement if selected?	
4	Has the technical proposal addressed all the elements outlined in the table "Structure and content of the technical proposal"?	
5	If third parties are involved, have the following been provided:	
5.1	Identification of specific tasks that a specific 3 rd party will perform	
5.2	Relevant explanation of the 3 rd party's capabilities	
5.3	CV's of all involved personnel from the 3 rd parties in the format required	
6	If there are any supporting documents, have they been attached in the Annexes?	
7	Has a resource allocation plan been attached to the overall project plan?	
8	Has the Financial Proposal addressed the following:	
8.1	All costs shown clearly in US Dollars	
8.2	A tabulated format showing the tasks, platform costs and costs of operations and also showing the following details per task:	
8.2.1	The proposed team member to complete the task	
8.2.2	An estimate of the number of man days per team member required to complete the task.	
8.2.3	An overall fee for each phase/activity/deliverable	
8.2.4	A daily fee rate per team member, based on a daily rate inclusive of all the expenses, except for flight tickets to Bahrain and accommodation (hotel) in Bahrain.	

Request for Proposals - Quality of Service

8.2.5	Costs associated to the platform (Hardware, Software and License components)	
8.2.6	Cost of one year of operations based on monthly fees (equal monthly instalments)	
9	Has the proposal been arranged in 2 separate submissions as below:	
9.1	Technical Response (to be sent in soft (electronic) format)	
9.2	Financial Response (in an envelope to be sent as a hard copy)	
10	Was the proposal delivered before the deadline set in this RFP to: Mr. Mohammed Nasser Telecommunications Regulatory Authority (TRA) Taib Tower, 7th Floor, Diplomatic Area P.O.Box 10353 Manama - Kingdom of Bahrain email: mnasser@tra.org.bh	