



هيئة تنظيم الاتصالات
Telecommunications Regulatory Authority

Terms of Reference

for Managing the Development of Number Portability in the Kingdom of Bahrain

TOD/ICT/0509/033

V2.0 [Final]

18 June 2009

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1 Introduction

- 1.1 The telecommunications market in the Kingdom of Bahrain has been transformed following Government policy to stimulate the national economy. In October 2002, Legislative Decree No 48 of 2002 promulgated the Telecommunications Law that enabled liberalization of the telecommunications sector and the formation of the Telecommunications Regulatory Authority (TRA).
- 1.2 TRA is an independent body and has a direct responsibility to ensure effective liberalization of the telecommunications market, oversee fair competition, give private investors confidence with regard to competition, and make available the related telecommunication resources, such as the radio spectrum, in a fair and transparent manner.
- 1.3 On the 7th of September 2003, TRA issued a position paper¹ regarding the Requirement for Mobile Number Portability ("MNP"), and requested comments with regards to requiring operators to provide MNP facility.
- 1.4 On the 14th of October 2008, TRA issued a public consultation regarding a draft Number Portability Regulation², in addition to an accompanying explanatory document, proposing to implement number portability for mobile services, fixed services and special services. TRA received a number of responses and is in the process of formulating a final regulation on number portability.
- 1.5 Article 4.6 of the draft number portability regulation states that the implementation of number portability shall conform to specifications to be developed and maintained by TRA. Further, article 8.3 states that the central database will be established by TRA, and will perform the functions and services as defined in the number portability regulation, and any specifications issued by TRA under Article 4.6 of the draft regulation.
- 1.6 Until such a time as the final number portability regulation is published, TRA wishes to engage the services of an external consultant for purposes of managing the development of number portability in the Kingdom of Bahrain as per articles 4.6 and 8.3 mentioned above – specifically for purposes of assisting in developing number porting specifications, and for assisting in the procurement and implementation of the central database – as detailed further below.
- 1.7 This Terms of Reference ("TOR") document sets out the minimum set of services and functions required to be undertaken by an external consultant.

¹ The Mobile Number Portability Position Paper is available at http://www.tra.org.bh/en/pdf/mobile_number_portability_requirement_position_paper_MOU_DC_077.pdf

² The draft Number Portability Regulation is available at http://www.tra.org.bh/en/pdf/NP_Draft_Regulation_Final.pdf, the Explanatory Document is available at http://www.tra.org.bh/en/pdf/NP_Explanatory_Final.pdf (The draft regulation is provided for informational purposes only as it will eventually be replaced by the final version of the regulation).

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- 1.8 All the work to be undertaken under this TOR shall be under the auspices of the Number Portability Working Group (“NPWG”), and any sub-working groups, to be established and led by TRA.

2 Scope of Work

The successful candidate(s) will be required to:

- 2.1 Develop the terms of reference for each of the working groups which have been identified including the mandate and authorities of the working groups
- 2.2 Through the development and maintenance of the appropriate documentation support the work of the following working groups (under TRA’s lead and supervision):
- 2.2.1 The mobile porting process working group whose task is to prepare the mobile number porting process specification
- 2.2.2 The fixed porting process working group whose task is to prepare the fixed number porting process specification
- 2.2.3 The routing and charging working group whose task is to discuss and develop further the first draft of the routing and charging specification, that has already been prepared for TRA
- 2.2.4 The central database working group whose task is to prepare the database procurement specification
- 2.2.5 The implementation working group, which will replace the above working groups once the documentation has been completed
- 2.3 Develop and draft the following documents taking account of the discussions in the working groups (as described in the later sections covering processes and the central database):
- 2.3.1 The inter-operator processes for mobile number portability
- 2.3.2 The inter-operator processes for fixed number portability
- 2.3.3 The specifications for routing and charging
- 2.3.4 The procurement specification of the central database that is required by TRA
- 2.4 Report progress to the overall number portability working group mailing list, which is comprised of all sub-working group members described earlier.
- 2.5 These working groups will meet at least twice a month³ to manage the development and implementation of number portability. The first meeting will be introductory and focus on the planning of the work. It should be possible to

³ Given the existing delays in the overall number portability project schedule, a more intensive working group meeting schedule may be suggested by respondents in order to allow final implementation of number portability by end of 2009.

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schedule the meeting so that all the working group meetings can be held in the same week, however, it may not be possible to hold more than one meeting on the same day as working group membership may overlap (i.e. same participant in more than one working group).

- 2.6 Provide agendas for each meeting where the agendas indicate clearly which issues are to be discussed
- 2.7 Prepare short meeting reports for each meeting - taking account of the fact that the results of discussions will be included in new drafts of the documents and need not be repeated in the meeting reports (e.g. a 2-page report may suffice). These meeting reports should be emailed to the participants regularly and be made available for online (see 2.11 below)
- 2.8 Develop and present initial drafts, based on international best practise, of the three process documents (Mobile porting, fixed porting and routing and charging) for discussion at the second meeting.
- 2.9 Prepare for public consultation a specifications document for the three processes listed in 2.8 above and consequently create a consultation report document with finalized specifications documents (taking into account any input received in the consultation period).
- 2.10 Develop a draft procurement specification for the central database for discussion at the second meeting but at that stage not containing details of the processes, which would be added later following discussion in the other working groups
- 2.11 Maintain an up-to-date website for the documents used by the working groups and email "automated e-mail lists" for correspondence between the participants
- 2.12 Identify companies that are capable of supplying the CDB as either a service or a procurement
- 2.13 Prepare the Request for Proposals (RFP) for TRA to issue based on the procurement specification. The RFP document must be in line with TRA's competitive tender principles and in conformance to the Bahrain Tender Board rules. The general format of the RFP document will be provided by TRA.
- 2.14 Discuss the proposals received in response to the RFP with the database working group and recommend the supplier to be selected by TRA (Tender Board procedures must be strictly adhered to as the contract value is expected to be significant).
- 2.15 Advise TRA on the contents of the contract for the supply of the database; the consultant will be required to provide the necessary legal skills in support of TRA.
- 2.16 Subsequently run progress meetings with the operators to discuss implementation issues and testing and to update any specifications as necessary.

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- 2.17 Attempt to reach consensus with the operators on practical issues and development commitment to the success of the project. Where consensus cannot be achieved the issues should be referred to the working group for resolution with TRA having the ultimate decision.

- 2.18 ADDITIONAL INFORMATION: The main issues to be addressed in the process working groups and included in the specifications are:
 - 2.18.1 Overview of the process
 - 2.18.2 Account classification
 - 2.18.3 Porting hours, batch processing and batch limits
 - 2.18.4 Subscriber handling and initial validation
 - 2.18.5 Special cases
 - 2.18.6 Requirements on the Recipient Operator when taking an order
 - 2.18.7 Checks performed by the central database
 - 2.18.8 Actions by the Donor on receiving a porting request
 - 2.18.9 Activation by the Recipient Operator
 - 2.18.10 Actions by the Donor Operator in closing the old account
 - 2.18.11 Updating of the central database
 - 2.18.12 Subsequent Portings
 - 2.18.13 Portings back to the Block Operator
 - 2.18.14 Portings where neither Donor Operator nor Recipient Operator is the Block Operator
 - 2.18.15 Database logs and reporting of late responses
 - 2.18.16 Termination of service
 - 2.18.17 Clarification of Cooling-off periods and Win-back
 - 2.18.18 Data cleansing and resolution
 - 2.18.19 Porting Request Form
 - 2.18.20 List of Messages and their format

- 2.19 ADDITIONAL INFORMATION: The main issues to be addressed in the database working group and included in the specifications are:
 - 2.19.1 The Service Requirements (by reference to the process specifications)
 - 2.19.2 Interfacing with the Operators
 - 2.19.3 Data Record Structure
 - 2.19.4 Dimensions & Scalability
 - 2.19.5 Availability and quality of service parameters
 - 2.19.6 Disaster Recovery
 - 2.19.7 Implementation Schedule
 - 2.19.8 Provision of information to law enforcement organisations
 - 2.19.9 Logging of activities and archiving of data
 - 2.19.10 Reporting of statistics
 - 2.19.11 Availability of a Test platform
 - 2.19.12 Escrow of the software
 - 2.19.13 Training
 - 2.19.14 Documentation
 - 2.19.15 Conditions of Delivery
 - 2.19.16 Price
 - 2.19.17 Penalties
 - 2.19.18 Reference List of Existing Customers
 - 2.19.19 Consultancy support
 - 2.19.20 Format of the quotation

3 Deliverables

As a result of the work to be undertaken by the consultant, as listed in the Scope of Work section above, TRA anticipates the following deliverables under this TOR⁴:

- 3.1 (Document) Clear terms of reference for all the working groups stating scope of work, responsibilities and authorities of each working group
- 3.2 (Document) Clear work plan showing the proposed number of meetings, suggested dates, milestones, communications plan, time to be spent by the consultant on-site and off-site, and resource requirements
- 3.3 (Activity) Implement a website for the documents used by the working groups and maintain regular mailing lists and correspondence with participants
- 3.4 (Document) Develop first drafts of the following documents – for discussion with the working groups:
 - 3.4.1 Mobile porting process specification document
 - 3.4.2 Fixed porting process specification document
 - 3.4.3 Routing and charging specification document
 - 3.4.4 Central database procurement specification document
- 3.5 (Document) Propose the agenda for each working group meeting (for each recurrence of the meetings)
- 3.6 (Meeting) Hold all meetings of the different working groups⁵ in order to arrive at a final set of specifications for the different processes
- 3.7 (Document) Prepare short post-meeting reports and distribute to working group participants
- 3.8 (Presentation) Once the working groups have arrived at a final set of specifications, present the documents to TRA and solicit feedback for input into the public consultation document
- 3.9 (Document) Prepare a public consultation document to consult with the public on the specifications listed in 3.4.1 through 3.4.4 above
- 3.10 (Document) Prepare and present a report on the responses received to the public consultation, and incorporate any agreed changes to the relevant documents
- 3.11 (Document/Meeting) Prepare a draft implementation plan for the central database, and discuss this plan with the working group

⁴ It is important to note that, in light of the multiple regulatory projects currently underway, the successful consultant will be required to undertake all the work necessary to put together the required documents and perform the activities listed; the role of the working groups will be limited to revision of documents and making comments/suggestions.

⁵ All working group meetings will be chaired by TRA

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- 3.12 (Document) Prepare an RFP for the central database based on the previously established procurement specification
- 3.13 (Activity) Evaluate proposals received in response to the central database RFP
- 3.14 (Meeting) Discuss the results of the RFP evaluation with TRA and the implementation working group
- 3.15 (Activity) Advise TRA on the proposed contract(s) related to the procurement of the central database (whether procured as a product or as a service)
- 3.16 (Activity) Supervise the implementation of the central database and ensure adherence to the specifications developed with the working groups
- 3.17 (Meeting) Run progress meetings with the operators to discuss implementation issues and testing, and update specifications as necessary
- 3.18 (Document) Provide a project post-mortem report to TRA showing project statistics (time spent, resource utilization, project progress, targets achieved, cancelled, or rolled into new requirements, lessons learned), list of working group participants, list of documents produced, list of meetings held, and other data relevant to the project

4 Response Instructions

- 4.1 Responses to this document should address all of the requirements
- 4.2 Successful consultants will be required to enter into a formal contract with TRA on terms to be supplied.
- 4.3 Until any such contract(s) have been executed, this Request for Proposal and any responses to this shall not in any way bind TRA.
- 4.4 The responding consultants shall provide CVs and contact details of the people to be involved in the project.
- 4.5 The responding consultants are requested to provide a summary of their relevant capabilities and past experiences in related issues. Examples of similar work carried out by the responding consultant would be helpful.
- 4.6 The responding consultants must demonstrate that within their respective teams they possess the necessary legal skills, and relevant experience, to ensure high quality work.
- 4.7 Proposed project plan and methodology should also be a part of the response.
- 4.8 General information about TRA may be found on TRA's web site at www.tra.org.bh.
- 4.9 Responses to this document should be submitted by either e-mail or hardcopy. If a response is submitted by e-mail a hard copy must reach TRA

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within 7 working days of the date of closing. It is the responsibility of the respondents to ensure that their responses have reached TRA within the required timeframe.

- 4.10 All responding consultants should include a statement that they have read and understood the terms and conditions contained herein.
- 4.11 Responding consultants may include supporting documents and attachments.
- 4.12 Proposals should be straightforward and demonstrate the capacity of the consultant to address the practical requirements of this work.
- 4.13 TRA may issue any clarification to all participants as an addendum to the TOR. Such an addendum will become part of the TOR documents before deadline.
- 4.14 Proposals should be received as soon as possible and in any case not later than **July 16th 2009, at 1300 Hours GMT +0:00**
- 4.15 The address for submitting proposals is as follows:

Mr. Mohammed Nasser
Director, Finance & Administration

P.O. Box 10353
Manama,
Kingdom of Bahrain

E-mail: mnasser@tra.org.bh
Fax: +973 1753 2125
- 4.16 The preferred method of technical proposal submission is by email.

5 Evaluation

5.1 Qualifications - the successful consultant is expected to have:

- 5.1.1 Experience in managing meetings where it is necessary to try to reach a consensus between participants with different objectives
- 5.1.2 Proven track record of achieving stated deliverables on time while working in a challenging environment
- 5.1.3 Experience in drafting technical specifications where it is important that the text is clear, concise and consistent
- 5.1.4 Experience in evaluating proposals
- 5.1.5 Detailed understanding and experience of the implementation of mobile and fixed number portability, the consequential changes that the operators will need to make both to their networks and to their IT support systems and the testing needed
- 5.1.6 Experience with number portability in more than 1 territory
- 5.1.7 Minimum of 15 years experience in the field of telecommunications (per consultant)

5.2 Evaluation Criteria and Proposal Format

5.2.1 Respondents must be aware of the evaluation criteria to be employed by TRA in evaluating and marking responses. The mark distribution is as follows:

5.2.2 Technical Proposal

#	Item	Maximum Score
1.	Understanding of the task(s) required, to include knowledge and understanding of local market conditions	15%
2.	Quality and effectiveness of selected project methodology/approach	20%
3.	Skills and expertise of the consultant(s), to include similar work conducted in the past and specializations / areas of expertise of consultant(s)	35%
4.	Consultant's previous experience in number portability implementations, to include process specification expertise	30%
Maximum Possible Score for the Technical Proposal		100%

5.2.3 The financial proposal is not given any marks, however, it is used to determine "value for money" as applied to the total score achieved in the Technical Proposal

5.3 Respondents are required to submit separate proposals for both areas mentioned above; technical, and financial. The financial proposal must be submitted in hard copy only and submitted by the closing date mentioned

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above. The financial proposal envelope should be clearly marked “Name of Bidder - **Number Portability Development TOR – Financial Proposal**”⁶

- 5.4 The financial proposal will only be opened for those submissions which achieve the minimum technical score
- 5.5 TRA will evaluate responses based on the above marking regime. Responses scoring less than 75% in the technical proposal will be rejected
- 5.6 TRA expects to review responses and appoint a Consultant within two calendar weeks of the deadline for submitting responses
- 5.7 TRA reserves the right at its sole discretion to accept any response it chooses in full or part, negotiate with any consultant, and accept any alternative response
- 5.8 TRA is not bound to accept any response or appoint a consultant

6 Implementation Plan

- 6.1 Prospective consultants are required to provide the required time frame for implementing the project.
- 6.2 The prospective consultant is required to provide an indicative implementation plan identifying the time frame required for completion and a description of the approach to be used in the implementation of this project (including time spent onsite/offsite). This is separate from the planning requirement listed in the deliverables section above.

7 Fees and Payment

- 7.1 Bidders should provide itemized cost/fees for each deliverable/stage in the implementation plan. A tabulated format should be provided to show all costs in Bahraini Dinars in a form that can easily be reviewed and evaluated. Bidders are reminded that financial proposals must be submitted separately in a sealed envelope, to be delivered no later than the date and time indicated above.
- 7.2 TRA will process payments as follows:

#	After completing deliverables	TRA will pay
1	3.1, 3.2, 3.3, and 3.4	20%
2	3.5, 3.6, 3.7, 3.8, and 3.9	30%
3	3.10, 3.11 and 3.12	15%
4	3.13, 3.14, and 3.15	15%
5	3.16, 3.17, and 3.18	20%

⁶ 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)