

Great Socialist People's Libyan Arab Jamahiriya

General Telecommunications Authority

RFP

Spectrum Pricing

15/09/2009

I. Purpose

The General Telecommunication Authority of Libya (GTA) requires the services of a reputable consultancy firm to undertake a study to assess the value of the spectrum in Libya.

II. Background

Global developments and unprecedented use of wireless technologies have allowed for the rapid buildup of information and communications technology (ICT) infrastructure - a vital infrastructure for economic growth. A key resource for wireless technology based communications is the radio spectrum – a natural resource of increasing economic and social importance. It provides the population with access to a range of private, commercial, consumer, defense, national security, scientific and public services and applications.

Libya is facing rapidly growing demand for wireless based telecommunication services and for the radio spectrum that those services require to operate. The radio spectrum is a limited resource with competing demands for its use. The enormous growth of wireless technology, including cellular mobile in Libya over the last four or so years, has placed a large burden on the country's radio spectrum management systems. Continued rapid growth of cellular mobile, as well as additional rapid growth of radio networks for broadband and rural access is anticipated. Proper management of Libya's radio spectrum is therefore critical if the benefit it can provide is to be fully and effectively realized.

Moreover, the Government has recognized that proper charges for access to the radio spectrum are important to support effective management. The aforementioned and a number of other factors have necessitated a review and revision of Libya's radio spectrum management policy and processes. These include:

- Increased demand for radio spectrum given the explosive growth in cellular mobile and other wireless telecommunication services in Libya;
- Need to remove delays and impediments that poorly allocated and utilized spectrum may pose to the development of newer, cheaper and smarter wireless technologies such as Wi-Fi and WiMAX;
- Increasing use or intention to use secondary mechanisms for spectrum assignments such as spectrum trading as a means to increase efficiency of spectrum use, in many countries.

The General Telecommunications Authority (GTA) is the responsible entity for spectrum management in Libya and as such is in charge of developing policies for the use of the spectrum resource to ensure it is effectively managed and efficiently used; the main objective of managing the spectrum is to maximize the economic and social benefits that Libyans derive from the use of the spectrum. As such, the fees for spectrum usage should be designed in a way that ensures efficient assignment and usage of the spectrum, as well as a fair return for the Libyans. Ensuring fees reflect the real value of the spectrum is very important because they:

- Serve as an incentive for licensees to optimize the usage of the spectrum
- Encourage the roll out of products and services to maximize the value
- Dissuades anti-competitive behavior that could limit competitors access

The GTA has undertaken a process to review current spectrum management model and process. As part of this process, the GTA also wants to do a formal study to assess the current market value of the spectrum, as well as the potential price setting model for spectrum usage.

III. Project requirements and objectives

The objective of this project is to determine the value of the spectrum in Libya as well as to define the most suitable price setting model to ensure efficient and effective management of the spectrum.

Key issues that need to be addressed, in view of current challenges and developments include:

- What is the demand for spectrum, how is this demand going to be fulfilled and what is the role of appropriate spectrum management policy? What measures can be taken to improve spectrum management policy, including allocation, assignment, pricing, and monitoring in order to facilitate increased investment, competition and growth in the Libyan telecommunications sector?
- What changes are required in Libya's spectrum management policies and regulations in order to achieve broader telecom and broadcasting sector objectives, while taking advantage of the enormous opportunities being provided by technological developments in the sector?
- To what extent are changes required in planning and allocation, licensing and pricing, and monitoring procedures and processes in order to improve radio spectrum management in Libya? What is international best practice pertinent to Libya?
- What changes are needed to (i) streamline the institutional structure for spectrum management; and (ii) improve the interface between spectrum licensing and monitoring functions in order to assist the planning process?
- How can it be ensured that spectrum management agencies have adequate financial resources and skills to better fulfill their mandates?
- To what extent and how can spectrum pricing be used both to encourage efficient use of the spectrum and to support growth in the ability of the regulator to manage spectrum?

IV. Scope of Work

Objective

The overall objective of this activity is to assess the spectrum management policy framework, overall functioning of the radio frequency spectrum monitoring and management function in Libya, compare performance with international norms, diagnose problems, and develop recommendations in light of international best practice and Libyan conditions, in particular with respect to pricing of spectrum use.

Tasks

The specific tasks to be undertaken by the consultants include the following:

- Detailed assessment and understanding of the current situation of radio spectrum use and management in Libya including factors that are constraining effective spectrum management and opportunities to dramatically improve radio spectrum management policy and practices.
- Detailed assessment of actual spectrum use and demand with a view to identify key bottlenecks in spectrum availability and management that prevent timely and adequate spectrum allocation and assignments.
- Detailed licensing policy that includes spectrum pricing models for the different spectrum bands taking into accounts all the relevant factors.
- Development of recommendations on spectrum pricing issues, instituting improved processes and licensing systems for spectrum management purposes;
- Assessing the adequacy of present financial resources/ budget allocations for the spectrum regulator and recommending how the regulator can put forward coherent and persuasive arguments for budget allocations more appropriately reflecting the tasks performed by them.
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- Setting out an action plan for implementation.

The study should include all data sources and methodology used. Due to the challenging nature of determining the real “market” value and the existence of several valuation methods, a comparison and assessment of the main valuation practices will be required to select one.

The study will also include international benchmarks and references that could be relevant for the purposes of the exercise. This includes assessing the results of auctions for similar spectrum, fee comparison for similar services and any other relevant market transaction that could be useful.

V. Conduct of the Project

Consultant qualifications

The GTA is seeking to contract a firm of reputable consultants with relevant experience in this field. The consultants will need to integrate international best practice with the specific characteristics of Libya. They will need to be present in Libya for a significant part of the total consultancy and need to include credible international experience on the team.

The consultants are expected to demonstrate experience in the following areas:

- Economic and technical expertise in spectrum management, including market based approaches to spectrum management (eg pricing, auctions);
- Technical expertise in the area of new technologies and convergence and their impact on demand for and use of spectrum resources;
- Management consulting expertise in the area of business process reengineering especially within the context of the Libyan public sector;
- An excellent understanding of the practicalities of spectrum management in the region including public administration and the institutional processes of the spectrum management and monitoring functions.

VI. Deliverables

Defining the most suitable price setting model for the allocation of spectrum

The contractor will be required to advice on the most suitable price setting model for the allocation of spectrum. The proposed spectrum price setting model should:

- Represent the best estimate of the real market value of the spectrum
- Contribute to the efficient allocation of spectrum
- Be transparent and simple from an administration point of view
- Be flexible to be applied as either a one shot fee or a periodic fee
- Provide a reasonable and fair financial return

It is expected that the proposed price setting model takes into consideration current circumstances and constituencies of existing spectrum allocation, management model and pricing, providing the necessary mechanisms to factor in current situation and migrate to the new model. This means that the study should cover not only allocation of available spectrum but also potential reallocation of existing allocated spectrum.

The consultants will be required to prepare a report containing the details and rational of the proposed price setting model including

- Detailed description of the proposed price setting model
- Alignment of the proposed model with the objectives set
- Comparison of the proposed model with alternative ones and the rationale for selection
- Information required for the correct application of the model
- Potential difficulties and pitfalls in the implementation of the model as well as how to overcome them

Other aspects to be included in the proposal

Apart from the detailed scope of work, the proposal will contain:

- Proposed approach, tentative work plan and deliverables
- Team structure and detailed CV's
- Total cost of the project, including all expenses
- References in similar engagements

VII. Schedule

Task	Timing
Deadline of Questions to be submitted to GTA to (r.zitouni@gta.ly)	16 th September 2009
Deadline for submission	5 th October 2009
Selection and contract negotiations starts	11 th October 2009

The consultants will be responsible for the following deliverables. All reports will be in the English Language.

Deliverable	Timing
Inception report	Contract signing + 2 weeks
Interim report highlighting the status of the identified issues and draft recommendations addressing these issues.	Contract signing + 8 weeks
Draft final report.	Contract signing + 12 weeks
Presentation to the GTA officials on the findings and recommendations	Contract signing + 14 weeks
Final report	Contract signing + 16 weeks