

Information & Communication Technologies Authority

Consultation Ref: ICTA/01/21

CONSULTATION REGARDING AMENDMENTS TO THE FIRST SCHEDULE AND TO THE LICENSING AND FEES REGULATIONS

Explanatory memorandum

Considering that:

- 1) the ICT Authority has as one of its functions, under section 18(f) of the Information and Communication Technologies Act 2001, to "exercise licensing and regulatory functions, or grant such authorisation, approval or clearance, in respect of information and communication services in Mauritius including the determination of types and classes of licences and the regulation of tariffs and alterations thereto";
- 2) the ICT Authority has as one of its objects, under section 16(c) of the Information and Communication Technologies Act 2001, to "to license and regulate the information and communication services";

The Information and Communication Technologies Authority resolves to:

- 1) make available for public consultation the Consultation Document Ref: ICTA/01/20;
- 2) invite views, contributions, and comments on the Consultation Document.

GUIDELINES ON RESPONDING TO THIS CONSULTATION

- G.1 All comments are welcomed; however it would make the task of analyzing responses easier if comments were referenced to the relevant question numbers from this document.
- G.2 You are invited to send your written views and comments on the issues raised in this document to the Executive Director, ICT Authority, 12th Floor The Celicourt, Celicourt Antelme Street, Port Louis, or by email to icta@intnet.mu, at latest by 16h00 on 26 February 2021.
- G.3 Should you be including confidential information as part of your responses, you are requested to clearly identify the said confidential materials and to place same in a separate annex to your response.

1. INTRODUCTION

Under Section 18(1)(f) of the ICT Act, the Authority shall "exercise licensing and regulatory functions or grant such authorization, approval and clearance in respect of information and communication services in Mauritius, including the determination of types and classes of licensees and the approval of prices, tariffs and alterations thereto".

Section 48 of the Act further provides for regulations to be made for the levying of fees and taking charges as well as for the amendment of the Schedules.

The latest update to the Licensing Schedule for the operation of ICT networks and services as well as for spectrum usage dates back to 2003

The licensing framework adopted at that time for commercial activities was an attempt to move from a traditional vertically integrated framework to a horizontally integrated framework in order to cater for the convergence of networks and services.

2. NEED FOR A LICENSING REFORM

The need for a reform in the licensing regime has been long felt by the Authority when convergence had started to become a reality and major changes in the business models of operators in developed countries had started to be observed.

Moreover, a number of countries, including Malaysia and Singapore, have adopted simpler licensing frameworks that could permit more flexibility and encourage innovation from operators.

Today, there is an even stronger need for a revised licensing regime. The onset of 'Everything over IP', smart cities, cloud services and the operation of Internet of Things platforms, amongst others, are further making the current licences as well as their charging principles obsolete. Against this backdrop, the Authority increasingly faces difficulties in guiding investors towards licences that are appropriate for the activities that they wish to carry out.

Question 1: Do you agree that the licensing framework and charging principles for commercial licences have to be updated to promote more investment, flexibility and innovation from operators?

Licences authorising spectrum usage also have to be revised in order to adapt to changes which have occurred during the past twenty years in the field of radiocommunications.

5G for example, will make use of spectrum in the so called mmWave band (i.e. spectrum at frequencies greater than 26 GHz). The characteristics of radio propagation at these frequencies are such that the

coverage cells will have radii in the order of hundreds of meters only, compared to cell radii of several kilometers in traditional sub-3 GHz bands.

Moreover, these frequency bands are significantly larger than in the traditional sub-3 GHz bands, hence this allows the allocation of larger portions of spectrum to operators, enabling higher data transmission rates.

Should the current licence fees be applied to an allocation of a portion of 1GHz (1000 MHz) of spectrum to an operator in the mmWave band, the latter will have to pay annual licence fees to the tune of Rs. 150,000,000. This is believed to make no business sense, hence the need for review.

Furthermore, it is believed that in certain specific cases, market-based mechanisms (e.g. auctioning) would be more appropriate for allocating spectrum as is the case in many jurisdictions as compared to the traditional administrative allocations. In the forthcoming Licensing and Fees Regulations it is proposed to make possible the use of market-based mechanisms as a means of valuing and charging for spectrum. This is in line with the recent amendments brought to the law.

Question 2: Do you agree that the licensing framework and licence fees for spectrum licences have to be updated to give better consideration to the business case of operators relative to the market value of spectrum?

Question 3: Do you agree that auctioning may be appropriate for allocating spectrum in certain cases?

3. NEW LICENSING FRAMEWORK FOR COMMERCIAL LICENCES

The current licensing framework for commercial licences is divided into four categories as follows:-

- 1. Network Infrastructure Provider
- 2. Networking Services Provider
- 3. Private Network Operator
- 4. Network Application Provider

The Network Application Provider category provides a list of licences covering a significant number of activities requiring a licence. Under some of these licences (e.g. PSTN, PLMN, etc...), the licensee is authorised, where applicable, to set-up a network and offer services. Under other licences (e.g. Value Added Services), the licensee is only authorised to offer services.

The main issue with this approach of defining specific licences for each activity is that as these activities evolve with time and as other activities are created or disappear, the licensing framework rapidly tends towards obsolescence.

It is therefore proposed to move progressively towards only two main categories of licences and the activities falling under each category would be left to be defined in guidelines that the Authority would issue from time to time. This is the general trend worldwide with respect to licensing in the ICT sector.

The two main categories would be as follows: -

- Facilities-based Operator (FBO) licences which would allow the licensee to own, deploy or operate public information and communication networks, systems, or facilities, including telecommunication networks, systems, or facilities and to offer information and communication services, including telecommunication services.
- Service-based Operator (SBO) licences which would allow the licensee to lease information and communication technologies network elements including telecommunication network elements from any licensed FBO for the provision of information and communication services including telecommunication services or for the resell of information and communication services including telecommunication services of FBOs, to third parties including business customers and the public.

Under this new framework, the licence fees would be based on a percentage of the annual gross turnover of the licensees, whereas also defining a floor and a ceiling. This would significantly contrast with the current flat fee regime which is applied irrespective of the commercial performance and size of the licensee. The percentage of annual gross turnover model of charging for licence fees is viewed as a fairer method, which take these latter parameters into consideration, and is known to be pro-competitive given its endorsement in many jurisdictions.

Question 4: Do you agree with the approach proposed in this section in respect of licensing framework and licence fees for commercial licences?

4. PROPOSALS FOR LICENCES FOR USAGE OF RADIO SPECTRUM

The basic format for defining licences for the usage of spectrum is proposed to remain essentially unchanged, The licence categories are proposed to be defined as follows: -

- 1. **Station Licences**, where a station is defined as "one or more transmitter or receiver or a combination of transmitters and receivers, including the accessory equipment, necessary at one location for carrying on a radiocommunication service, or the radioastronomy service."
- 2. Radio Spectrum Licences which would be granted to those applications not covered under a station licence, for those frequency bands allocated to radiocommunication services under the Mauritius Frequency Allocation Table and where exclusive or shared use of a defined portion of radio spectrum or specific frequency is required.

- 3. Fixed Radio Link Licences which would be granted to those applications not covered under a station licence, for those frequency bands allocated the Fixed Service under the Mauritius Frequency Allocation Table and where Licences are granted for a radio link between two defined fixed points
- 4. Radiocommunication Class Licences which are granted to all persons meeting prescribed criteria, for those frequency bands specified below and allocated to appropriate services under the Mauritius Frequency Allocation Table

The Radio spectrum licences are proposed to be reorganised as follows: -

- to provide radio spectrum licences to Private Mobile Radio applications instead of the current apparatus licences. This is proposed as the Authority believes that this approach would favour a more efficient use of the radio spectrum. This is so as under the current approach, a single licence is provided irrespective of the amount of spectrum used. With the proposed approach, each additional frequency on a device will be licensed and separate fees will be charged. This will encourage PMR users to use spectrum more efficiently;
- The segmentation of the spectrum for Public Land Mobile Services has remained unchanged, except that a lower boundary has now been defined at 470 MHz in order to segment the spectrum for Private Mobile Radio and Public Mobile Radio Trunking applications and those for Public Land Mobile Services.
- 3. The Fixed Radio Link Licences have remained the same except that licences are now defined only up to 50 GHz. This is being proposed in order to cater for short-hop fixed links that are now implemented in the so-called V-band (50/60 GHz) and E-band (70/80 GHz). These links do not require to be licensed individually and may rather be operated under a class licence. This approach is in line with that taken in several countries¹.

Question 5: Do you agree with the approach proposed in this section in respect of licensing framework and licence fees for licences for the usage of the radio spectrum?

¹https://www.etsi.org/images/files/ETSIWhitePapers/etsi_wp9_e_band_and_v_band_survey_20150629.pdf

5. REVISION OF FEES FOR SPECTRUM USAGE LICENCES

In general, the licence fees for spectrum usage are proposed to be updated based on the Customer Price Index (CPI) over the period 2003 to now. This approach has been used in order to ensure that the value of the resource is preserved against erosion by inflation.

Question 5: Do you agree with the approach proposed in this section in respect to the proposed methodology for updating the licence fees for usage of the radio spectrum?

6. CONCLUSION

In this paper the rationale behind the changes proposed to be made to the First Schedule and the Licensing and Fees regulations has been laid down. The proposed changes are being made in order to modernize the licensing approach of the Authority for the benefit of the sector at large. This paper has also explained the approach for coming up with revised fees for spectrum usage. The licence fees for spectrum usage are proposed to be updated based on the Customer Price Index (CPI) over the period 2003 to now.