



A Position Paper issued by the Telecommunications Regulatory Authority on the Licensing Approach to Internet Protocol (“IP”) Based Voice and Messaging Services in the Kingdom of Bahrain

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Purpose: To update the Telecommunications Regulatory Authority’s position on IP-based voice and messaging services from its previous papers on Voice over IP (“VoIP”) services dated 17 April 2004 and 30 May 2007.

1 INTRODUCTION

- 1.1 The Telecommunications Regulatory Authority ("**Authority**") has previously issued two Position Papers which set out the Authority's approach to the regulation of VoIP services under the existing licensing regime under the Telecommunications Law (the "**Law**")¹ in the Kingdom of Bahrain, namely:
- (a) Position Paper on the carriage of Voice calls using the Internet Protocol (IP) dated 17 April 2004 (MOU/DC/268) ("**2004 VoIP Paper**"); and
 - (b) Position Paper No.1 of 2007 on Regulation of Voice over Internet Protocol ("VoIP") Services dated 30 May 2007 (LAU/0504/054) ("**2007 VoIP Paper**").
- 1.2 Since the 2004 VoIP Paper and 2007 VoIP Paper were published, there has been substantial growth in the use of over-the-top ("**OTT**") voice and messaging services in the Kingdom of Bahrain, which are often utilised on mobile phones.
- 1.3 The purpose of this position paper ("**Position Paper**") is to update the Authority's position in relation to IP-based or OTT voice and messaging services. This Position Paper supersedes the Authority's approach to licensing VoIP services expressed in both the 2004 VoIP Paper and 2007 VoIP Paper.
- 1.4 This is meant to be a Position Paper for guidance purposes only. It is a general statement of the Authority's current views on this issue based upon the facts available to it. As technological innovation regarding OTT voice and messaging services develops, the Authority's position may similarly change and the Authority reserves its right to amend this Position Paper accordingly.
- 1.5 The Authority may in the future explore other regulatory measures to deal with the matters considered in this paper and others that may arise, but until such a step is taken this Position Paper shall act as an indication to licensees and relevant stakeholders as to the Authority's viewpoint on the application of the Law and existing regulatory framework at this time.

2 THE AUTHORITY'S PREVIOUS POSITION ON THE REGULATION OF VOIP SERVICES

- 2.1 Since 2004, a number of Position Papers and Guidelines have been issued that set out the Authority's approach to licensing VoIP services and that are otherwise relevant to the licensing of OTT voice and messaging services, namely:
- (a) the 2004 VoIP Paper;
 - (b) the 2007 VoIP Paper;

¹ Legislative Decree No. 48 Of 2002 Promulgating the Telecommunications Law, as amended most recently in September 2017 to reflect NTP4 policies and developments, available at: <http://www.tra.org.bh/media/document/TelecommunicationsLaw-secondedition-English.pdf>.

(c) Position Paper on Internet and Online Applications dated 6 October 2016 (LAD/1016/184) (“**2016 OTT Paper**”); and

(d) Traffic Management and Pricing Practices Guidelines dated 4 December 2017 (LAD/1117/252) (“**2017 TM Guidelines**”).

2.2 This Position Paper does not impact the 2016 OTT Paper or the 2017 TM Guidelines. The 2016 OTT Paper generally described OTT services as online applications providing services and content to end-customers, which comprise a variety of applications which enable services over the Internet, such as voice and messaging services, media, content distribution and e-commerce.² With respect to OTT voice and messaging services, which is the subject of this Position Paper, the 2016 OTT Paper described the purpose of such services as enabling communications over the public Internet service, such as VoIP, video-based Internet OTT communications and IP-messaging, which, in contrast to traditional communications services relying on managed and dedicated transmission networks, use contented transmission network (i.e. Internet access) and the public Internet as the transport medium.³

2.3 In the 2007 VoIP Paper, the Authority considered four types of VoIP services for regulatory purposes:

(a) Internet only VoIP services (“**Internet Only Services**”), i.e. peer-to-peer communications;⁴

(b) Internet to Public Telephone Networks (“**PTN**”) VoIP services (“**Internet to PTN Services**”), i.e. VoIP which allows break out to the public switched telephone network (“**PSTN**”);⁵

(c) PTN to Internet Services, i.e. VoIP which allows break in from the PSTN;⁶ and

(d) PTN VoIP Services, i.e. where the PTN operator uses an IP network to convey calls between its subscribers.⁷

2.4 The Authority’s previous position on the regulation of VoIP services may be summarised at a high level as follows:

(a) Providers of Internet Only Services, which do not utilise numbering resources, would not ordinarily require a licence. However, if such providers do more than

² 2016 OTT Paper, p. 4.

³ 2016 OTT Paper, pp. 12-13.

⁴ Internet Only Services are typically characterised by the provision to end users of a service for the download of software, which allows the end user to make voice calls to other people using the same, and sometimes other, compatible software. The software allows end users to participate in a virtual network using virtual switches and connections across the Internet. See: 2007 VoIP Paper, para. 2.1.1.

⁵ Internet to PTN services are characterised by the ability of the end user to use a service that is substantially the same as the Internet Only Service, except the end user can contact subscribers of PTNs who are identified by some internationally recognised identifier. See: 2007 VoIP Paper, para. 2.1.2.

⁶ See: 2007 VoIP Paper, para. 2.1.3.

⁷ See: 2007 VoIP Paper, para. 2.1.4.

merely offer software that facilitates VoIP communications, this may tip the service into classification as a telecommunications service that would require a licence.

- (b) Providers of Internet to PTN Services, PTN to Internet Services and PTN VoIP Services would require a National Fixed Licence (“**NFL**”) and/or International Services Licence (“**ISL**”), since these services interconnect with the PSTN.
- (c) A service provider established in a foreign jurisdiction whose activities would ordinarily require a licence as described in paragraphs (a) and (b) above, would be subject to the Law irrespective of their establishment and location of their technical equipment, if they effectively, deliberately, and purposefully direct their activities to residents of the Kingdom.

3 CURRENT POSITION STATEMENT

Classification of OTT voice and messaging services

- 3.1 As described in paragraph 2.3 above, the 2007 VoIP Paper considered four types of VoIP services for regulatory purposes, all specifically relating to how voice calls could be made using IP networks. Since 2007, not only has there been a substantial increase in VoIP calls, but also OTT messages that now outstrip the volume of consumer SMS.
- 3.2 Of the four types of VoIP services described in the 2007 VoIP Paper, Internet Only Services would not ordinarily require a licence. The remaining three types of VoIP services (i.e. Internet to PTN Services, PTN to Internet Services and PTN VoIP Services) would require an NFL and/or ISL, since these services interconnect with the PSTN. In other words, the regulatory approach differs depending on whether or not the particular service connects with publicly assigned numbering resources.
- 3.3 Therefore, the Authority considers that a clearer classification of OTT voice and messaging services, in line with the 2007 paper, is to distinguish between those services that are “number-based”, and those that are “number-independent”. These are described further below.

Number-based OTT voice and messaging services (“**Number-Based Services**”)

- 3.4 Number-Based Services are OTT voice and messaging services which connect with publicly assigned numbering resources. Such services are able to connect or enable communication with a number or numbers in the National Numbering Plan or international numbering plans.⁸
- 3.5 The Authority notes that some OTT voice and messaging services require a user to register their phone number as an identifier in order to use the service. The Authority considers that the mere use of a number as an identifier is not the equivalent to the use of a number to connect with publicly assigned numbering resources, and this in itself would not qualify the service as a Number-Based Service.

⁸ This would include Internet to PTN Services, PTN to Internet Services and PTN VoIP Services as described in the 2007 VoIP Paper.

Number-independent OTT voice and messaging services (“**Number-Independent Services**”)

- 3.6 Number-Independent Services are OTT voice and messaging services which do not connect with publicly assigned numbering resources. Such services are not able to connect or enable communication with a number or numbers in the National Numbering Plan or international numbering plans.⁹

General licensing approach to OTT voice and messaging services

- 3.7 Subject to the remaining paragraphs of this Section 3:
- (a) Number-Based Services qualify as Telecommunications services that are subject to the licensing requirement pursuant to Article 24(a) of the Law; and
 - (b) Number-Independent Services do not qualify as Telecommunications services and are not subject to the licensing requirement pursuant to Article 24(a) of the Law.

Licensing of Number-Based Services

Individual Licences

- 3.8 The provision of Number-Based Services may be authorised under one or more of the following Individual Licences, in accordance with the scope of each Licence:
- (a) NFL;
 - (b) ISL;
 - (c) National Fixed Wireless Service Licence; and/or
 - (d) Individual Mobile Telecommunications Licence (“**IMTL**”).
- 3.9 The particular licence(s) required will depend on the circumstances of each case. For example:
- (a) Where a Number-Based Service qualifies as a “national fixed telecommunications service”, a NFL is required. If the Number-Based Service also includes an “international telecommunications service”, then an ISL would also be required;
 - (b) Where a Number-Based Service qualifies as a “mobile telecommunications service”, an IMTL is required. If the Number-Based Service is also provided by means other than mobile radiocommunications, then an NFL would also be required.

Internet Service Provider (“**ISP**”) Licence

⁹ This would include Internet Only Services as described in the 2007 VoIP Paper.

- 3.10 The ISP Licence prohibits the licensee from offering a “basic voice service” between the Kingdom of Bahrain and other countries, and also from facilitating by the use of its telecommunications network the offer of a basic voice service by a third party, without also holding an ISL.¹⁰
- 3.11 A basic voice service is a type of Telecommunications service, as defined in the ISP Licence. As described in paragraph 3.7 above, only Number-Based Services qualify as Telecommunications services. Therefore, with respect to OTT voice and messaging services, the prohibition regarding basic voice services only extends to Number-Based Services.

Number-Based Services used within private networks

- 3.12 Number-Based Services provided within a private network are not subject to the licensing requirement pursuant to Article 24(a) of the Law. For example, this would include Number-Based Services used inside a company, for the sole use of that company, i.e. the company is not offering the Telecommunication service to the public.

Territorial jurisdiction of the Authority

- 3.13 The Authority would not consider Number-Based Service providers to be covered by its jurisdiction (and therefore subject to the licensing requirement pursuant to Article 24(a) of the Law) only because their services could be accessed by persons located in the Kingdom of Bahrain utilising Internet services. However, the Authority would consider that the Law applies to all Number-Based Service providers irrespective of the jurisdiction of their establishment and the location of their technical equipment, if they effectively, deliberately, and purposefully direct their activities to residents of the Kingdom of Bahrain.
- 3.14 In order to determine jurisdiction in the specific instance, the Authority will take into account the marketing practices of the respective undertaking. Provision of Number-Based Services that offer receiving calls using numbers from the National Numbering Plan of the Kingdom of Bahrain or that include services physically provided by personnel of a service provider or its agent located in the Kingdom of Bahrain would presume the jurisdiction of the Authority over such services.
- 3.15 The positions outlined above do not preclude the Authority or any other public authority of the Kingdom of Bahrain from taking necessary steps to restrict access to services materially infringing the laws of the Kingdom of Bahrain.

Consumer protection

- 3.16 The Authority is keen to continue to ensure that consumers of telecommunications services within the Kingdom of Bahrain are able to fully avail themselves of the latest communications services, and where appropriate that they are able to enforce their legal rights as necessary and possible, and equally, that they understand when this is not possible.

¹⁰ See Condition 3.1 of the ISP Licence.

- 3.17 There are clear issues of extra-territorial jurisdiction in the case of OTT voice and messaging services provided from outside the Kingdom of Bahrain but that are accessible to end users within the Kingdom of Bahrain. This presents difficulties for end users wishing to dispute a matter with a foreign service provider not licensed and regulated by the Authority in Bahrain.
- 3.18 In some cases the foreign OTT voice and messaging service provider may require the end user to submit to arbitration or to a foreign legal system and jurisdiction for the resolution of disputes between the service provider and end user. Bahrain end users may be subject to the forum for dispute resolution chosen by the service provider and the service provider's choice of law.
- 3.19 Submitting to arbitration or to a foreign jurisdiction and legal system may not be desirable for end users for many reasons, such as the difficulty in accessing the foreign legal system, the difficulty and cost of obtaining legal advice and representation and the cost of enforcement.
- 3.20 End users of a foreign OTT voice and messaging service provider may have an opportunity to appeal to the body responsible for regulation of telecommunications in the service provider's jurisdiction. However, such an avenue of appeal will depend upon the regulatory regime of that jurisdiction. While the Authority might petition such a regulator (if one exists per se or it is possible to determine where the OTT voice and messaging service provider is domiciled), the Authority cannot guarantee that it will be able to represent the aggrieved end user.
- 3.21 As such end users wishing to utilise a foreign OTT voice and messaging service provider's services must ensure that they understand the terms and conditions of the service provider. End users must accept that there are some risks attendant in utilising a foreign service provider that is not licensed in the Kingdom of Bahrain.

4 CONCLUSION

- 4.1 Given the substantial growth in the use of OTT voice and messaging services in the Kingdom of Bahrain, the Authority considers it appropriate to update its position with respect to the regulation of VoIP services.
- 4.2 The Authority considers that adopting a simplified approach in the classification of OTT voice and messaging services should provide greater certainty to service providers as communications technology continues to evolve. The regulatory approach will depend on whether or not the particular service connects with publicly assigned numbering resources.
- 4.3 The Authority's position may be summarised as follows:
- (a) Number-Based Services qualify as Telecommunications services that require an NFL, ISL and/or IMTL as applicable, unless the services are provided within a private network.
 - (b) Number-Independent Services do not qualify as Telecommunications services and do not require a Licence.

- (c) Under the ISP Licence, the prohibition on providing “basic voice services” includes Number-Based Services and does not extend to Number-independent Services.
- (d) The Law applies to all Number-Based Service providers irrespective of the jurisdiction of their establishment and the location of their technical equipment, if they effectively, deliberately, and purposefully direct their activities to residents of the Kingdom of Bahrain.

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