

28 May 2015

By Email

Circular letter to all

- **Unified Carrier Licensees (authorised to provide fixed internal services or mobile services)**
- **Fixed Carrier Licensees**
- **Mobile Carrier Licensees**
- **Services-Based Operator Licensees for Class 1 Service, Class 2 Service, or Class 3 service (Mobile Virtual Network Operator Services and External Telecommunications Services only)**

Dear Sir/Madam,

**Local Access Charge (“LAC”) Bypass in relation to
Voice over Internet Protocol (“VoIP”) Services**

At the eighth meeting of the Telecommunications Regulatory Affairs Advisory Committee (“TRAAC”) held on 21 April 2015, the issue of LAC bypass¹ in relation to VoIP services was discussed vide the TRAAC Paper No. 2/2015.² The Office of the Communications Authority (“OFCA”) put forward a number of measures suggested for VoIP service providers to adopt to prevent their customers from engaging in LAC bypass activities. Members of the TRAAC were generally supportive of OFCA’s suggestions and agreed that a circular letter should be issued by OFCA to all relevant licensees to remind them of the existing regulatory regime for VoIP services and the measures that should be implemented by them to prevent their customers from engaging in LAC bypass activities.

¹ “LAC bypass” refers to those activities relating to the avoidance or evasion of the payment of LAC by providers of external telecommunications services through disguising the external traffic as local traffic by making use of improper access codes or calling line identification in contravention of the numbering plan for telecommunications services in Hong Kong, code of practice relating to the use of numbers and codes and the “HKCA 3101, Regulatory Guide for Calling Line Identification Format” (http://www.ofca.gov.hk/filemanager/ofca/en/content_405/HKCA3101_en.pdf). For Services-Based Operator licensees, the proper access codes and calling line identification for the provision of external telecommunications services are 15xx, 16xx or 30(5-9)x.

² http://www.ofca.gov.hk/filemanager/ofca/en/content_757/traac2_2015_p.pdf

This circular letter is issued to all relevant licensees who may be involved in the provision of VoIP services. The licensees should take heed of the key underlying principles of the existing regulatory regime for VoIP services and implement the measures as set out in this circular letter. The implementation of the measures will contribute to the prevention of LAC bypass activities and the safeguarding of fair competition in the External Telecommunications Services (“ETS”) market.

Regulatory regime for VoIP services

The regulatory regime for VoIP services was introduced in 2005 after an industry consultation. The details of the regime are set out in the following documents (which may be downloaded from the links identified below) -

- (a) the former Telecommunications Authority (“TA”) statement entitled “Regulation of Internet Protocol (IP) Telephony” issued on 20 June 2005;³
- (b) the former TA statement entitled “Services-Based Operator Licence” issued on 6 January 2006;⁴
- (c) the “Code of Practice Relating to the Use of Numbers and Codes in the Hong Kong Numbering Plan”;⁵ and
- (d) the former TA statement entitled “New Regulatory Regime for Local Access Charge” issued on 23 December 2011.⁶

The key underlying principles

Due to the nomadic nature of VoIP services, prohibiting users from using VoIP services with Hong Kong telephone numbers at places outside Hong Kong may not be practicable or enforceable. Besides, the prohibition would also restrict users from benefiting from the full capabilities of the VoIP technology. Therefore, for practical reasons, the existing regulatory framework provides that VoIP traffic communicated between Hong Kong

³ http://tel_archives.ofca.gov.hk/en/tas/ftn/tas20050620.pdf

⁴ http://tel_archives.ofca.gov.hk/en/tas/ftn/tas20060106.pdf

⁵ <http://www.coms-auth.hk/filemanager/statement/en/upload/320/cop20150415e.pdf>

⁶ http://tel_archives.ofca.gov.hk/en/tas/interconnect/ta20111223.pdf

telephone numbers is treated as local calls even though one of the ends is physically located outside Hong Kong.

Despite VoIP services may be used by users at overseas, local telephone numbers are allocated by OFCA to licensed operators in Hong Kong for assignment to their customers to represent local “addresses” or “network terminating points” for communications mainly over the local networks. Licensed operators are also required to comply with the following requirements in providing VoIP services -

- (a) Hong Kong telephone numbers must not be “sold” or passed to overseas operators to enable the overseas operators to assign the numbers to their own customers;
- (b) VoIP service providers should maintain a direct supplier-customer relationship with the end-users, or be involved in operating or maintaining the VoIP services enjoyed by the end-users assigned with the Hong Kong telephone numbers; and
- (c) the VoIP services (particularly Mode 3)⁷ should not be used for the provision of ETS from overseas to Hong Kong, e.g. for the conveyance of third-party’s traffic from the public switched telephone network (“PSTN”) at overseas to the PSTN at Hong Kong by using local telephone numbers as the Calling Line Identification (“CLI”) for such external traffic, as illustrated by the diagrams shown at the Annex.

OFCA’s enforcement roles in tackling LAC bypass activities

The engagement of LAC bypass activities constitutes a contravention of the Telecommunications Ordinance (Cap. 106) (“Ordinance”) and/or the conditions of the relevant telecommunications licences (e.g. special conditions 7.1 and 8.1 of the Services-based Operator Licence). OFCA has been monitoring the market, including conducting

⁷ Mode 3 VoIP services are provided by an operator as an application on the Internet which is accessed through any broadband connection of which the supplier has no commercial agreement with the VoIP service provider. The VoIP user may use the service in a nomadic way, i.e. at any location as long as broadband connection is accessible.

various test calls in Hong Kong and at overseas, with a view to identifying any illegal activities. If there is prima facie evidence for any LAC bypass activities, OFCA will initiate an investigation and collect evidence from all avenues, including from the party in question and from the telecommunications licensees which have been involved in the activities. OFCA may also conduct site inspection, raid operation and other activities as appropriate.

Once sufficient evidence has been collected, OFCA will take enforcement actions against the party responsible for the illegal activity. If the LAC bypass activity is connected with a licensed telecommunications services, the concerned licensee may be in breach of the Ordinance and/or the conditions of the relevant telecommunications licence (as the case may be). The Communications Authority may, pursuant to section 36C of the Ordinance, impose a financial penalty of an amount not exceeding HK\$200,000 for the first occasion on which a penalty is imposed. If the LAC bypass activity is connected with an unlicensed operation, the responsible party may be prosecuted for having contravened section 8(1) of the Ordinance and if convicted, the party shall be liable to a fine up to HK\$100,000 and to imprisonment for 5 years.

Measures to be implemented by licensees providing VoIP services

While OFCA will continue to handle the enforcement work as a priority, we would like to request all licensees providing VoIP services to timely implement the following measures to prevent their customers from engaging in LAC bypass activities by using the VoIP services -

(a) *Be alert to unusual request for services*

As VoIP services have the characteristics that may be used by users in a nomadic manner, licensees providing VoIP services should be cautious when providing VoIP services to customers who request a large quantity of Hong Kong telephone numbers and claim to have a large volume of traffic. If there is an indication that the customers would likely use the VoIP services substantially at overseas, licensees should consider declining the service request and report the matter to OFCA.

- (b) *Ensure that customers are clear that the VoIP services cannot be used for the provision of ETS*

Licensees providing VoIP services must ensure that their customers are clear that the VoIP services cannot be used for the provision of ETS, e.g. for the conveyance of third-party's traffic from overseas PSTN to Hong Kong PSTN. The restriction should be conveyed clearly to the customers (such as by stating the restriction in the service contract) and acknowledged by customers before the commencement of service provision.

- (c) *Closely monitor the usage and traffic pattern of customers*

Licensees providing VoIP services (particularly Mode 3) should set up an effective mechanism to closely monitor the usage and traffic pattern of customers. Regular reviews should be conducted to verify whether the provision of VoIP services to the customers remains appropriate. If there is evidence that the VoIP services are being used improperly (e.g. the VoIP services are used intensively at various countries at the same time), licensees should seek representations from the concerned customers and report the matter to OFCA. In case of no acceptable explanation from the concerned customers, licensees may proceed to suspend or terminate the VoIP services. To do so, licensees should ensure that they have the right to suspend or terminate the service pursuant to the terms of their service contracts with the customers.

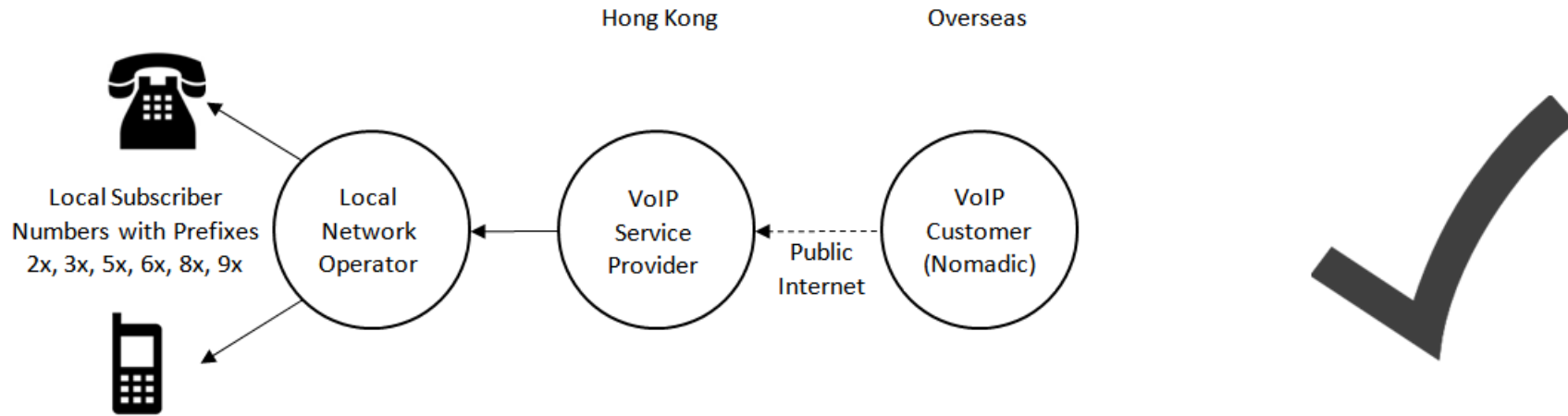
Should you have any enquiry on the matter, please contact the undersigned or Mr Danny Wong at 2961 6223.

Yours faithfully,

(Esmond Chiu)
for Director-General of Communications

Use of VoIP Services

Allowed scenario



Prohibited scenario

