

Guidelines for the Application of Services-Based Operator (“SBO”) Licence

(Issue 6, 17 October 2011)

Section 1 – Introduction

- 1.1 These Guidelines are issued under section 6D(2)(a) of the Telecommunications Ordinance (Cap. 106) (the “Ordinance”). They indicate the manner in which the Telecommunications Authority (“TA”) proposes to perform his function of determining applications for Services-Based Operator (“SBO”) Licence, including the licensing criteria and other relevant matters he proposes to consider.
- 1.2 These Guidelines are designed to assist interested parties to submit their applications for SBO Licence. They do not bind the TA to grant any licence nor on the terms of any licence to be granted. All applications will be evaluated on their merits having regard to the relevant factors as they stand at the relevant time and the information submitted to the TA.
- 1.3 To assist the provision of the required information for the processing of the applications for SBO Licence, interested parties are required to complete the SBO Licence application form and provide the required supporting documents to:

Office of the Telecommunications Authority
29/F, Wu Chung House
213 Queen’s Road East
Wan Chai
Hong Kong
Attn: Principal Regulatory Affairs Manager, R12 Section

The application form can be downloaded from OFTA’s website at www.ofta.gov.hk/en/howto/forms/A825.pdf. The sample SBO Licences are also available on OFTA’s website at www.ofta.gov.hk/en/Howto/howto-lic.html.

- 1.4 The TA may request the applicants to provide additional information to clarify or supplement the applications submitted. All information submitted in respect of the applications for SBO Licence will not be returned to the applicants.
- 1.5 The applicants should use their best endeavours to ensure that all

information contained in their applications and any other subsequent submissions and representations are correct and accurate in all respect, in reliance upon which the TA will consider the applications.

- 1.6 The TA reserves the right to disclose the names of the parties who have submitted applications. All other information received will be treated in confidence.
- 1.7 On receipt of the completed application form, the TA will process the application and respond to the applicant within 14 working days.

Section 2 –Licensing and Regulatory Framework

The Broad Framework

- 2.1 In Hong Kong, public telecommunications services can be provided either by facility-based operators or service-based operators. Facility-based operators refer to operators which establish their own networks, which may cross unleased Government land and public streets, for the provision of public telecommunications services. Service-based operators refer to telecommunications service providers which rely on the fixed or mobile networks established by facility-based operators to provide their own telecommunications services¹. Service-based operators had been generally licensed under the Public Non-Exclusive Telecommunications Services (“PNETS”) Licence introduced in the 1980s. On 20 June 2005, the TA issued the statement entitled “Regulation of Internet Protocol (IP) Telephony” (“VoIP Statement”) setting out the regulatory framework for IP telephony services. On 6 January 2006, the TA created the SBO Licence and issued the statement entitled “Services-Based Operator (SBO) Licence” (“SBO Statement”) to explain the licensing framework for the SBO Licence under which the provision of various service-based public telecommunications services may also be authorized.
- 2.2 Prior to the creation of the SBO Licence in 2006, basically only facility-based operators could provide local voice telephony services in Hong Kong. Service-based operators, except for mobile virtual network operators (“MVNOs”), were not permitted to provide local voice telephony services but they could apply for PNETS licences to provide other public telecommunications services, such as external

¹ “Service-based operators” may establish and maintain facilities such as switches, routers, servers within buildings and leased land for the provision of public telecommunications services.

telecommunications service and international value-added network service (which also covers Internet access service). With the introduction of the SBO Licence, service-based operators can operate local voice telephony services employing various technologies including IP-based technologies as well as various kinds of services covered by the PNETS Licence, except for mobile related services². On 19 October 2009, the TA concluded a review on the licensing of service-based operators and issued the statement entitled “*Review of the Public Non-Exclusive Telecommunications Service and Services-Based Operator Licensing Regimes*” (“Modified SBO Statement”). In that Statement, the TA decided to modify the SBO Licence by, among others, creation of a new Class 3 type of service under the SBO Licence to replace the PNETS Licence as well as allowing SBO licensees to provide service to both fixed and mobile customers. The VoIP, SBO and Modified SBO Statements and a sample SBO Licence are published on OFTA’s website at www.ofta.gov.hk/en/industry/sbo/main.html. The revised form of the SBO Licence (with general conditions attached) was also published in the Gazette by the TA on 30 October 2009 pursuant to section 7(8) of the Ordinance. With the implementation of the modified SBO Licence, the licence will be used as the only licensing vehicle to license all types of service-based operators and the PNETS Licence will no longer be issued.

- 2.3 For the provision of public telecommunications services (including but not limited to local voice telephony services) by using the transmission facilities provided by licensed facility-based carriers or establishing or maintaining transmission facilities which do not cross public streets or unleased Government lands (i.e. confined within the boundary of a building or property), the operator needs to apply for an SBO Licence under which the relevant types of local voice telephony services are authorized. In applying for the SBO Licence, the operator needs to specify whether the provision of local voice telephony services are provided to fixed or mobile customers. The operator also needs to specify whether other types of public telecommunications services, i.e. Class 3 services, will be provided.
- 2.4 For the provision of public telecommunications services other than local voice telephony services, by using the transmission facilities provided by licensed carrier or establishing or maintaining transmission facilities which do not cross public streets or unleased Government lands, the operator may apply for an SBO Licence under which one or more types of Class 3 services are authorized. For the avoidance of doubt, the provision of local voice telephony services is not permitted under the

² Two types of PNETS are previously excluded from the SBO Licence, namely mobile virtual network operator and public radio communications relay services.

SBO Licence for Class 3 services, except for the provision of MVNO service. Class 3 services which may be authorized under the SBO Licence include the following seven categories of services:

- (a) external telecommunications service (“ETS”);
- (b) international value-added network service (“IVANS”);
- (c) mobile virtual network operator (“MVNO”) service;
- (d) private payphone service;
- (e) public radio communications relay service (“Radio Relay”);
- (f) security and fire alarm signals transmission service (“Security & Alarm”); and
- (g) teleconferencing service.

2.5 The applicant for an SBO Licence should be a company registered under the Companies Ordinance (Cap. 32) in Hong Kong, but there is no foreign ownership restriction on the applicant. If the applicant is a company incorporated overseas, the TA may consider its application provided that it has registered under the Companies Ordinance as an overseas company.

2.6 There is no restriction on the number of licences granted for the SBO Licence.

Scope of Service

2.7 Under the SBO Licence, the licensee may provide all types of internal and external telecommunications services as specified in Schedule 1 to the SBO Licence. This includes:

- (a) Class 1 local voice telephony service;
- (b) Class 2 local voice telephony service;
- (c) Other local voice telephony services other than Class 1 and Class 2 services; and
- (d) One or more types of Class 3 services as listed in 2.4.

A detailed description of the various types of services which may be

authorized under the SBO Licence is given in the Annex 1.

- 2.8 For the avoidance of doubt, a person issued with an SBO Licence is only authorized to provide services in accordance with the scope of service as specified under the licence. For example, a holder of SBO Licence for one particular type of Class 3 service only is not entitled to provide another type of Class 3 service or Class 1/Class 2 services. A holder of SBO Licence authorised to provide Class 1 / Class 2 services for fixed customers only is not entitled to provide the concerned services to mobile customers. If a holder of SBO Licence intends to expand its scope of service after it has been granted the licence, it may do so after having obtained the written approval of the TA to expand the scope of its licence and, where necessary, payment of the appropriate licence fee.

General Requirements

Calling Line Identification (“CLI”)

- 2.9 The TA has issued a *Code of Practice in Relation to Calling Line Identification and Other Calling Line Identification Related Services*. SBO licensees are required to observe the requirements and responsibilities set out in that code of practice for the sending of calling line identification in their provision of services. In addition, licensees who provide a Class 3 service (such as IVANS) which involves the sending of short message service (“SMS”) through Internet should adopt necessary procedures to ensure that the caller sends correct caller identification information and comply with guidelines which may be issued by the TA on the caller identification in SMS.

Universal Service Contribution

- 2.10 SBO Licensees³ which involve the use of telephone numbers allocated to the licensees shall contribute towards the cost of meeting the universal service obligation (“USO”) by a fixed carrier licensee appointed by the TA to have such an obligation in Hong Kong. The Statement entitled “*Review of the Regulatory Framework of Universal Service Arrangement*” issued by the TA on 8 June 2007 sets out the regulatory arrangement. At present, the holder of the fixed carrier licence held by PCCW-HKT Telephone Limited and Hong Kong Telecommunications (HKT) Limited is the only entity which has been charged with the USO.

³ This includes licensees providing Class 1/ Class 2 local voice telephony services or Class 3 (MVNO) mobile service.

Local Voice Telephony (Class 1 and Class 2) Services

2.11 For the provision of local voice telephony services, whereby Hong Kong telephone numbers are assigned to the customers, and where the services enable the customers to make and receive calls to and from parties assigned with numbers from the Numbering Plan for Telecommunications Service in Hong Kong (“Numbering Plan”) is concerned, the TA adopts a two-class (Class 1 and Class 2) licensing approach. In summary, Class 1 services are those services that have all the attributes of the conventional telephone services and are required to fulfil the licence conditions of carrier licences, or the equivalent licence conditions contained in the SBO Licence. Class 2 services are those services that do not have all the attributes of the conventional telephone services and are only subject to minimal licensing conditions with the main purpose to protect consumer interests and safeguard fair competition. Other local voice telephony services which do not fall within the descriptions of Class 1 or Class 2 services (e.g. those services which do not require the use of Hong Kong telephone numbers) may also be provided under the SBO Licence but they will not be subject to the licence conditions governing Class 1 or Class 2 services (to be further explained in paragraphs 2.12 – 2.14 below).

Similarities and Differences between Class 1 and Class 2 Services

2.12 Class 1 and Class 2 services are local voice telephony services which have the following common attributes:

- (a) They are internal telecommunications services for carrying real-time voice communications which may be integrated with other types of communications;
- (b) The customers are assigned with Hong Kong telephone numbers; and
- (c) The services are capable of allowing customers to make and receive calls to and from parties assigned with Hong Kong telephone numbers.

2.13 The differentiation between Class 1 and Class 2 services is by means of:

- (a) SBO licensee’s declaration (and where appropriate, the declaration by its agents, contractors and resellers) in all promotion, marketing or advertising materials concerning such service that it is a “Class 2” service; and
- (b) the use of different prefixes for the Hong Kong telephone

numbers which an SBO licensee may assign to their customers. For fixed Class 1 services, the prefix for conventional fixed network numbers (e.g. '2' or '3') should be used. For mobile Class 1 services, the prefix for conventional mobile network numbers (e.g. '6', '9', '51', '53') should be used. For Class 2 services, special number prefix (e.g. '57' or '58') should be used, whether for fixed or mobile services.

- 2.14 The licence obligations for the provision of Class 1 and Class 2 services in respect of number portability, directory service and customer charter are different. SBO licensees providing Class 1 services have to facilitate number portability, provide directory service to customers free of charge, and publish a customer charter. SBO licensees providing Class 2 services are not imposed with such obligations. More details will be given below with regard to these obligations.

Hosting and Interconnection

- 2.15 Class 1 and Class 2 services are required to fulfil the principle of “any-to-any” connectivity for interconnection between networks to ensure that any user can communicate with any other user on any network. Pursuant to Section 32D of the Ordinance, the TA may prescribe standards for service and network interconnection in the form of HKTA specifications. The SBO licensees shall observe the Standardisation Guide HKTA 3202 in respect of implementation of these network connection standards.
- 2.16 In gaining access to the conventional public switched telephone network (“PSTN”), SBO licensee offering Class 1 and Class 2 services should seek a hosting connection to the network of at least one carrier licensee. The carrier licensee hosting an SBO providing fixed Class 1/ Class 2 services is generally a fixed network operator (“FNO”) holding a unified carrier licence (“UCL”) with authorization to provide fixed services, a fixed carrier licence (“FCL”) or a fixed telecommunications network service (“FTNS”) licence. The carrier licensee hosting an SBO providing mobile Class 1 / Class 2 services may be a FNO or a mobile network operator (“MNO”) holding a UCL with authorization to provide mobile services provided that the MNO is also authorised under its licence to provide ‘transit’ service or fixed services in general. This hosting carrier licensee will be responsible for the routing of the traffic of the Class 1 and Class 2 services of the SBO licensee being hosted to and from the networks of other carrier licensees. The terms and conditions of the interconnection agreements between the SBO licensees and their hosting carrier licensees will be negotiated on a commercial basis. As there are multiple local fixed and mobile carriers in the

market, market forces should ensure that the SBO licensees have fair access to the networks and the TA is not expected to intervene unless so doing will be in the public interest.

Numbering

2.17 SBO licensees have the obligation to comply with the Numbering Plan made by the TA. So far as the numbers to be used for Class 1 and Class 2 services are concerned, the TA decides that 8-digit numbers should be allocated to SBO licensees for both Class 1 and Class 2 services. Numbers for Class 1 and Class 2 services will directly be allocated by the TA to SBO licensees upon request, with a block size of 10,000. For Class 1 service, numbers for conventional fixed services (e.g. prefix ‘2’ and ‘3’ numbers) and mobile services (e.g. prefix ‘6’, ‘9’, ‘51’ and ‘53’ numbers) are to be allocated. For Class 2 service, 8-digit numbers with special prefix ‘57’ and ‘58’ are to be deployed, whether for fixed or mobile services.

2.18 In the SBO Statement of 6 January 2006, the TA made clear that the Hong Kong telephone numbers are allocated to the licensed operators in Hong Kong for assignment to their customers to represent addresses for communications over the local networks. Thus, the numbers should not be “sold” or passed to overseas operators to enable the overseas operators to assign the numbers to their own customers. The *Code of Practice Relating to the Use of Numbers and Codes in the Hong Kong Numbering Plan* issued by the TA stipulates that the SBO licensees providing Class 1 and Class 2 services should not sell or pass the numbers to overseas operators for assignment to their customers, and should maintain a direct supplier-customer relationship with the end-users assigned with the numbers and codes in the Numbering Plan. The TA will monitor closely the market situation regarding the consumption of local telephone numbers and take appropriate measures, say, by switching to 10-digit numbers for Class 2 service so that the lifetime of the current 8-digit Numbering Plan will not be adversely affected.

Number Porting

2.19 SBO licensees offering Class 1 services are required to support number porting function⁴.

2.20 Currently, the number porting function is not required for Class 2

⁴ Because of the technical complexity of setting up an administration database (“AD”) and interconnecting with other relevant parties to perform the number porting function, Class 1 SBOs are expected to enter into commercial arrangements with their hosting carrier licensees to fulfill this licensing requirement, instead of building their own AD.

services. The TA may initiate a review of the situation as and when necessary.

Emergency Call Service

- 2.21 SBO licensees offering Class 1 or Class 2 services are required to provide customers with free access to emergency call services, i.e. to make emergency calls free of charge. If an SBO licensee provides Class 2 services with inbound calling capability only, it may apply for exemption by the TA from providing the emergency call services. SBO licensees providing Class 2 services exempted from the requirement of emergency call service are required to indicate the limitation in their promotion, marketing and advertising materials offering service to the customers and obtain their consent before providing service to them.
- 2.22 Where SBO licensees offering Class 1 or Class 2 services provide access to emergency call services, they are required to set up a database for maintaining the most up-to-date information on the location of customers. This database should identify telephone numbers as potentially nomadic. The service providers are required to provide a mechanism whereby the customers can update their location information, and to remind the customers to do so, whenever they relocate their IP telephony equipment. SBO licensees are required to provide location information of customers free of charge to the Hong Kong Police Emergency Centre and other entity as directed by the TA.

Backup Power Supply

- 2.23 In compliance with the relevant licence condition, SBO licensees offering Class 1 or Class 2 services must not provide the services to users whose “lifeline devices” are connected to the services unless they provide backup power supply to the IP phone, integrated access device (IAD), modem and network equipment etc. so as to ensure that there is no service disruption during power outage. A “lifeline device” means a medical alarm or any other device for the elderly, infirm or invalid to summon assistance in the event of an emergency without having to dial manually the telephone number of the emergency service.
- 2.24 To comply with the licence condition on backup power supply, all SBO licensees offering Class 1 or Class 2 services are required to check with the consumers before or upon subscription of services whether the services will be used by lifeline users and whether there will be any lifeline devices connected to their services. If the reply is in the affirmative, they have to ensure that backup power supply is available as stipulated in Special Condition 22 of the SBO Licence before providing the services to or signing service agreements with the customers. To

avoid any potential disputes with the customers after services are subscribed to, the licensees should consider requiring the customers to confirm in writing (for example, by signing a printed form) whether the services will be used by lifeline users. The licensees are also required to affix a label onto the wall socket panel or any equipment installed on the customer's premises, or take other reasonable steps (such as a cautionary remark in telephone bills) to remind the customers that the service is without backup power supply and is therefore not suitable for connection to lifeline devices.

Directory Services

- 2.25 The provision of directory enquiry service and printed directory to customer free of charge is a mandatory requirement for Class 1 services provided to fixed customers. SBO licensees providing such fixed Class 1 services may enter into commercial arrangement with their hosting fixed carrier licensees to make available the services to their customers. It is voluntary for SBO licensee offering mobile Class 1 and/or Class 2 services to offer the directory enquiry service and printed directory to their customers.

Class 3 Services

External Telecommunications Services (ETS)

- 2.26 An SBO licensee may provide ETS under the SBO Licence. A licensee providing ETS will be required to pay to local fixed or mobile network operators relevant interconnection charges, such as local access charges ("LAC") and international call forwarding service ("ICFS") charges for the delivery of outgoing and incoming external telecommunications traffic, as may be determined by the TA from time to time under section 36A of the Ordinance. Details of the arrangement of the LAC and ICFS charges may be found on OFTA's website.
- 2.27 An SBO licensee providing ETS shall comply with the Numbering Plan for Telecommunications Services in Hong Kong and other relevant Regulatory Guides issued by the TA. Among others, it shall only use numbers with prefix '15', '16' or '30(5-9)' for provision of ETS. The licensees for ETS may also apply for International Signalling Point Codes ("ISPCs") and Signalling Point Codes ("SPCs") for the operation of the licensed services in accordance with the *Code of Practice Relating to the Use of Numbers and Codes in the Hong Kong Numbering Plan*.

- 2.28 Unlike the numbers for Class 1, Class 2 and Class 3 (MVNO) services, the numbers with prefix '30(5-9)' for ETS will not be directly allocated by the TA to SBO licensees. The concerned numbers are allocated by the TA to fixed carrier licensees for assignment to their customers. SBO licensees who wish to use these numbers should send their application to their hosting fixed carrier licensees.

International Value-Added Network Services (IVANS)

- 2.29 An SBO licensee is permitted under the SBO Licence to provide IVANS type of services, which includes, but is not limited to, Internet access services, data transmissions such as fax-to-email, email-to-fax, store and retrieve, store and forward services. A licensee providing IVANS type of services will be required to pay to local fixed or mobile carrier licensees, as the case may be, to whom its IVANS type of services are interconnected with the necessary interconnection charges.
- 2.30 An SBO licensee providing IVANS shall comply with the Numbering Plan and other relevant Regulatory Guides issued by the TA. Among others, it shall only use numbers with prefix '300(1-9)' and '30(1-4)' for the provision of IVANS. Unlike the numbers for Class 1, Class 2 and Class 3 (MVNO) services, the numbers with prefix '300(1-9)' and '30(1-4)' for IVANS will not be directly allocated by the TA to SBO licensees. The concerned numbers are allocated by the TA to fixed carrier licensees for assignment to their customers. SBO licensees who wish to apply for these numbers should send their application to their hosting fixed carrier licensees.
- 2.31 An SBO licensee authorized to provide IVANS is not entitled under its licence to provide real-time voice telephony (including real-time facsimile) services. An SBO licensee who wishes to provide such services should apply for authorization under its licence for the provision of ETS (for external voice telephony services) or Class 1 / Class 2 services (for local voice telephony services).

Mobile Virtual Network Operator (MVNO) Services

- 2.32 An MVNO is an operator who provides a public radiocommunications service to customers through interconnection with, and access to, the radiocommunications infrastructure of a MNO licensed under a UCL authorised for provision of mobile service or a MCL and assigned with the radio spectrum through which the public radiocommunications service is provided.
- 2.33 An MVNO may be licensed under an SBO Licence authorized to provide Class 3 (MVNO) service. A copy of the sample licence for

MVNOs is published on the OFTA website at www.ofta.gov.hk/en/legislation/guideline_6d_2a/Guideline/PNETS_licence_mvno.pdf for reference.

2.34 If an MVNO meets the relevant criteria stipulated in Appendix 4 of the Code of Practice Relating to the Use of Numbers and Codes in the Hong Kong Numbering Plan issued by the TA, the MVNO will have the following rights and obligations with respect to numbering arrangements:-

2.34.1 Rights with respect to numbering arrangements:-

- (a) the MVNO will be allocated its own numbers direct by the TA; and
- (b) the MVNO may be allocated a Mobile Network Code.

2.34.2 Obligations with respect to numbering requirements:-

- (a) the MVNO shall conform to the Numbering Plan;
- (b) the MVNO shall facilitate mobile number portability;
- (c) the MVNO shall provide emergency services to its customers; and
- (d) the MVNO shall contribute towards the cost of USO in Hong Kong.

2.35 The MVNO shall fulfill the following general obligations:-

- (a) the MVNO shall provide customer statistics to the TA; and
- (b) the MVNO will be required to pay the same interconnection charges as an MNO for interconnection with other networks.

Open Network Requirements for 3G MNOs

2.36 In accordance with the licence conditions of the UCL for an MNO operating in the 1.9-2.2 GHz band for 3G services, the MNO is obliged to open 30% of its network capacity to MVNOs who are not affiliated to any MNOs. In order for an MVNO to be qualified for the TA's regulatory support on its access to the MNO's network, the MVNO is required to meet the requirements similar to those mentioned in paragraph 2.34 together with the criteria set out in Annex 2 of these guidelines.

Reporting Requirements

- 2.37 Given that the SBO licensees are permitted to operate a wide variety of services similar to that operated by carrier licensees, they are required to submit, at the time and in the manner specified by the TA, statistics and reports including but not limited to:
- (a) statistics of local voice telephony services, for example, number of customers, on a monthly basis;
 - (b) statistics of mobile services, for example, number of customers, short messages sent and received etc. on a monthly basis;
 - (c) statistics of the number of customers of Internet services on a monthly basis and statistics of the use of international private leased circuit for the provision of Internet services on a half-yearly basis; and
 - (d) statistics of outgoing and incoming ETS traffic on a monthly basis.
- 2.38 The SBO licensees are required to submit all the statistics or reports mentioned in paragraph 2.37 in respect of services authorized under their licences even if any of the services are not or have not yet been provided (i.e. nil return is required).

Period of Validity

- 2.39 The SBO Licence shall be valid for such period as determined and published by the TA at the time of the issue of the SBO Licence. At present, the SBO Licence is valid for one year and may, at the discretion of the TA, be renewed on an annual basis.

Licence Fee

- 2.40 An SBO licensee shall pay the fees applicable to the SBO Licence as determined and published by the TA from time to time⁵. At present, the licence fee payable on the issue or renewal of the SBO Licence consists of the following components:
- (a) A fixed fee⁶ of
 - (i) \$25,000 where services other than Class 3 services (i.e. Class 1, Class 2 or other local voice telephony services) are provided by the licensee during the validity period of the

⁵ See the document "Period of Validity and Licence Fees determined by the Telecommunications Authority" published by the TA (http://www.ofta.gov.hk/en/legislation/other_licence/fee.pdf)

⁶ Where there is any expansion in scope of service authorized under the licence during the validity period of the licence, a pro-rata fixed fee as determined by the Authority in respect of the additional service authorized for the remaining validity period of the licence shall be payable at the time when the expansion in scope of service is made to the licence.

SBO Licence; or

(ii) \$750 for each type of Class 3 service provided during the validity period of the SBO Licence, if the licensee is authorized to provide Class 3 services only. If the licensee is authorized to provide services other than Class 3 services (i.e. Class 1, Class 2 or other local voice telephony services), only the fixed fee under (i) will apply and the licensee does not need to pay the fixed fee under (ii) for any additional Class 3 services that may be authorized.

(b) A fee of \$ 3 for each subscriber number allocated or assigned to the licensee (“number fee”). The number fee shall be paid for each subscriber number (i) allocated to the licensee that is not ported out from the licensee’s system or re-allocated or assigned, as authorized by the Authority, to another licensee (who has made payment of the licence fee for such number under its licence) and (ii) allocated to another licensee that is ported in to the licensee’s system or re-allocated or assigned, as authorized by the Authority, by another licensee to the licensee. In addition, where a subscriber number allocated to another licensee is re-allocated or assigned, as authorized by the Authority, to the licensee during the validity period of the licence, a pro-rata number fee for the remaining validity period of the licence shall be payable at the time of the re-allocation or assignment.

(c) When apparatus for radiocommunications is possessed, used, established or maintained for the purposes of the service provided, the following additional fees shall be payable on the issue or renewal of the licence-

(i) a fee of \$750 for every base or fixed station; and

(ii) a fee of \$800 for each 100 mobile stations or less used by customers of the service.

2.41 For the purpose of the provisional licence fee calculation, the SBO licensee providing Class 1 and/or Class 3 (MVNO) services is required to report to OFTA one month before the licence renewal date (the “Self-Declaration”):

(a) the estimated quantity of numbers to be held by itself as at the forthcoming licence renewal date; and

(b) the estimated quantity of fixed / base stations and mobile stations in respect of the Class 3 (MVNO) services, as the case may be.

In general, the provisional licence fee to be payable on the renewal of licence would be based on the information as reported by the SBO licensees in the Self-Declaration.

- 2.42 For the purpose of the actual licence fee calculation, the SBO licensee is required to provide a relevant auditor certificate as explained in below.
- (a) For the SBO licensee which provided Class 1 and/or Class 3 (MVNO) services since its last licence renewal date (or licence issue date for newly issued licence), it would be required to provide an auditor certificate to certify the figures reported to OFTA in paragraph 2.41 as at the licence renewal date for determining the exact amount of licence fee. Such auditor certificate should be submitted to OFTA within one month from the licence renewal date. If there is any discrepancy between the figures in the Self-Declaration and those in the auditor certificate, an adjustment on the exact number fee will be made.
 - (b) For the SBO licensee which did not provide Class 1 or Class 3 (MVNO) services since its last licence renewal date (or licence issue date for newly issued licence) but has been authorized and has previously indicated its intention to OFTA to provide the concerned services (e.g. by applying for a network ID for the use of an AD platform for number portability), it would be required to submit an auditor certificate to prove that no Class 1 or Class 3 (MVNO) services are provided or have been provided during the licence period in question. Such auditor certificate should be provided one month from licence renewal date. If there is any discrepancy between the findings in the Self-Declaration and those in the auditor certificate, an adjustment on the number fee will be made. It should be noted that the requirement on the submission of auditor certificate should follow sub-paragraph (a) if the licensee already declared the provision of Class 1 and/or Class 3 (MVNO) services in its Self-Declaration.

Application Procedure

- 2.43 An SBO licence may be granted under the following scenarios:
- (a) Application for a new SBO licence;
 - (b) Replacing an existing service-based operator licence (e.g. PNETS licence) before or upon its expiry by an SBO licence; or
 - (c) Conversion of multiple service-based operator licences (e.g. more than one PNETS licence or SBO licence) into one SBO licence.

- 2.44 Information required to be provided by an applicant for a new application (i.e. scenario (a) in paragraph 2.43) and the licensing criteria for granting of licence are specified in Sections 3 and 4. Information to be provided for other scenarios of application will be required on a case-by-case basis.

Section 3 – Licensing Criteria

3.1 General Criteria

- (a) The service provider has to be a business entity registered under the Companies Ordinance (Cap. 32).
- (b) The service proposed in the application must be technically sound and compatible with the local environment. This includes the expertise required in the operation and maintenance of the system. Previous experience of the applicant in operating similar services will be taken into account.
- (c) The applicant must have the financial capability and willingness to invest sufficient capital to provide a satisfactory public service.
- (d) The proposed service and facilities will be expected to comply with the relevant ITU Recommendations and technical specifications as may be specified by the TA except as specifically agreed otherwise by the TA.
- (e) For interconnection with other public telecommunications networks/services, the applicant shall have proper interconnection arrangement established with other licensed telecommunications operators and the equipment of the proposed service shall meet the technical specifications for interconnection with such networks/services as or may be specified by the TA.
- (f) The applicant shall demonstrate commitment to operate the proposed service in compliance with the Ordinance, licence conditions, determinations, relevant guidelines, code of practices and other instruments issued from time to time by the TA including but not limited to the payment of relevant interconnection charges.

Section 4 - Information to be Submitted Together with the Application

4.1 Company Structure

- (a) The applicant should provide details of the company which wishes to establish and operate the proposed service, including information on the corporate structure of the company. In particular, the following documentary evidence should be provided:
 - (i) a copy of the Certificate of Incorporation;
 - (ii) a copy of the Business Registration Certificate;
 - (iii) a certified list of directors or a copy of “Form D1 – Notification of first secretary and directors” and where applicable, “Form D2 – Notification of changes to secretary and directors” from the Companies Registry; and
 - (iv) documents showing the authorized, issued and paid-up share capital and the current share holding structure of the company, e.g. “Form NC1 – Incorporation Form (Company Limited by Shares), “Form AR1 -- Annual Return” or “Form SC1 -- Return of allotments”
- (b) Where the applicant (or its associated companies) holds or previously held any licences issued by the TA, a list of such licences and their licence numbers should be provided.
- (c) Where a director(s) of the applicant is/are also the director(s) of other companies which currently hold or previously held any licences issued by OFTA, a list of the names of such companies, the licences held or previously held by these companies together with their licence numbers should be provided.

4.2 Financial Capability (applicable only for applicant providing local voice telephony services such as Class 1 or Class 2 services)

- (a) If the applicant is an established company, a copy of its audited profit and loss accounts and balance sheets for the last three years should be provided.
- (b) If the applicant is a newly-formed company, directors' certificate of the amount of issued and paid-up share capital together with bankers' confirmation of the amount of its deposits and/or available credit facilities, and copies of audited accounts for the last three years of the company's shareholders, if any, should be provided.

- (c) The applicant should provide a budgeted profit and loss statement for the proposed service for the first three years' operation, with estimated number of subscribers, planned system capacity, breakdown of initial capital investment, level of charges and estimated annual revenue and operating costs.
- (d) The applicant should provide sufficient documentary evidence to prove that the applicant has the financial capability to meet the capital investment required in the financial plan.

4.3 Description of the System

- (a) The applicant should provide a description of the system to be installed, including system configuration, architecture and operation and if appropriate, how the system is interconnected with other public telecommunications networks/services.
- (b) The applicant should give the planned location of system to be installed.

4.4 Description of the Services

- (a) The applicant should provide a detailed description of the service to be provided, including any special operational features available.
- (b) The applicant should provide the implementation programme, which is particularly important if it is proposed to introduce the service in stages.

4.5 Technical Support

- (a) The applicant should describe the technical support facilities in Hong Kong, including a description of the technical personnel responsible for the day-to-day operation and maintenance of the facilities and the routine maintenance procedure available.

4.6 Previous Relevant Experience

- (a) The applicant should describe the previous experience in the establishment and operation of the service proposed, with details of cities or countries in which an identical or a similar service is operating, with timescales, system capacities, etc. available.
- (b) The applicant should also describe the experience, if any, in Hong Kong of providing telecommunications services in general.

4.7 Other Information

- (a) The applicant may submit any other information not specified above which they consider helpful to their applications.
- (b) The TA may request the applicant to submit any other information he considers necessary for his consideration on the application.

Office of the Telecommunications Authority
17 October 2011

**Description of services which may be authorized under
the Modified SBO Licence⁷**

Type of Service	Proposed description in Schedule 1 of the Modified SBO Licence	Remarks
Class 1 or Class 2 services (with or without provision of Class 3 services authorized)	<p>Part I</p> <p>1. Subject to General Condition 3, Clause 3 [and Clause 4] of this Schedule 1, all internal and external telecommunications services as listed in Part II, other than telecommunications services the subject of an exclusive licence issued under the Ordinance, [a Mobile Carrier Licence, a Mobile Carrier (Restricted) Licence, a Unified Carrier Licence authorizing provision of mobile services, a Public Radiocommunications Service Licence, a Radio Paging System Licence, a Public Radiocommunications Service Licence (For Services Other Than Land Mobile Services),] a service subject to licensing under any other Ordinance, or a satellite broadcasting service under a Satellite Television Uplink and Downlink Licence.</p> <p>2. For the purpose of this licence, an “internal” telecommunications service means a service for communications between points within Hong Kong ; and an “external” telecommunications service means a service for communications</p>	<p>(1) The specific services authorized for provision by the licensee (i.e. Class 1 / Class 2 services and individual type of Class 3 services) will be listed in Part II of Schedule 1. (2) Restriction for providing local voice telephony services to mobile customers in the Clauses 1 and 4 (text in square bracket) will be removed if the licensee is authorized to provide mobile voice telephony services.</p>

⁷ The proposed scope of service in the table is for reference only. Depending on the services proposed by the applicant, the TA will adopt the appropriate scope for the services concerned.

Type of Service	Proposed description in Schedule 1 of the Modified SBO Licence	Remarks
	<p>(a) between one or more points in Hong Kong and one or more points outside Hong Kong; and</p> <p>(b) between two or more points outside Hong Kong but routed in transit via Hong Kong.</p> <p>3. Nothing in this licence authorizes the licensee to establish or maintain (i) any means of telecommunications, including but not limited to physical facilities or telecommunications installations, which cross public streets or unleased Government lands (ii) telecommunications or radiocommunications network as a carrier licensee as defined in the Ordinance.</p> <p>[4. The scope of service specified in Clause 1 of this Schedule 1 does not include internal voice telephony services provided to mobile customers.]</p> <p>Part II</p> <p>1. Class 1 services</p> <p>Services with the same meaning as defined in Special Condition 17.2</p> <p>2. Class 2 services</p> <p>Services with the same meaning as defined in Special Condition 18.2</p> <p>3. An internal telecommunications</p>	

Type of Service	Proposed description in Schedule 1 of the Modified SBO Licence	Remarks
	<p>service which is not a Class 1 service or a Class 2 service for carrying real time voice communications which may be integrated with other types of communications.</p> <p>4. Class 3 services</p> <p>(Please refer to the following descriptions for individual types of Class 3 service if they are authorized for provision by the licensee)</p>	
Class 3 (ETS)	<p>1. The service is an external public telecommunications service operated over external leased circuits supplied by an Fixed Telecommunications Network Services Licensee, a Fixed Carrier Licensee or a Unified Carrier Licensee authorized to provide fixed services and to supply such circuits at the Hong Kong end or over other external switched telecommunications services lawfully operated in Hong Kong at the Hong Kong end.</p> <p>2. In the above description of service, “external” means communications with places outside Hong Kong.</p> <p>3. For the avoidance of doubt, the service shall not include the provision to customers of a telecommunications circuit between a point in Hong Kong (including, without limitation, a radiocommunications facility or cable termination facility) and</p>	(1) Same description as scope of service for existing PNETS licence for External Telecommunications Services (ETS)

Type of Service	Proposed description in Schedule 1 of the Modified SBO Licence	Remarks
	<p>one or more points outside Hong Kong, and any means of telecommunications capable of facilitating such a circuit.</p> <p>4. Customers at the Hong Kong end and/or at the distant end may be connected to the service through any public switched telecommunications network or dedicated circuits.</p> <p>5. This licence does not authorize the licensee to establish and maintain any physical facilities for the supply of external circuits to customers.</p>	
Class 3 (IVANS)	<p>1. The service is a local and/or external public telecommunications service accessed by its customers via, and provided over, circuits provided by public telecommunications networks and/or public telecommunications services licensed under the Ordinance and, subject to Clauses 3 to 6 of this Schedule, may include the following service elements :</p> <p>a) data communications;</p> <p>b) non-real time facsimile communications;</p> <p>c) electronic mailbox/messaging;</p> <p>d) electronic data interchange;</p> <p>e) code, protocol and/or format conversions;</p> <p>f) database access and retrieval;</p> <p>g) value added voice services;</p> <p>h) call management services; and</p> <p>i) public teletext services.</p>	<p>(1) Similar description as scope of service for existing PNETS licence for International Value-Added Network Services (IVANS)</p> <p>(2) The Class 3 (IVANS) service will also include most of the existing services licensed under the PNETS licence for Miscellaneous Value-Added Service</p>

Type of Service	Proposed description in Schedule 1 of the Modified SBO Licence	Remarks
	<p>2. In this Schedule,</p> <p>“circuits provided by public telecommunications networks” means the dedicated circuits or switched circuits or a means of transmission by telecommunications line or radiocommunications link operated or authorised under the Ordinance.</p> <p>“external” means communications with places outside Hong Kong.</p> <p>“external circuit” means a telecommunications circuit between a point in Hong Kong (including, without limitation, a radiocommunications facility or cable termination facility) and one or more points outside Hong Kong, and any means of telecommunications capable of facilitating such circuit.</p> <p>3. “Non-real time facsimile communications” in Clause 1(b) of this Schedule refer to the following types of facsimile communications:</p> <p>(a) store and retrieve; or</p> <p>(b) store and forward (in the case of automatic delivery to the destination terminal(s), there must be at least one other function such as deferred delivery or multi-addressing).</p> <p>4. “Value added voice services” in</p>	

Type of Service	Proposed description in Schedule 1 of the Modified SBO Licence	Remarks
	<p>Clause 1(g) of this Schedule do not include basic voice service for carrying real-time voice communications which may be integrated with other types of communications.</p> <p>5. “Call management services” in Clause 1(h) of this Schedule refer to call forwarding and/or routing services which allow the redirection of an incoming voice or facsimile call to computerised call processing equipment operated by the licensee or to telephone numbers or for access to a licensed telecommunications service.</p> <p>6. “Public teletext services” in Clause 1(i) of this Schedule refer to services which involve the transmission and reception of data and information in compliance with the relevant technical standard for public teletext services issued by the Authority.</p> <p>7. For the avoidance of doubt, this licence does not authorize the licensee to establish and maintain any physical facilities for the supply of external circuits to customers.</p>	
Class 3 (MVNO)	1. The service is a mobile virtual network service provided to subscribers or customers within the territory of Hong Kong by making use of and by having access to, and interconnection with, radiocommunications infrastructure of a	Similar description as scope of service for existing PNETS licence for Mobile Virtual Network Operator (MVNO) Services

Type of Service	Proposed description in Schedule 1 of the Modified SBO Licence	Remarks
	<p>Mobile Carrier Licensee or Unified Carrier Licensee authorized to provide mobile services and assigned with the radio spectrum using which the public radiocommunications service is provided.</p> <p>2. Subject to Clause 1, the licensee shall provide the service through and by setting up, maintaining and operating the apparatus, equipment, facility, infrastructure and interconnection including but not limited to billing, switching, home location register and Intelligent Network systems but without radio transmission parts and radio base stations. For the avoidance of doubt, the licensee has not been assigned, and is not entitled to the assignment of, any radio spectrum and therefore does not operate any radio base station for the purpose of operating the service.</p> <p>3. Subject to Clause 1, the service may provide for the carriage of telephonic and non-telephonic messages.</p> <p>4. Subject to Clause 1, the service may include (but without limitation to) voice, facsimile, voice mail, electronic mail and short message services and the provision of electronic mailbox or storage facilities to be operated in conjunction with services described in this First Schedule and which enable any member of the public (whether a subscriber of the service or not) to deposit voice, facsimile, voice</p>	

Type of Service	Proposed description in Schedule 1 of the Modified SBO Licence	Remarks
	<p>mail, electronic mail, short message or other files into the electronic mailbox or storage facilities allocated to subscribers of the service or to display the same on handset or other devices of the subscriber of the service.</p> <p>5. The service includes dealing in and demonstration with a view to selling in the course of trade or business of the service and the applicant, such apparatus, facility, equipment, handset, device, accessory, material, case and packaging item for radiocommunications as may be necessary for subscribers of the service to make use of, participate in or receive the service.</p>	
Class 3 (Radio Relay)	<p>1. The service provides a telecommunications system for interconnection with the mobile services licensed under the Ordinance, and other radiocommunications services as may be authorized or directed by the Authority, for extension of the radio coverage of these services within the following areas:</p> <p style="padding-left: 40px;">Name of Building Address</p> <p>2. The service is a radio relay service for relaying the signals of mobile services licensed under the Ordinance. It does not provide any mobile service directly to the end users.</p>	Similar description as scope of service for existing PNETS licence for Public Radio Communication Relay Service (Radio Relay)
Class 3	1. The service is a local and/or external	Same description as

Type of Service	Proposed description in Schedule 1 of the Modified SBO Licence	Remarks
(Teleconference)	<p>teleconferencing service whereby customers of the service can hold audio or video conference through the facilities provided by the licensee.</p> <p>2. Connections between the facilities of the licensee in Hong Kong and the users in Hong Kong shall be made through dedicated circuits or switched circuits operated under fixed telecommunications networks licensed under the Telecommunications Ordinance (Cap. 106).</p> <p>3. The licensee operates a teleconference operator centre (or call centre) and provides bridging facilities so that conference participants at different locations can see, talk and listen to one another in conference mode through the telecommunications network/circuit connections made by the licensee's system.</p> <p>4. Nothing under this licence authorizes the licensee to operate an external public telephone or non-telephone service. External calls to and from the facilities of the service in Hong Kong shall be routed through an external public telephone or non-telephonic service licensed in Hong Kong.</p>	<p>scope of service for existing PNETS licence for Teleconferencing Service (Teleconference)</p>
Class 3 (Private Payphone)	<p>1. In this licence,</p> <p>(a) "payphone" means a fixed telephone</p>	<p>Similar description as scope of service for existing PNETS licence</p>

Type of Service	Proposed description in Schedule 1 of the Modified SBO Licence	Remarks
	<p>that is connected to the public switched telephone network operated by a Fixed Telecommunications Network Services (“FTNS”) Licensee, Fixed Carrier Licensee or Unified Carrier Licensee authorized to provide fixed services and that cannot be used to make a telephone call (other than an emergency call, a free call for access to other services provided by FTNS Licensees, Fixed Carrier Licensees or Unified Carrier Licensees authorized for provision of fixed services as may be specified by the Authority pursuant to Special Condition 28 or a call made through an operator-assisted or automated caller identity verification system) unless the user, immediately prior to using the telephone, makes, or arranges to make, a payment for that particular individual call;</p> <p>(b) “private payphone” means a payphone that is located on or over privately owned land or leased land as defined in section 2, Part I of the Government Land Ordinance (Cap. 28) and to which members of the general public have access; and</p> <p>(c) “external calls” means calls for communications with places outside Hong Kong.</p> <p>2. The service is a private payphone service provided through the use of payphone equipment established and</p>	<p>for Private Payphone Service</p>

Type of Service	Proposed description in Schedule 1 of the Modified SBO Licence	Remarks
	<p>maintained by the licensee.</p> <p>3. The service may carry telephonic and non-telephonic messages.</p> <p>4. Subject to Special Condition 28, the service may include services which enable the customers to make local and external calls.</p> <p>5. The payphone equipment established and maintained by the licensee shall be connected to access lines provided by a FTNS Licensee, Fixed Carrier Licensee or Unified Carrier Licensee authorized to provide fixed services. Nothing in the licence authorizes the licensee to establish or maintain any network facilities.</p> <p>6. Nothing in this licence authorizes direct interconnection between the payphone equipment established and maintained by the licensee with the gateways for external public telephone services licensed under the Ordinance.</p>	
Class 3 (Security & Alarm)	The service is a local public telecommunications service for the transmission of security and fire alarm signals from customers' premises to a security fire service communication centre. The conveyance of the security and fire alarm signals may be made through the dedicated circuits or switched circuits provided by a Fixed Telecommunications Network Services	Similar description as scope of service for existing PNETS licence for Security And Fire Alarm Signals Transmission (Security & Alarm) Service

Type of Service	Proposed description in Schedule 1 of the Modified SBO Licence	Remarks
	Licensee, Fixed Carrier Licensee, Mobile Carrier Licensee, or Unified Carrier Licensee, or the other telecommunications network and services licensed, or deemed to be licensed, or exempt from licensing, under the Ordinance.	

Intervention by the TA for MVNO Providing Services in the 3G Band
(Referred to in Paragraph 2.36)

Powers of intervention

With respect to an MVNO, the TA's power of intervention will be based on:-

- (a) special condition 12 of the mobile carrier licence or special condition 37 of the unified carrier licence; and
 - (b) the powers under section 36A of the Ordinance;
- to determine the terms and conditions of interconnection, including any technical, commercial or financial or other terms of the interconnection agreement.

In the event that a non-affiliated MVNO and a MNO cannot agree with each other on the terms of interconnection, either of them may call upon the TA to intervene in the dispute and to determine the terms of interconnection. If an MVNO makes a request for a determination under special condition 12 of the mobile carrier licence or special condition 37 of the unified carrier licence, the TA is unlikely to intervene if:-

- (a) the MVNO is affiliated to the MNO or to any other MNO;
- (b) the MVNO already has access to the network capacity of any other MNO's network (as defined in the mobile carrier licence) equivalent to 30% or more of the network capacity of the network to which the MVNO is seeking access. If the TA receives a request for access to a network from an MVNO that already has access to another network, the TA will take into account the extent to which the MVNO already benefits from the open network access framework and such other factors as he may consider relevant such as the market position of the MVNO;
- (c) the MVNO does not satisfy the minimum infrastructure requirements set out in paragraph 2.36 of these guidelines; or
- (d) the relevant MNO has reached its 30% open network access requirement.

MVNOs may also request a determination from the TA under section 36A of the Ordinance. The TA shall consider whether to accept the request for determination after taking into account factors under section 36A(10) of the Ordinance as well as other relevant factors including but not be limited to

- (i) the extent to which the applicant already benefits from the open network access framework; and
- (ii) the extent to which the relevant MNO is satisfying its obligation under the open network access framework.

Under section 36A(3B) of the Ordinance, the charges in a determination shall be based on the relevant reasonable costs attributable to interconnection and, in determining the level, or method of calculation, of the relevant reasonable costs attributable to interconnection, the TA may select from among alternative costing methods which he considers to be fair and reasonable costing method.

None of the above should be interpreted as fettering the TA's discretion in any way concerning whether or not the TA may make a determination, or the terms of any determination that may be made.

The TA will follow the procedure as stipulated in the revised "Procedures for Making Determinations on the Terms and Conditions of Interconnection Agreements", a copy of which is available on the OFTA website.