

Regulatory Guide of Local Access Charge

Introduction

Local Access Charge (“LAC”) is the interconnection charge payable by external telecommunications service (“ETS”) operators to local network operators for the conveyance of ETS traffic to and from the end users.

2. LAC, as well as the terms and conditions for interconnection, are subject to negotiations between ETS operators and local network operators on a commercial basis. To facilitate the industry to conduct their commercial negotiations on LAC, the TA has prepared this document (the “LAC Regulatory Guide”) to provide guidance for the industry’s reference in respect of the payment obligation, charging principles and settlement arrangements. The concerned parties should read this document in conjunction with the TA Statement on New Regulatory Regime for Local Access Charge issued on 23 December 2011.

3. Pursuant to section 36A of the Telecommunications Ordinance (the “Ordinance”), the Telecommunications Authority (“TA”) may determine the terms and conditions of interconnection, including the level of charges and the method of calculating such charges, on the request of a party to the interconnection or, in the absence of a request, if he considers it is in the interest of the public to do so. In the event that a determination of LAC is made under section 36A of the Ordinance, the TA will take this regulatory guide into account. For the avoidance of doubt, this regulatory guide will not prejudice the TA’s power to take into account other considerations and adopt other costing methodology he considers to be fair and reasonable for any particular case, after the TA has given regard to the specific circumstances of the case.

Payment Obligation and Charging Principles of LAC

4. The following paragraphs set out a set of basic principles in respect of payment, costing method and settlement of LAC.

(a) Payment Obligation of LAC

- (i) ETS traffic conveyed to and from both Fixed Network Operators (“FNOs”) and Mobile Network Operators (“MNOs”) are subject to LAC.
 - (ii) Both FNOs and MNOs are entitled to receive LAC for the conveyance of originating and terminating ETS traffic to and from end-users connected to their local networks. Interconnecting operators may, subject to their respective commercial agreements, specify the charging and settlement arrangement for LAC for originating ETS traffic and terminating ETS traffic. That is to say, they are at liberty to specify a symmetric arrangement, or an asymmetric one as they deem fit.
 - (iii) Voice over Internet Protocol (“VoIP”) traffic communicated between local subscriber numbers, despite that one of the ends might be located outside Hong Kong, shall for practical purpose be treated as local traffic, subject to future reviews.
 - (iv) LAC should be settled in accordance with paragraphs 5 to 12.
- (b) Costing Principles for the calculation of LAC
- (i) The same costing principles will apply in calculating LAC for FNOs and MNOs.
 - (ii) Charges for LAC and related services will be based on the relevant costs.
 - (iii) The relevant costs of interconnection and other related transactions will be measured as the long run average incremental costs (“LRAIC”)¹, including a cost of capital for assets used.
 - (iv) The LRAIC model may include a mark-up for the recovery of indirect fixed cost.
 - (v) Costs for ETS traffic should reflect the cause and effect relationships to the maximum extent possible.

¹ For the definition of LRAIC, please refer to the TA Statement entitled “Interconnection and Related Competition Issues Statement No. 7 (Third Revision) Carrier-to-Carrier Charging Principles” (for Fixed Carrier Interconnections)” (“Statement No. 7”). The TA Statement is available at “<http://www.ofta.gov.hk/en/tas/interconnect/ta20090403stat.pdf>”.

- (vi) Under the LRAIC model, only incremental costs relevant to the conveyance of ETS traffic for the customer access network (“CAN”) will be considered. For fixed networks, the cost of local loop will not be included in the calculation of LAC for a wireline public switched telephone network (“PSTN”). Under the Next Generation Network (“NGN”) environment, if it can be demonstrated that any cost components of the CAN are incremental to the conveyance of ETS traffic, such components may be included in the calculation of the level of LAC. For mobile networks, any cost components of the radio access network (“RAN”) being used for connecting subscribers to the networks of the MNOs and are not considered incremental for the conveyance of ETS traffic will not be included in the calculation of the level of LAC for MNOs. Following this, the costs of acquiring spectrum (i.e. Spectrum Utilization Fee) for building the RAN will not be included.
- (vii) The structure of LAC should reflect the behaviour of the underlying costs.
- (viii) Network operators should provide interconnection and related services and facilities on a disaggregated basis so that interconnecting parties may be able to use only those components that they need. This principle should apply in the calculation of the underlying costs for LAC.
- (ix) Current or replacement cost will be used as the costing standard but the TA will consider applying a cap based on the historical cost standard on all or part of the cost components in the LRAIC, particularly for those cost components related to land and buildings.
- (x) In the event that the TA is required to make a determination on the charges, he may make reference to the cost of the most efficient network operator, wherever appropriate.
- (xi) In making reference to the most efficient network operator, the TA may do all things that are necessary in order to eliminate any network inefficiency and he may take into account all relevant factors in providing the interconnection service when deciding the reasonable relevant costs of interconnection.
- (xii) A cost of capital will be applied to compensate the risk of business

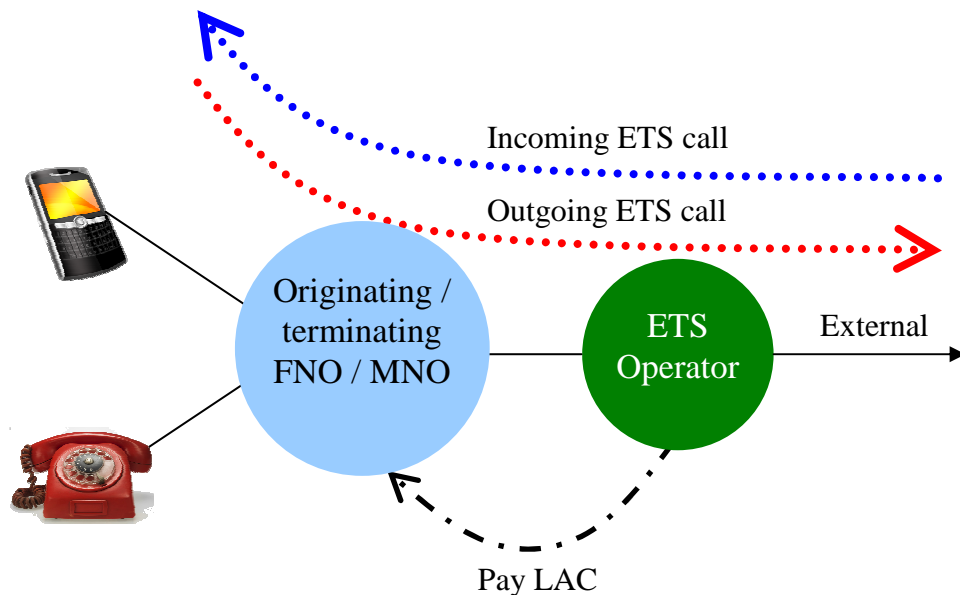
investment. The cost of capital may or may not be based on industry average for the concerned interconnecting parties.

Settlement of LAC

Direct ETS Traffic

5. “Direct ETS Traffic” refers to the traffic of an ETS operator² delivered between the ETS operator and the originating/terminating FNO/MNO through a direct interconnection link between the ETS operator and the FNO/MNO.

Figure 1. Direct ETS Traffic between the ETS operator and the FNO/MNO

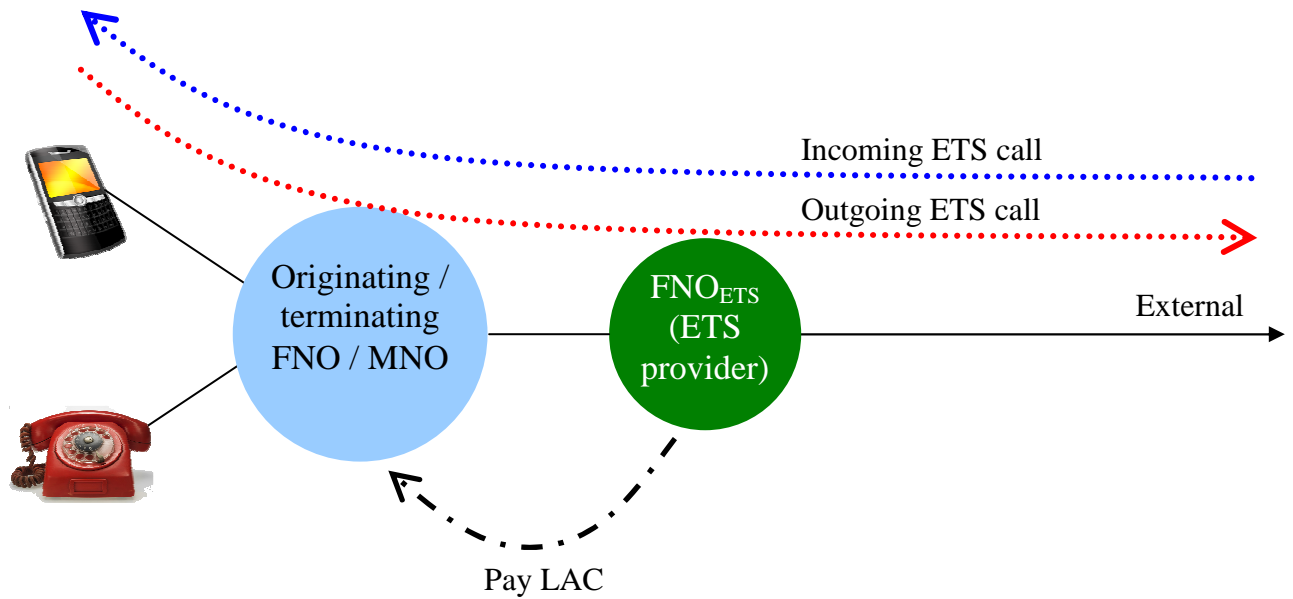


6. Subscribers to the fixed/mobile services of the originating/terminating FNO/MNO may access the ETS provided by an ETS operator which is directly connected with the originating/terminating FNO/MNO.

7. If there is a direct interconnection link between the ETS operator and the originating/terminating FNO/MNO and the ETS traffic is delivered between the ETS operator and the FNO/MNO through such link as shown in Figure 1, the ETS operator has the obligation to pay LAC to the originating/terminating FNO/MNO.

² Under the existing licensing regime, ETS may be provided under a Services-Based Operator (“SBO”) Class 3 ETS licence, a fixed carrier licence (“FCL”) or a unified carrier licence (“UCL”) which covers the provision of external fixed service. As such, “ETS operator” in this Statement refers to any operator which provides ETS, regardless of whether it is a licence holder of an SBO licence, an FCL or a UCL.

Figure 2. Direct ETS Traffic between an FNO (acting as an ETS operator) and an FNO/MNO



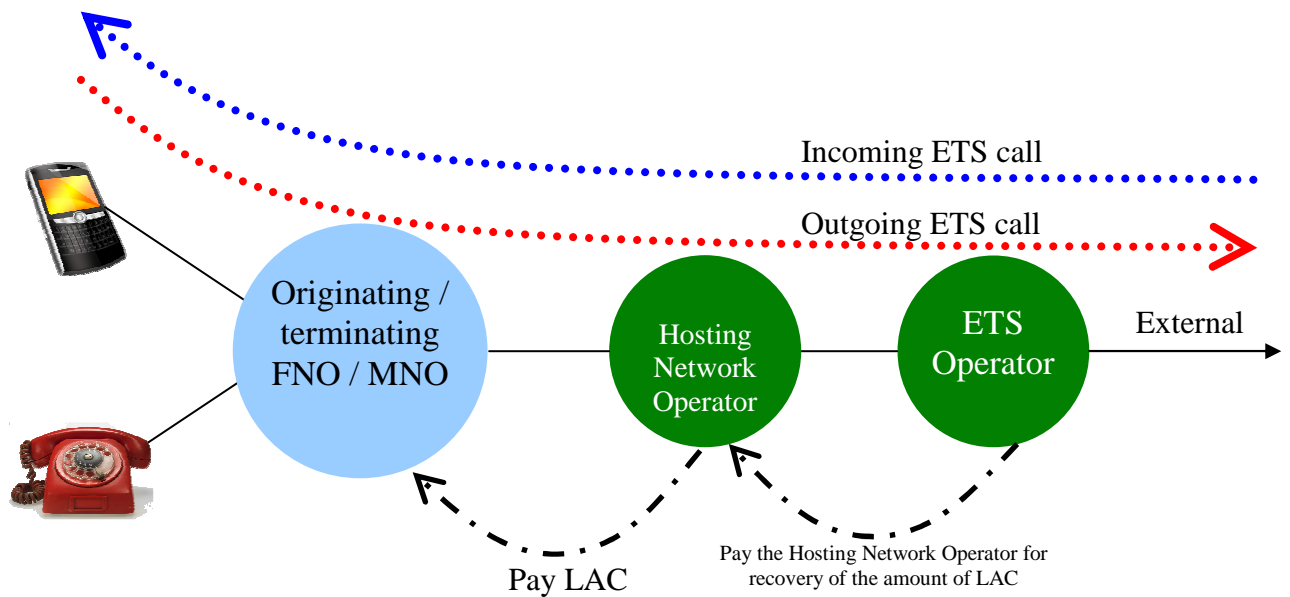
8. Subscribers to the fixed/mobile services of the originating/terminating FNO/MNO may access the ETS provided by another FNO (acting as an ETS operator) which is directly connected with the originating/terminating FNO/MNO.

9. If there is a direct interconnection link between the FNO_{ETS} (which is the provider of the ETS) and the originating/terminating FNO/MNO and the ETS traffic is delivered between the FNO_{ETS} and the FNO/MNO through such link as shown in Figure 2, the FNO_{ETS} has the obligation to pay LAC to the originating/terminating FNO/MNO.

Indirect ETS Traffic

10. “Indirect ETS Traffic” refers to the ETS traffic delivered between an ETS operator and an originating/terminating FNO/MNO by transit through a hosting network operator.

Figure 3. Indirect ETS Traffic between an ETS operator and an FNO/MNO via the hosting network operator of the ETS operator



11. Subscribers to the fixed/mobile services of the originating/terminating FNO/MNO may access the ETS provided by an ETS operator through the hosting network operator of the ETS operator.

12. If there is no direct interconnection link between the ETS operator and the originating/terminating FNO/MNO and the ETS traffic is delivered between the ETS operator and the originating/terminating FNO/MNO via a hosting network operator of the ETS operator as shown in Figure 3, the hosting network operator has the obligation to pay LAC to the originating/terminating FNO/MNO. The hosting network operator will in turn recover such charges from the ETS operator that it hosts, together with other relevant charges, subject to the terms and conditions of the commercial agreement between them.

Office of the Telecommunications Authority

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