

**For Discussion
on 8 June 2009**

**Legislative Council Panel
on Information Technology and Broadcasting**

**Progress on Implementation of Initiatives Related to
Fixed-Mobile Convergence**

Purpose

This paper updates Members on the progress of implementation of the various initiatives undertaken by the Administration to facilitate the development of fixed-mobile convergence (“FMC”) in Hong Kong.

Background

2. FMC refers to the trend whereby distinctions between fixed and mobile networks and services are blurred. FMC is expected to bring innovative services and benefits to consumers.

3. Traditionally, fixed and mobile services were regulated under separate regimes. Such a regulatory environment was not conducive to the development of FMC. To facilitate the development of FMC in Hong Kong, the Telecommunications Authority (the “TA”), having duly considered the submissions to the two rounds of public consultation in 2005 and 2006 and the recommendations made by the consultant commissioned by the TA, published a Statement entitled “*Deregulation for Fixed-Mobile Convergence*” (the “FMC Statement”) on 27 April 2007 setting out his decisions in relation to the following items:

- (a) Fixed Mobile Interconnection Charge (“FMIC”);
- (b) Local Access Charge (“LAC”);
- (c) Unified Carrier Licence (“UCL”); and
- (d) Fixed Mobile Number Portability (“FMNP”).

The Executive Summary of the FMC Statement is at **Annex**. This Panel was briefed on the FMC Statement at its meeting of 11 June 2007.

4. This paper gives an update on the follow-up action that has been undertaken by Office of the Telecommunications Authority (“OFTA”) in respect of the items in paragraph 3.

De-regulation of FMIC

5. In the FMC Statement, the TA decided to withdraw the regulatory guidance on FMIC in favour of a Mobile Party’s Network Pay (“MPNP”) arrangement¹, which was set out in a TA Statement entitled “*Interconnection and Related Competition Issues Statement No. 7 (Second Revision) – ‘Carrier-to-Carrier Charging Principles’, 18 March 2002*” (“Statement No. 7”). To phase in the change smoothly, the TA set a two-year transitional period whereby operators might negotiate with each other on the replacement mechanisms to be applied during or after the transition period. After the transition period ended on 27 April 2009, FMIC would be determined by commercial negotiations and agreements between the fixed network operators (“FNOs”) and mobile network operators (“MNOs”). In order not to interfere with such negotiations, the TA does not intend to issue replacement guidance after 27 April 2009. However, the TA will monitor market developments closely and if market conditions change, he will re-consider the need for regulatory guidance on FMIC. The interested parties will be fully consulted if the TA intends to issue regulatory guidance on FMIC in future.

Follow-up Actions

6. During the transition, the TA has been encouraging and facilitating FNOs and MNOs to take part in negotiations on the new FMIC arrangement. The TA faced legal challenges from one interested party on his decision to de-regulate the FMIC arrangement, both in the Court and before the Telecommunications (Competition Provisions)

¹ The amount of FMIC received by fixed operators under the MPNP arrangement was estimated to be about HK\$600 million per year.

Appeal Board (the “Appeal Board”)². The cases were dismissed. The verdicts were appealed but the Court of Appeal also affirmed the lawfulness of the TA’s decision.

7. On 1 June 2008, PCCW HKT-Telephone Limited (“PCCW”), the incumbent FNO, increased its FMIC tariff by 25%. In response, two MNOs filed complaints to the TA alleging that the conduct of PCCW in relation to the tariff increase was anti-competitive and therefore violated the competition provisions under the Telecommunications Ordinance (the “Ordinance”). The TA is investigating the complaints. Separately, two MNOs appealed to the Appeal Board against the TA’s decision to grant deemed approval to the tariff increase³. In January 2009, the Appeal Board acceded to the request from parties concerned for adjournment of proceedings in the light of the complaint investigation by the TA.

8. The withdrawal of regulatory guidance on FMIC came into effect on 27 April 2009 as planned with the Statement No. 7 suitably amended taking into account the industry views. According to the information made available to the TA, quite a few major fixed and mobile operators have already reached some form of agreement or understanding on the post-transitional FMIC arrangements. Among those agreements or understanding reached, the charging arrangements adopted by the concerned parties are invariably based on the so-called “Bill-And-Keep” model, whereby interconnecting parties agree not to charge each other for traffic flowing between their networks. For other operators which have not yet reached agreements, the TA has urged them to continue their negotiations. The TA has made it clear that he is prepared to offer

² The Telecommunications (Competition Provisions) Appeal Board is set up pursuant to section 32M of the Telecommunications Ordinance to consider appeals against the TA’s directions, determinations and decisions related to the competition provisions of the Ordinance.

³ Prior to de-regulation of the FMIC, under the fixed carrier licence of PCCW, an amendment to the existing FMIC tariff is deemed to be approved unless the TA notifies the licensee in writing, within 30 days after receiving the proposed amendment from the licensee, of the TA’s opinion that the amendment would contravene the competition provisions of the Telecommunications Ordinance. On 23 May 2008, the TA issued a press release indicating his view that there was no conclusive basis for saying that the tariff increase proposed by PCCW would contravene any of the competition provisions in the Ordinance. However, the TA did not give any positive clearance to the application and indicated that any party who considered that the tariff increase would have an anti-competitive effect in any telecommunications services market in contravention of competition provisions in the Ordinance might state its case to him. Starting from 27 April 2009, amendment to the FMIC tariff of PCCW is no longer subject to such approval by the TA.

assistance to facilitate negotiations and to ensure effective market operation for various services. Given the positive progress of negotiation in general among the market players, the TA does not see the need for intervention at this stage. If parties have engaged in negotiation in good faith but still failed to reach agreement and if the public interest so warrants, the TA will consider the appropriate intervention needed, including the use of the power granted under the Ordinance.

International Call Forwarding Services (“ICFS”)

9. Another type of interconnection charge closely associated with the FMIC is ICFS, which is a service offered by ICFS providers (which may be FNOs or external telecommunications service (“ETS”) operators) allowing a mobile user, when he is situated outside Hong Kong, to receive calls to his Hong Kong mobile number by forwarding the calls to a Hong Kong fixed number and the calls are in turn forwarded to a non-Hong Kong mobile number. ICFS is a popular substitute for mobile roaming service due to its competitive price. ICFS providers providing this service are subject to an ICFS interconnection charge levied by MNOs in order that they may recover the cost incurred for the delivery of ICFS traffic. This interconnection charge includes, among others, a FMIC cost component. In the FMC Statement, the TA has stated that he would review the ICFS arrangement upon requests from the industry.

10. The charge level of the FMIC component in the ICFS interconnection charge was set at a fixed level by a determination made by the TA in 2003 (the “2003 ICFS Determination”), and it was based on the then prevailing market rate of FMIC. However, maintaining the FMIC at a fixed level after de-regulation of FMIC would not be consistent with the decision promulgated in the FMC Statement. In response to requests from the industry, a consultation paper was published on 19 March 2009 to solicit views on varying the 2003 ICFS Determination so that we may continue to cope with the changes consequential to the withdrawal of FMIC guidance. Having duly considered the views received, the TA issued a variation of determination on 19 May 2009, setting out (a) for the period prior to 27 April 2009, the ICFS interconnection charge (including the FMIC component) is to

remain unchanged; (b) for the period on or after 27 April 2009, the ICFS interconnection charge shall be varied according to the market outcome of the FMIC component agreed between interconnecting FNOs and MNOs, based on the formula adopted under the 2003 ICFS Determination.

11. The TA also makes it clear that he will conduct a comprehensive review of the ICFS arrangement after the conclusion of the commercial negotiations of the FMIC arrangement between the MNOs and FNOs. The TA is hopeful that by then the MNOs and the FNOs should be able to reach agreements on other issues as well (such as the interconnection links) and he will then be able to revisit the ICFS regulatory regime in a holistic manner.

LAC

12. LAC is an interconnection charge payable by ETS operators to local network operators to compensate the latter for use of their local network facilities for delivery of external traffic. The LAC mechanism was introduced in January 1999 when the then external service franchise was terminated. The LAC received by FNOs is regulated and the level of LAC received by the incumbent FNO (i.e. PCCW) is governed by a determination made by the TA in 1998. Other FNOs generally set their LAC by making reference to the LAC of PCCW. On the other hand, LAC levied by MNOs has never been regulated and is subject to commercial agreements only. However, the market situation has been such that the MNOs have not levied any LAC since January 1999. In the FMC Statement, having considered the prevailing market conditions and also the views and comments received during the consultations, the TA concluded that while there was room for de-regulation of the level of LAC, he would not do so for the time being but would continue to monitor whether more effective competition would be developed for LAC upon the de-regulation of FMIC before initiating another review.

Follow-up Actions

13. The FMIC de-regulation has created a ripple effect on the LAC market. In the process of negotiation on the new FMIC arrangements, most MNOs have published their own FMIC tariffs as a counter-claim on the interconnection charge chargeable by FNOs⁴. A FNO which had yet to reach agreement with a MNO reacted by announcing that it will pass on the charges to ETS operators for delivery of external calls to or from the MNO. ETS operators have in turn voiced out their concern on this potential increase in interconnection charges to the TA and in the public domain. Although the incident has been settled through mediation by different parties, it highlighted the need to start the LAC review as soon as possible. The TA has already begun the review and plans to consult the industry on the way forward in the second half of 2009.

UCL

14. In the FMC environment, it will be difficult to draw a clear line of demarcation between a fixed or a mobile service, or classify a network operator as a FNO or a MNO. Therefore, maintaining separate licensing regimes for fixed and mobile services would not be an optimal arrangement. In the FMC Statement, the TA recommended the creation of UCL as a new, harmonised licensing regime which would cover the provision of any fixed, mobile or converged service under the same licence.

Follow-up Actions

(A) Creation of UCL

15. In view of the TA's recommendation, in December 2007 the Secretary for Commerce and Economic Development ("SCED") issued a consultation paper entitled "*Consultation Paper on the Creation of a Unified Carrier Licence under the Telecommunications Ordinance*", which set out proposals on the general conditions, period of validity and fees for the UCL. On the same date, the TA issued a separate

⁴ Among the five MNOs in Hong Kong, four MNOs (SmarTone, China Mobile, CSL and Hutchison) have all published their FMIC tariffs.

consultation paper entitled “*Licensing Framework for Unified Carrier Licence*” covering the special conditions proposed to be attached to the UCL, the general approach for granting a UCL under different scenarios, and the arrangement for migration of the existing carrier licences to UCLs. Having considered the views and comments received on the public consultation, the SCED decided to create the UCL.

16. At the meetings of this Panel on 14 January 2008 and 13 May 2008, Members were briefed about the consultation exercises on the creation of UCL and their results respectively. The necessary subsidiary legislation for the creation of the UCL was passed without amendment upon the expiry of the negative vetting period and took effect on 1 August 2008.

17. With the implementation of the UCL regime on 1 August 2008, the TA will only issue the UCL, in lieu of the previous Fixed Carrier Licence (“FCL”) and Mobile Carrier Licence (“MCL”), for licensing fixed and mobile carrier services. Existing FCLs and MCLs will remain in force until their expiry or voluntary surrender to the TA upon which they will be replaced by UCLs. As of end April 2009, OFTA has issued 13 UCLs, including four new licences for external fixed services, three new licences for mobile services and six for conversion of existing FCLs and MCLs.

(B) Number Fee

18. Licence fees payable under licences issued by OFTA are designed for cost recovery of the expenses of OFTA in administering the telecommunications licences. Apart from cost recovery considerations, in order to encourage the efficient use of scarce resource of telecommunications numbers and prolong the life span of the existing 8-digit numbering plan, a “number fee” was introduced under the UCL whereby a variable fee of \$3 would be charged for each subscriber number allocated to a licensee, irrespective of whether the number is assigned to a customer or not. The number fee seeks to provide a financial incentive for operators not to hold on to idle or unused numbers, since they may return unused number to the TA to reduce the licence fee payable.

19. At the meetings of this Panel on 14 January 2008 and 13 May 2008, Members raised their concerns whether the number fee should apply to paging service to encourage operators to return the under-utilized numbers with prefix “7”. The issue was also discussed in the Legislative Council Subcommittee set up to consider the subsidiary legislation for the creation of the UCL. The Administration expressed support for a proposal to extend the number fee to paging operators and mobile virtual network operators (“MVNOs”) with a view to providing financial incentives for them to return idle numbers to OFTA. Having consulted the industry and the parties concerned, the TA decided to impose number fee for public radio paging service operators and MVNOs with effect from 1 June 2009. Furthermore, in another consultation launched by the TA on 11 March 2009⁵, the TA proposed to reduce the number fee under the Services-Based Operators (“SBO”) Licence from HK\$7 to HK\$3 in order to align it with that of UCL and other licences. When this proposal is implemented, the numbers allocated for use by all telecommunications licensees will be subject to the same number fee.

20. In addition to the number fee, OFTA will implement administrative measures to extend the life span of the 8-digit numbering plan. A Working Group on Numbering Issues, with participation from various stakeholders (including operators, vendors, the Consumer Council, Hong Kong Telecommunications Users Group and the Hong Kong Institution of Engineers), was set up to examine administrative measures to improve number utilization. These include allocating smaller number blocks (to be reduced from the previous size of 100,000 to 10,000 numbers per block), raising the threshold for operators’ eligibility to apply to the TA for the allocation of new numbers from 60% to 70%, and permitting operators to return non-consecutive idle numbers. These measures have been adopted and fully implemented since February 2009.

21. With the introduction of the number fee mechanism and the administrative procedure to return unused numbers in place, about 690,000 numbers have already been returned to OFTA by MNOs, SBOs

⁵ See the consultation paper on “*Review of the Public Non-Exclusive Telecommunications Service and Services-Based Operator Licensing Regimes*” issued by the TA on 11 March 2009. This is the subject matter of another agenda item at the same Panel meeting on 8 June 2009.

and radio paging operators. As more and more licensees will be subject to the number fee, it is expected an appreciable quantity of unused numbers will be returned by operators for re-allocation by OFTA, thus achieving the original objective behind the introduction of the “number fee” mechanism, i.e. promoting more efficient use of numbers.

FMNP

22. At present, number portability across fixed and mobile platforms is not supported. In the FMC environment, a user may be assigned with a single number for both fixed and mobile services and there may be a need for FMNP, which allows the user to retain his telephone number when switching subscription from fixed service to mobile service, or vice versa. However, once FMNP is implemented, fixed and mobile numbers will no longer be distinguishable. In the FMC Statement, the TA decided to ascertain the market demand for FMNP before coming up with a firm proposal for its introduction in Hong Kong.

Follow-up Action

23. In February 2008, OFTA completed a market survey about the demand for FMNP. The results of the survey showed that in general, while there is some public demand for FMNP, the demand is not high as only 25% of residential line users and 26% of business line users will opt for porting their fixed numbers to mobile networks if FMNP is available. The corresponding figures for porting mobile numbers to the fixed networks are much lower, in the range of 9% for residential line users and 7% for business line users respectively.

24. Having regard to the results of the survey, the views collected from previous consultation exercises and the experience of implementing FMNP in other economies, the TA considers that there is insufficient justification to mandate the implementation of FMNP. However, he considers that it should be in the public interest to allow individual operators to make their own business decisions to implement FMNP on a voluntary basis. On 31 October 2008, the TA issued a “*Consultation Paper on Fixed Mobile Number Portability*” to solicit further views from

the public on the possibility and guiding principles for the voluntary implementation of FMNP. The TA is considering the submissions received and plans to issue a Statement setting out his conclusions on this subject in June 2009.

Way Forward

25. While the implementation of FMC should be market-driven, the TA will ensure that the regulatory framework will be continually updated and optimized so that any regulatory barrier that may hamper the introduction of FMC products and services will be removed. To this end, the TA will

- (a) continue to monitor market developments and ensure a smooth implementation of the FMIC de-regulation;
- (b) issue a Statement setting out his conclusions on FMNP in June 2009;
- (c) consult the public and the industry in the second half of the year on the way forward for LAC;
- (d) conduct a comprehensive review of the ICFS arrangement after the conclusion of the commercial negotiations of the FMIC arrangement between the MNOs and FNOs.

Office of the Telecommunications Authority
1 June 2009

DEREGULATION FOR FIXED-MOBILE CONVERGENCE

Statement of the Telecommunications Authority

27 April 2007

EXECUTIVE SUMMARY

The Telecommunications Authority (TA)'s concluded views and the regulatory changes that will be adopted as a consequence of the review in relation to fixed mobile convergence are summarized below:

Fixed Mobile Interconnection Charge (FMIC)

- (1) The TA will de-regulate the existing FMIC arrangement. The regulatory guidance in favour of MPNP contained in the TA's Statement No.7 (Second Revision) on Interconnection and Related Competition Issues will be withdrawn, subject to a transition period.
- (2) The TA will also withdraw the regulatory guidance on interconnection links subject to the same transition period as for FMIC.
- (3) There will be a transition period of 2 years starting from the date of issue of this Statement before the changes in (1) and (2) are implemented.
- (4) The TA will not issue replacement regulatory guidance upon the withdrawal of the existing regulatory guidance. The TA will continue to monitor market developments and will re-consider the need for regulatory guidance should market conditions change and/or indications of likely market failure emerge.
- (5) For the avoidance of doubt, there will be no change to:
 - (a) the existing "Any-to-Any" ("A2A") regime which is preserved in its entirety by virtue of the relevant powers in the

Telecommunications Ordinance (“Ordinance”) and made a condition of all licences granted to operators. The TA will intervene, on a case by case basis, where commercial negotiations between operators fail to achieve A2A connectivity; and

- (b) the TA’s power under section 36A of the Ordinance as a last resort to intervene, on an ex post basis, if commercial negotiation fails to produce agreed terms of interconnection between FNOs and MNOs within a reasonable period of time.
- (6) The TA Statement No. 7 will be modified at the end of the transition period to reflect the above changes.

Local Access Charges (LAC)

- (7) The existing LAC arrangement will be maintained.
- (8) If and when there is a complete and valid application for a modification or withdrawal of the existing determination of LAC, the TA will consider the request in separate proceedings.

Unified Carrier Licence (UCL)

- (9) The TA will make a recommendation to the Secretary for Commerce, Industry and Technology (SCIT) concerning the creation of the UCL by subsidiary legislation which will cover the general conditions, period of validity and licence fee of the UCL.
- (10) If SCIT approves the creation of the UCL, the TA may carry out further consultation (if necessary) at the appropriate time to solicit views on the special conditions for issue of the UCL.

Fixed Mobile Number Portability (FMNP)

- (11) The TA will conduct market research to understand the extent of consumer demand for FMNP and thus facilitate an assessment of the costs and benefits of FMNP before deciding whether to implement FMNP.

- (12) If having made this assessment the TA decides to implement FMNP, a FMNP Working Group, consisting of members from the stakeholders, will be formed to address:
 - (a) the technical and operational issues arising from the introduction of FMNP
 - (b) the feasibility and detailed arrangements for a centralised database to support number portability
- (13) All carriers (fixed or mobile) should have access to all number porting data (fixed number porting and mobile number porting). OFTA will convene a technical working group to examine the technical issues arising from MNOs having access to the ONP database.
- (14) The TA will request the NAC to review the remaining availability of numbers with the prefix '6' and '9' for mobile services and any differential treatment for FNOs and MNOs in the distribution of new number blocks.

Road Opening and Building Access Rights

- (15) The existing arrangement for road opening will be maintained, i.e. the right will only be given to those operators that are authorized under their licence to provide public wireline-based services.
- (16) The existing arrangement for building access will be maintained.

The TA wishes to emphasize that nothing in this document should be taken to suggest that he is fettering his discretion in relation to his powers under sections 36A and 36B of the Ordinance. The TA will continue to exercise these powers where necessary.