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## Press Releases

### Arrangements for the Frequency Spectrum in the 1.9 – 2.2 GHz Band upon Expiry of the Existing Frequency Assignments for the Provision of Third Generation ("3G") Mobile Services and the Spectrum Utilisation Fee

The Communications Authority ("CA") announced today (15 November 2013) its decision to adopt a hybrid administratively-assigned cum market-based approach for the re-assignment of the 118.4 MHz of paired spectrum in the 1.9 - 2.2 GHz band ("3G Spectrum") upon expiry in October 2016 of the existing assignments. The Secretary for Commerce and Economic Development ("SCED") also announced today the methodology in setting the relevant spectrum utilisation fee ("SUF") which will be prescribed through subsidiary legislation.

Under the hybrid approach, each of the four incumbent 3G mobile network operators ("the incumbent 3G operators") viz. CSL Limited, Hong Kong Telecommunications (HKT) Limited, Hutchison Telephone Company Limited, and SmarTone Mobile Communications Limited, will be offered a right of first refusal to be re-assigned two-thirds (or 19.8 MHz) of the 3G Spectrum ("Right-of-first-refusal Spectrum") they currently hold. The remaining 3G Spectrum will be re-assigned by way of auction ("Re-auctioned Spectrum"). The 20 MHz of unpaired spectrum in the 1.9 - 2.2 GHz band, which has been left idle since the assignment in 2001 will be put back to reserve upon expiry of the existing assignments.

"The CA has taken into account a number of factors in reaching its decision. They include its statutory duty under the relevant legislation, the spectrum management principles set out in the Radio Spectrum Policy Framework promulgated by the Government in 2007, the views and comments received in the two rounds of a 7-month long consultation, findings of the consultancy study on service impact commissioned by the Government ("Study findings"), the policy views of the SCED and the CA's own independent assessment", a spokesman of the CA said.

Two guiding principles as stipulated in the Radio Spectrum Policy Framework are particularly pertinent to this spectrum re-assignment exercise. First, a market-based approach will be used in spectrum management wherever the CA considers that there are likely to be competing demands from providers of non-Government services, unless there are overriding public policy reasons to do otherwise. Second, there is no legitimate expectation on the part of the spectrum assignees, that there will be any right of renewal or right of first refusal of spectrum assignment upon the expiry of a spectrum assignment.

"It is clear to the CA from the submissions received in the two rounds of consultation that there are intense competing demands for the 3G Spectrum. In view of this, a full-fledged market-based approach, viz. Option 2 as proposed in the consultation, under which all the 3G Spectrum would be re-auctioned, should be adopted as the default approach for the 3G Spectrum re-assignment, unless there are overriding public policy reasons to do otherwise," the spokesman said.

The CA nevertheless shares the view of SCED that there are overriding public policy reasons, in terms of the potentially severe and long lasting effects on service quality and reception especially in indoor areas during the transitional period, for it to deviate from a purely market-based approach in re-assigning the 3G Spectrum. Accordingly, the CA considers that Option 2 should not be adopted. The CA has evaluated the performance of the two remaining options, the administratively-assigned approach under Option 1 and the hybrid approach under Option 3, against the four objectives in spectrum re-assignment.

"On the first objective of **ensuring customer service continuity**, the CA accepts that Option 1, through a perpetuation of the existing 3G Spectrum assignments, has the advantage of maintaining more or less a seamless transition and hence service continuity. Having taken account of the Study findings and conducted its own independent assessment, the CA considers that service continuity can also be reasonably assured under Option 3. Also, any degradation in service quality that may ensue from a reduction in individual 3G Spectrum holdings under Option 3 can be effectively mitigated with the implementation of appropriate mitigation measures," the spokesman explained.

As to the second objective of **ensuring efficient spectrum utilisation**, Option 1 is more likely to be inferior to Option 3. The CA's considered view is that a perpetual spectrum assignment as in Option 1 provides less incentive for, and exerts less pressure upon, spectrum assignees to strive to enhance spectral efficiency. In

contrast, Option 3 is expected to enhance utilisation of spectrum in at least three different ways. First, as spectrum is a scarce public resource, its auction should lead to it being assigned to those assignees which value it the most and which could be expected to put it to the most efficient use. Second, different mobile network operators are likely to have different spectrum needs. The prospect of an auction provides an opportunity for them to review and optimise their spectrum holdings. Third, Option 3 also provides an opportunity for the incumbent 3G operators to acquire 3G Spectrum to build up a contiguous block of wider bandwidth so as to fully utilise the potential of the Long Term Evolution - Advanced technology at an early stage.

"On the third objective of **promoting effective competition**, Option 3 is more likely to achieve that by opening up an opportunity for new entrants to enter the mobile market than Option 1 which forecloses such a possibility. This will particularly be the case when there will unlikely be any new spectrum supply in the coming few years before the availability of digital dividend, which is subject to completion of the switching off of the analogue terrestrial television services and the cross-boundary frequency coordination. The mobile network operators can also take the opportunity under Option 3 to rationalise their spectrum holdings according to their own commercial considerations which should enable them to compete more effectively in the market," the spokesman explained.

As to the fourth objective, the CA is of the view that as compared with Option 1, Option 3 is more likely **to encourage investment and promote innovative services** from new 3G Spectrum assignees and the incumbents. Any new 3G Spectrum assignees will make investments to put the spectrum they acquire to use. The incumbent 3G operators, having been assigned two-thirds of the 3G Spectrum through exercising the right of first refusal, will be able to maintain their current levels of 3G services. They will need to continue to invest to upgrade their 3G network infrastructure. For any incumbent 3G operator which is unable to, or chooses not to, acquire any 3G Spectrum in the auction, it is likely to invest in its infrastructure by upgrading its network capacity to compensate for the reduction in spectrum holding. Option 1 would not stimulate investment in the same way. Lastly, the opportunity to build up a contiguous spectrum block of wider bandwidth than the existing 30 MHz of paired 3G Spectrum will enable the concerned incumbent 3G operator to introduce more innovative services.

"In sum, the CA has decided to adopt the hybrid option as it best meets the multiple objectives in spectrum re-assignment," the spokesman concluded.

The announcement today gives the incumbent 3G operators an advance notice of about three years to prepare for the spectrum re-assignment. The auction for re-assigning the Re-auctioned Spectrum, which will be open for bidding by all interested parties, is expected to take place in the fourth quarter of 2014. The right of first refusal for the Right-of-first-refusal Spectrum will be offered to the incumbent 3G operators before the auction.

On the SUF, that for the Re-auctioned Spectrum will be determined by auction and the SCED considers it appropriate to set the reserve price for the auction at \$48 million per MHz. For the Right-of-first-refusal Spectrum which will be offered to the incumbent 3G operators administratively, the SCED considers that the SUF per MHz should be set at \$66 million, or the average of the SUF for the Re-auctioned Spectrum as determined by auction, whichever is the higher. Under the re-assignment arrangement, incumbent 3G operators need to decide whether to exercise their rights of first refusal before the auction takes place. To apprise the incumbent 3G operators of the range of their financial commitment at the time of decision, there will be a cap for the SUF of the Right-of-first-refusal Spectrum at \$86 million per MHz.

For details about the abovementioned re-assignment related arrangements, please see the Statement published today, which is available at:

[http://www.coms-auth.hk/filemanager/statement/en/upload/237/ca\\_statements20131115\\_en.pdf](http://www.coms-auth.hk/filemanager/statement/en/upload/237/ca_statements20131115_en.pdf)

The consultancy report entitled "Re-assigning the Spectrum in the 1.9 - 2.2 GHz Band - Impacts on Service Quality and Customers of Adopting a Hybrid between Administratively-assigned and Market-based Approach" is also published today and is available at:

[http://www.ofca.gov.hk/filemanager/ofca/common/reports/consultancy/cr\\_201311\\_01\\_en.pdf](http://www.ofca.gov.hk/filemanager/ofca/common/reports/consultancy/cr_201311_01_en.pdf)

Communications Authority  
Commerce and Economic Development Bureau  
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