# SUBMISSION TO CONSULTATION PAPER ON PROPOSED SPECTRUM POLICY FRAMEWORK

# BY SMARTONE MOBILE COMMUNICATIONS LIMITED

### 1. INTRODUCTION

1.1 SmarTone Mobile Communications Limited ("SmarTone-Vodafone") is pleased to provide its comments in response to the Consultation Paper on Proposed Spectrum Policy Framework ("Consultation Paper") issued by the Commerce, Industry and Technology Bureau ("CITB") on 25 October 2006.

#### 2. SUMMARY OF KEY POINTS

- 2.1 In summary, SmarTone-Vodafone submits that:
  - The current consultation exercise has regarded some critical policy issues as longer term that could be dealt with later or subject to further study. This will defer decision made on these policies, thereby creating substantial regulatory uncertainties to the industry:
    - Issues like trading, refarming and liberalization of spectrum are important policy issues affecting the spectrum users' rights and the value of spectrum;
    - ~ Fixed-mobile convergence and telecommunications-broadcasting convergence are two unavoidable trends that the spectrum policy framework must look into:
    - Failure to address these issues in the long-term spectrum policy will create substantial regulatory uncertainties which make it difficult for industry players to assess the value of certain spectrum and make informed investment decision;
    - ~ The Government should address these issues as soon as possible by providing detailed and specific proposals for the industry to consider. This

will help to formulate a comprehensive long-term spectrum policy to clear uncertainty and allow the industry to make informed decision on spectrum issues.

- Considerations and policy objectives of the spectrum policy should include the following:
  - ~ Promoting fair competition and a level playing field in the electronic communications industry;
  - ~ Promoting long-term and sustainable investment from both new and existing industry players.
- On the proposals in relation to spectrum assignment, we submit that:
  - ~ Auction should be generally used in spectrum assignment;
  - ~ The reserve price set by the Government should be consistent with past auction for spectrum of similar nature;
  - Non-market-based approach in spectrum assignment should be fully justified and there should be a check and balance mechanism;
  - ~ There should be a review of the spectrum utilization fee ("SUF") policy so as to ensure that there is a level playing field among spectrum users.
- Licence renewal decision should consider implication to customer and service continuity. An efficient operator utilizing spectrum efficiently should have the first right of refusal upon licence renewal.
- A spectrum release plan as well as information about existing spectrum allocation and assignment should be published to enable industry stakeholders to make informed decision regarding spectrum.

#### 3. SCOPE OF THE SPECTRUM POLICY REVIEW

3.1 The Government first announced the decision to launch a spectrum policy review on 29 November 2004. The intention of the Government of embarking a comprehensive review of the long-term spectrum policy for Hong Kong covering all fundamental issues in relation to spectrum management was set out in the CITB's press statement, which said:

Given the rapid pace of advancement in technology development and deployment, we consider that a fundamental review of the policy for allocation and assignment of radio spectrum is warranted.

The objective of the review is to formulate a responsive, transparent and marketled spectrum policy to enable the community to reap the maximum benefit from the deployment of this scarce public resource as technology advances.

- 3.2 In the joint submission in response to the Consultation Paper on "Licensing Framework for Deployment of Broadband Wireless Access Analysis of Comments Received, Preliminary Conclusions and Further Consultation" dated 28 December 2005, the 13 telecom operators has made a request to the government that, consistent with international best practices, the spectrum policy review should cover the following issues:
  - What spectrum to be allocated to which services
  - Manner in which spectrum will be allocated
  - Whether spectrum trading is to be allowed
  - Whether spectrum pricing will be standardized
  - How interference issues are to be settled
  - Alignment with global best practices
- 3.3 In the same submission, the importance of the spectrum policy for the industry to make informed decision on spectrum auction was also highlighted:

"If investors were asked to participate in a spectrum auction, they would need to be provided with all essential information including: what is being auctioned, what service the relevant spectrum can be used for, how long they will hold the spectrum, whether the spectrum can be refarmed or traded, interference risks/protection, the licence terms on which the spectrum will be allocated, and the reserve price of the spectrum so that they can place an appropriate price tag on it and make informed decisions".

3.4 There is therefore a general expectation that the current consultation exercise, after almost two years preparation, should set out some detailed proposals to facilitate the discussions on all the key issues related to long-term spectrum management policy in Hong Kong. However, it is found that some issues as highlighted below are either insufficiently addressed or missing in the Consultation Paper.

# **Spectrum Trading**

- 3.5 Spectrum trading is generally regarded as a way to improve efficient use of spectrum, which brings substantial economic benefits. However, it is noted that the Consultation Paper has not set out any detailed proposal as to whether, how and when spectrum trading should be implemented in Hong Kong.
- 3.6 Ovum in its report has clearly recommended that spectrum trading should be implemented in Hong Kong. Under the market-based approach as advocated by the Government, spectrum trading will play an important role as it will allow market force to work for spectrum management decision. The market value of spectrum will be affected by the secondary market if spectrum is allowed to be tradable among stakeholders of the industry. To classify spectrum trading as a longer term issue and subject it to a feasibility study will certainly delay addressing the issue which is important to the industry and the community. The consequence is that Hong Kong will be left behind in the development of the secondary market of spectrum and delay the economic benefits that will be brought by spectrum trading as identified in the consultancy report.

# **Spectrum Refarming and Liberalization**

- 3.7 Similar to spectrum trading, spectrum refarming and liberalization are important policies that will affect the value of spectrum. Spectrum refarming refers to allocation of spectrum from one use to another. The need for refarming of a particular spectrum would normally arise when there is a potential higher value use of the spectrum. The effect of spectrum refarming to existing user of the spectrum will depend on whether the existing user will retain the right of use after spectrum refarming. Hence under a market-based approach where investors are required to bid for the right of spectrum, it is important for them to know whether the spectrum can be refarmed in the future for other use during the licence term.
- 3.8 Spectrum liberalization refers to the policy of allowing spectrum users to change the use of the assigned spectrum without the need of seeking consent from the regulator. While it is understood that spectrum liberalization is a more complicated issue than spectrum trading and refarming, it should not be put aside because of its complication. The industry would need to have a clear view as to whether there is any plan to introduce spectrum liberalization in Hong Kong in the medium or longer term, even the longer term

may be many years away, as such policy would substantially affect spectrum users and value of spectrum today.

# Convergence

Another important issue which should be addressed but not is convergence. It refers to both convergence between fixed and mobile as well as telecommunications and broadcasting. The trend of convergence is clear and unavoidable as the boundaries between fixed/mobile operators and telecommunications/broadcasting carriers are increasingly blurring with the technological development. The proposal put forwarded by the Government to establish the Communications Authority in Hong Kong is exactly to cater for such development in the market. However, the current spectrum management policy towards different stakeholders in the electronic communications industry is not on a consistent basis. For instance, while SUF is applied to 2G and 3G mobile operators, it is not applicable to both fixed operators as well as broadcasters although the more valuable spectrum under 1 GHz are mostly used by fixed operators and broadcasters. Pursuant to the principle of promoting efficient use of spectrum and to provide a fair compensation to the community for the use of valuable public resources, the Government should take the opportunity to review the SUF policy in light of the worldwide trend of convergence. While it is noted that the Ovum's report has recommended that commercial broadcasting service should access spectrum in the same way as other commercial telecommunications services (i.e., recommendation 6.4 in the Ovum's report), the Consultation Paper has not made any specific proposal in this regard nor to invite comments on such recommendation.

## **Way Forward**

3.10 SmarTone-Vodafone believes that the above issues warrant more detailed elaboration than what it is now in the Consultation Paper. They are important issues that should be addressed in the spectrum policy framework. They are important factors that the Government should aim to address in the Spectrum Policy so as to provide the necessary certainties to industry stakeholders. To regard these issues as longer term that could be dealt with in the future or subject to further study will defer the decision made on these policies, thereby creating regulatory uncertainties to the industry. Given that it is the objective to have a fundamental review of spectrum policy in Hong Kong, it is our view that the current consultation exercise should cover as fully and extensively as possible all issues related to spectrum management in Hong Kong. We therefore request

the Government to put forward more detailed proposals with regard to the above issues so as to enable further consultation with the industry.

#### 4. RESPONSE TO SPECIFIC ISSUES

4.1 SmarTone-Vodafone's responses to the specific questions put forward in the Consultation Paper are set out below.

CITB: Do you agree that the above considerations, i.e. future shape of radiocommunications, international developments, encourage investment, strategic considerations and fair compensation for the community, should be factored in Hong Kong's spectrum policy framework and the supporting spectrum management arrangements? Are there any other factors or considerations that should be taken into account?

- 4.2 Besides the considerations as listed in the Consultation Paper, SmarTone-Vodafone considers that the Government should include fair competition as a relevant considerations when devising the spectrum policy framework for Hong Kong.
- 4.3 Spectrum is a scarce public resource that is used to provide a variety of radiocommunications service including telecommunications, broadcasting, satellite and
  government services. Spectrum allocation and assignment decisions, such as what
  spectrum is allocated for a particular use, the amount of spectrum assigned and the
  spectrum pricing, will substantially affect the competitiveness of the spectrum users in
  the market. Spectrum policy is therefore in the heart of ensuring a level playing field
  among spectrum users providing similar services in the market. SmarTone-Vodafone
  submits that the spectrum policy framework and the supporting spectrum management
  arrangement should aim to promote fair competition in the electronic communications
  industry. Under a pro-competition policy as advocated by the Government, competition
  factor must be taken into account when devising the Hong Kong's spectrum policy
  framework.
- 4.4 One of the considerations set out in the Consultation Paper is to encourage investment by providing an open, transparent, objective and non-discriminatory policy and regulatory framework to the industry. It is recognized that consistency and predictability of regulatory decisions can reduce policy and regulatory risks that the

industry could face and thereby allowing industry stakeholders to plan ahead and make informed investment decisions (paragraph 22 of the Consultation Paper). SmarTone-Vodafone is in support of this principle and would like to supplement that investment here should mean both from existing and new operators in the industry. A policy that gives preference to new investors without having regard to the investment already made by existing investors would distort competition and market development. Such policy could not create a conducive environment for long-term investment which is most important to the telecommunications industry. Inconsistency in spectrum policy would only result in regulatory uncertainties which would adversely affect investment and employment in the industry. SmarTone-Vodafone therefore requests the spectrum policy framework should clearly set out that consistency and predictability of regulatory decisions is one of the key principles that should be followed when clarifying the matters in relation to spectrum allocation and assignment procedures (as listed out in paragraph 23 of the Consultation Paper).

CITB: Do you agree with the proposed spectrum policy objectives? Are there other spectrum policy objectives that the TA should take into account when making spectrum management decisions?

- 4.5 Similar to our comments in 4.3 and 4.4 above, it is considered that the spectrum policy objectives should include the following:
  - to promote a fair competition and level playing field in the market;
  - to promote investment from the industry by providing consistency and predictability in regulatory decisions in relation to spectrum management

CITB: Do you agree with the proposed guiding principle in spectrum management, especially that market-based approaches should be considered first for spectrum where there are competing commercial demands?

4.6 SmarTone-Vodafone agrees that the market-based approach (i.e., assignment of spectrum via auction) should be used in most circumstances. This will ensure that spectrum is put to its most valuable use and is used efficiently. It is considered that auction should be used with or without competing commercial demands. First the Government may not have full information about whether there are competing demands

in the market before the auction. It can only be known when the auction is carried out (for example, there were only four interested bidders for the available 3G spectrum in 2001).

4.7 The Consultation Paper proposes that the TA may not follow the market-based approach in spectrum management when there are overriding public policy reasons. SmarTone-Vodafone considers that the term "public policy reasons" can be very board and discretionary and therefore a check & balance mechanism should be in place to ensure the reasons given are fully justified and fair. It is not sufficient to just publish the public policy reason. There should be a full consultation before any decision made and the final decision should be subject to the endorsement of someone independent from OFTA (such as the Legislative Council).

CITB: Do you agree with the proposal to prescribe the circumstances under which spectrum assignment may be varied or withdrawn before the assignment expires? Are there other circumstances for variation or withdrawal of spectrum assignment before expiry that should be taken into account? What are your suggestions on the appropriate minimum notice periods?

4.8 To protect investment and service continuity, variation or withdrawn of frequency assigned before licence expiry should only happen in extreme situation. The current proposal as stated in the Consultation Paper is that "the TA should not vary or withdraw frequencies assigned to a licensee before the expiry of the spectrum assignment except in circumstances where public interest, or government policies and international obligations so require, or where interference between legitimate spectrum users, render it necessary to exercise such powers". SmarTone-Vodafone is concerned that public interest and government policies are not specific terms and can be interpreted widely. As this is a critical decision which not only affect the spectrum user but also the end-customers using the services provided by the spectrum user, the Government should clarify further on these points so as to give more certainty to the industry on how the Government may exercise such power.

CITB: Do you agree with the proposal of status quo for spectrum right after the expiry of a spectrum assignment, i.e. no legitimate expectation for renewal? What is you suggestion of the minimum notice period for the intention to change or not to renew the spectrum assignment of a licence where substantial investment in the underlying infrastructure is required?

4.9 The renewal of spectrum right for the 2G licences is based on whether the licensee has efficiently used the spectrum assigned. As a result, nine PCS and GSM licensees had the first right of refusal to renew their licences. We consider that such practice should be continued so that efficient licensee should have the legitimate expectation for renewal when their licence expiry so that service continuity can be maintained.

CITB: Do you agree that the TA should be required to undertake impact appraisals before initiating spectrum refarming exercises? What other arrangements should be put in place for spectrum refarming exercises?

4.10 As explained in paragraph 3.7 above, spectrum refarming has significant impact to existing spectrum users, good or bad depending on whether the spectrum user can retain the spectrum right after refarming. If a spectrum originally assigned to a user for a particular use and then the spectrum is later on refarmed to a better use, and the existing spectrum user can retain the spectrum right without having to pay extra SUF, then it would create an unfair situation to other competing users of the same spectrum. The Spectrum Framework Policy should therefore take into account the competition effect of spectrum refarming and set out clear direction as to whether, how and when spectrum refarming would be introduced. As a general principle, competition and cost/benefit analysis is a must before initiating any spectrum refarming exercise.

CITB: For non-licensees under the TO, do you have demand for spectrum rights? If so, what kind of spectrum rights would you seek? For licensees under the TO, what are your views on our proposal not to cover spectrum rights for non-licensees in the spectrum policy framework?

4.11 SmarTone-Vodafone considers that the status quo is fine and should be continued.

CITB: Do you support the proposal to publish 3-year rolling spectrum release plans for spectrum to be released to the market through open, competitive bidding processes? What types of information would you propose to include in the plans?

4.12 SmarTone-Vodafone in principle supports the proposal to publish a 3-year rolling spectrum release plans as it will promote transparency and certainties to the industry.

However, we consider that the release plan should not be confined to spectrum to be released through open, competitive bidding processes, but also include any spectrum that are planned to be released via non-market based processes. It will ensure that the industry have a full picture of spectrum availability and make informed decision. We do not see any reason why such information could not be made available to the industry. Further, we consider that information regarding existing spectrum allocation and assignment should also be published to promote transparency. Currently such information is not available. It is important for any potential investor to have a clear picture of not only what will be available in the coming 3 years but also what spectrum have been assigned to who in order to make an informed investment decision on spectrum.

CITB: Do you agree that the introduction of secondary trading of spectrum in Hong Kong can improve the efficient use of spectrum? How should potential anti-competitive behaviour in the spectrum market be addressed? How should gains in spectrum trading be treated? What are your views on other implementation issues identified by the consultant?

4.13 SmarTone-Vodafone in principle supports that spectrum trading should be implemented in Hong Kong as soon as possible. Spectrum trading will ensure spectrum is put to its most valuable use from time to time and will bring substantial economic benefits to the community as evidenced in other countries. As mentioned in paragraphs 3.5 and 3.6 above, it is our view that the government should put forward specific proposals on spectrum trading for further consultation so as to ensure that spectrum trading will be addressed in the Spectrum Framework Policy.

CITB: Do you agree that we should further monitor developments in other jurisdictions regarding spectrum liberalization before considering whether we should introduce it to Hong Kong?

4.14 As mentioned in paragraph 3.8 above, while it is understood that spectrum liberalization is a lot more complicated issue than spectrum trading and refarming, it should not be put aside because of its complication. The industry would need to have a clear view as to whether there is any plan to introduce spectrum liberalization in Hong Kong in the medium or longer term, even the longer term may be many years away, as such policy would substantially affect spectrum users and value of spectrum today.

CITB: Do you agree that the command and control approach for spectrum management should continue to be applied to spectrum for government services?

4.15 SmarTone-Vodafone considers that the command and control approach for spectrum used for government services should be gradually phased out. As a matter of principle, the market-based approach should be used and SUF should be applied for government used spectrum. This will ensure spectrum is efficiently used by government users. From an economic perspective, the SUF for government used spectrum should at least reflect the opportunity cost of the spectrum used. Such practice has been adopted in UK which has been proven to achieve the objective of promoting efficient use of spectrum.

CITB: Do you agree that SUF should be applicable to commercial use of spectrum irrespective of whether there is competing commercial demand? Do you agree that SUF for spectrum not released through auction should be set to reflect the opportunity costs of the spectrum?

- 4.16 SmarTone-Vodafone is of the view that SUF should apply irrespective of whether there is competing commercial demand. The considerations are as follows:
  - Spectrum is valuable resources and therefore it should generate a fair compensation to the community for the use of spectrum;
  - No one can assure whether there is market demand for the spectrum unless the spectrum is actually put to an auction;
  - With the policy of spectrum trading, refarming and liberalization, the value of spectrum may change over time – spectrum without market demand today may become valuable tomorrow;
  - Since it has been the policy of OFTA in assigning spectrum to 2G and 3G operators subject to the payment of SUF, other spectrum users should also subject to the same SUF to ensure fair competition in the market.
- 4.17 As regards the issue of reserve price for spectrum bidding, which was set by OFTA in previous auction, SmarTone-Vodafone considers that OFTA should ensure consistency in its regulatory decision so as to provide the necessary certainties to investors. The consideration is whether the spectrum price would create distortive effect to competition. It has been an issue considered by the Government in the 3G licence

bidding. A uniform royalty level was suggested at that time so that the successful bidders of 3G licence pay the same royalty fee percentage. It is to ensure that there will be a level playing field in the market. Following the same principle, the long-term spectrum policy should have considered whether the decision on spectrum pricing (i.e., the reserve price set for particular spectrum under any bidding process) would adversely affect competition. A sudden change of policy in spectrum pricing and assignment arrangement could destroy the precedents on which the market was built and investments were made. A stable framework is needed to enable long-term investment.

4.18 Lastly, SmarTone-Vodafone would like to request OFTA to undertake a review of the SUF policy in light of the market development. As stipulated in the CDMA 2000 consultation paper recently released by OFTA, there are a number of drawbacks associated with the royalty's scheme and it is proposed to adopt one-off SUF for new release of spectrum. Similar to the above, we urge the Government to assess the effect on competition if different SUF regimes are applied to competing users. Also, there are different rights and obligations associated with spectrum among different spectrum users, including fixed, mobile and broadcasting service providers. The Government should review the SUF in light of the trend of convergence.

**SmarTone Mobile Communications Limited January 2007**