

Achieving Effective Economic and Technical Regulation of Advanced Telecom Services to Foster Industry Growth

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Good noon, ladies and gentlemen,

It is my pleasure to speak at the 5th Annual 3G Mobile World Forum. Let me give you the agenda of my presentation. First, I will give you a brief introduction of our mobile market. I will then explain our current regulatory framework for mobile services. Finally, I will briefly mention two major policy reviews that we are conducting. These two reviews are important as it will help us to formulate our regulatory regime for the next generation mobile networks.

At present, we have six mobile network operators with ten 2G networks. Three of them are GSM networks. Six are PCS networks and one is CDMA. We have four 3G operators who are also operating the 2G networks. The 3G operators were licensed in October 2001 through open auctioning and they have subsequently launched services in 2004 and last year. We licensed only four 3G operators, not because we wanted to limit the number of players in the market, but because of the constraints in the availability of frequency spectrum. To allow other interested parties to participate in the mobile markets, we also license the operation of mobile virtual networks. As there is no frequency constraint, we do not set any limit on the number of mobile virtual network operators. There are currently seven mobile virtual network operators and these operators may commercially reach agreements with the 2G or 3G network operators for using their radio networks for the provision of 2G and 3G services.

As of October last year, we have a total of 8.4 million mobile subscribers, representing 121% penetration. Among these subscribers, about 20% of them are advanced mobile services customers. Our mobile coverage is almost ubiquitous, outdoor and indoor, road tunnels and underground. Prices of mobile services are affordable to consumers.

Similar to other markets in the world, the predominant usage of mobile services in Hong Kong is still voice communications. Comparing with some other countries such as Japan and Korea which have reached a data penetration rate of over 40%, we do find that the take up rate of our data services is slightly slower. I think this slow take up rate may be due to two reasons. First, Hong Kong people have been enjoying a flat rate charge for local fixed line telephone services since the introduction of telephone services in Hong Kong. It has become our habit to talk over the phone and it may take some time for us to change our “talking over the phone” habit. Second, the marketing strategies of our mobile phone operators have also been focusing on providing low voice call service to their customers in the past years. At present, we are enjoying a price as low as \$5 per month for 500 minutes. It is almost equivalent to flat rate charge. Another reason may be, unlike voice calls, in developing data content services, additional cost will need to be incurred. As we only have a population of about 6.94 millions, comparing with other countries, our mobile market size is relatively small. This means that our operators need to incur a higher cost for providing data and content services. However, with the subsequent launch of our 3G networks, I notice that our mobile operators have begun to adjust their marketing strategies by offering various data services packages at competitive prices to our consumers. In the market, a 3G operator is offering data packages at a price as low as 30 US cents per Mbyte.

Now, turn to our policy and regulation of mobile services. The foundation of our existing policy and regulation is market liberalization and competition. From basic economic theory, we all know that competition may lead to innovation and efficiency. No one can deny the benefits that have brought about by introducing competition in the international telecommunications services and transportation services such as airlines. Corporate users and consumers are having wider choices of services at lower prices. Resources have been more efficiently used by the competing firms in order to remain competitive in the market.

Our mobile services have been opened to competition ever since cellular service was introduced in the 1980’s in Hong Kong. We have all along been adopting a light-handed approach that relies on market forces to the

maximum. We will not intervene unless the market fails. All investment in the mobile services is market driven without government ownership or subsidy. We have no foreign ownership restriction. We start to move to adopt market mechanism to select licensees from the traditional “beauty contest” approach.

In licensing our mobile services, our licence selection criteria and procedures are open and transparent. Investors are able to calculate their own returns and assess their risks before they make their own commercial decision whether or not to enter the mobile market in Hong Kong. There is no regulatory exit barrier. Market exit is facilitated by mergers and acquisitions. To protect fair competition in the market, similar to our advanced economies, we have enacted the legislation on mergers and acquisition in 2003 in order to provide a clear framework for the investors to consider entry and exist. We would only consider intervention if the mergers and acquisitions would substantially lessen competition. Our minimum intervention policy on mergers and acquisitions can be seen from the recent mergers and acquisition activities in the telecommunications market in Hong Kong, e.g. PCCW, a fixed operator has acquired the shareholdings in SUNDAY, a mobile operator in July 2005, China Mobile, a mobile operator in Mainland, is acquiring the shareholdings in Peoples, a Hong Kong mobile operator.

To ensure that our mobile operators can compete in a fair environment, we have put in place a regulatory framework that conforms to the best practices in the world. Our regulatory framework adheres in every aspect to the regulatory principles set out in the Reference Paper in the basic telecommunications agreement under the auspices of the World Trade Organization. It is transparent and based on law, administered by an independent regulator. All the essential building blocks for a fair regulatory system have been implemented. These include a cost-based interconnection regime, mobile number portability to remove customer switching barriers, sharing of bottleneck facilities, access to limited resources such as mobile numbering, fair competition provisions in the telecommunications legislation, etc.

We do from time to time receive views that our mobile market in Hong Kong is too competitive as a result of fierce competition among the six

mobile operators. Prices stay slow and dampen investment incentive. We do not agree. It is true that our mobile market is one of the most competitive markets in the world, but we consider that there is no reason why competitiveness should dampen investment incentive. As long as we do not have any entry and exit barriers, it is entirely a commercial decision of the investors to enter or exit the market. Once they enter the market, as I mentioned earlier, we have a regulatory framework to enable them to compete in a fair environment.

Therefore, what the investors remain to look for before they decide to invest is whether they can identify the revenue stream that enables them to recoup their investment with the expected return. In Hong Kong, Hong Kong has a GDP per capita of US\$29,000. Consumers and users have the capability to pay for the services provided that the services meet their needs. On the corporate side, Hong Kong continues to be the capital for regional headquarters and regional offices for multinationals in the Asia Pacific. Our goals to be a regional centre for financial services, logistics, tourism and professional services all require the critical support of a world class telecommunications infrastructure. Our geographic location, our infrastructure, rule of law, clean government, simple and low tax regime, free flow of information, our talents, our entrepreneurship, etc. will ensure that Hong Kong will stay as a thriving business city in the years to come. This is a guarantee for increasing underlying demand for telecommunications services including mobile services as Hong Kong moves to a knowledge-based and high value-added economy that depends on the exchange of huge volume of information over the telecommunications infrastructure. On the consumer side, our population is prepared to embrace new technologies. Although for mobile voice services, we have reached a penetration of 121%. For mobile data services, our penetration is only 20%. There is still room for growth. What is required is the innovation and creativity of the service, content and application providers to deliver the services that the consumers need and are willing to pay for.

Prices may be competitive in Hong Kong, but this needs not be a deterrent for investment. The basic objective of doing business is to earn a return commensurate with risk. Monopoly rent is not required to induce investment. As there is also no reason that prices should stay

below cost. When the market functions properly, market forces will bring prices to a level that covers cost. We have in place fair competition provision in our telecommunications law to guard against predatory pricing. Effective competition is to lead to prices that cover costs including the cost of capital. As in all other market sectors, effective competition only prevents excessive prices. Effective competition will not deter investment.

Unlike 2G services, advanced mobile services such as 3G will mainly be content-based services. When it comes to the development of content and applications, we consider that creativity and a sense of keeping tab on the market and consumer demand are important. We believe an “open network access” mode of operation than a “walled-garden” approach which may restrict the users to the services applications and content chosen solely by the facilities-based operator supplying the connections for access. To facilitate the development of data and content-based services in Hong Kong, in our regulatory regime for 3G, we have mandated our 3G operators to comply with the policy of open network access, which aims to introduce greater competition at the content, application and service level while preserving sufficient investment incentives for licensees to roll out their network. The policy also enables parties who do not have the resources to bid for a 3G licence or who failed to obtain a licence to participate in the 3G market.

Under the framework of open network access, the 3G licensees must open up to 30% of their network capacity for use by non-affiliated service providers, including mobile virtual network operators and content service providers. To ensure a fair environment for competition, the 3G licensees must provide access to non-affiliated service providers on a non-discriminatory basis. We expect the policy of open network access can encourage small and medium sized content and service providers to develop more innovative and interactive multi-media services. Furthermore, this policy can undoubtedly facilitate the convergence of the mobile phone market with the fast expanding content provision market as well as the mobile commerce market. How effective is our open network access policy? I cannot tell you now as our 3G services are still in the embryonic stage. I hope I may have the opportunity to tell you in other future forum.

So far, I have introduced our existing policy and regulation of mobile services. In the remaining time, I will briefly tell you two major reviews that we are currently conducting. The results of these two reviews may form the future landscape of our regulation regime for the next generation mobile services. These two reviews are fixed-mobile convergence review and spectrum policy and management review.

As we all know, the advent of technologies has blurred the boundary between the telecommunications and broadcasting markets as well as the mobile and fixed services markets. Our operators, both mobile and fixed, when constructing, upgrading or expanding their networks, have equipped and will equip their networks with the capability to offer services that could be provided only by one type of network operator previously. For example, our cable TV operators' network platform is able to provide Voice over Internet Protocol, broadband Internet service and television programming services; our fixed operators can offer broadband Internet services and IP television services; our 3G network operators can offer mobile broadband Internet access; our terrestrial digital television broadcasters will also equip their networks with the capability to provide television programming services, telecommunications services and mobile data services.

Integrated customer premises equipment are and will soon be available in the market which allow end users to access a variety of services that would require multiple terminals previously, e.g. computer with multimedia players, GSM/Wi Fi handsets, GSM/DVB handsets. Service platforms are also converging due to advent of technologies. For example, broadband wireless technologies will enable the delivery of both fixed and mobile services; IP multimedia sub-system will support the delivery of both fixed and mobile services. All these convergences may lead to the convergence of market segments which are previously separate market segments.

In Hong Kong, the fixed and mobile services are regulated as two separate services. For example, there are now fixed number portability and mobile number portability, but no fixed-mobile number portability, the arrangement for interconnection charge payment between mobile and fixed operators is asymmetrical, a mobile network operator pays the fixed

network operator for call origination and termination, different access right to buildings, etc.

With the advent of broadband wireless access and other new technologies which can connect fixed customers or moving customers to the operators' networks, we consider that there is a need to review this separate regulatory regime for fixed and mobile services. We believe that the lift of the restriction that a particular service can only serve fixed or moving customers will allow plenty of scope for designing the service around the actual communications needs of the users, who can be expected stationary at some times and moving at other times. The result is that new and innovative services will emerge, bringing convenience to users and generating value to operators. We are conducting a review on the regulatory changes that are required to cope with fixed mobile convergence.

Another review is on our existing spectrum policy. Similar to most of the administrations, we currently adopt a centralized form of administration commonly known as the "command and control" approach in management of the spectrum. So far, except the selection of 3G licensees whereby we had used a hybrid pre-qualification and auctioning approach to select the 3G licensees, all the other spectrum licensees are selected by the regulator using the "command and control" approach. However, with the rapid technological advancement and market development, the "command and control" approach, based on centralised administration, may not be sufficiently responsive to the dynamic needs of the market. It may no longer be the most suitable approach for the efficient allocation and management of the spectrum as a scarce public resource. In fact, in a recent exercise in allocating spectrum for broadband wireless access, we have already seen the limitations of the existing "command and control" mode of spectrum management. The introduction of new services like broadband wireless access will have to await decisions of the regulator. Based on our experience in auctioning 3G licensees, we consider that economic mechanisms have provided an objective method of deciding who should operate in the spectrum, to value spectrum as a scarce and valuable public resource and to promote efficient use of the resource. Thus, it seems that an economic mechanism will do better to make similar decision on allocating

frequencies in other frequency bands such as those for broadband wireless access. We are now conducting a full review on our existing spectrum policy.

The main objective of the review is to formulate a responsive and transparent spectrum policy to enable the community to reap the maximum benefits from the deployment of spectrum. In our review, we will also study whether trading and/or liberalization of spectrum will bring benefits to our community and facilitate the introduction of new and innovative radiocommunications services.

As a result of the reviews, we expect that there will be changes in our existing regulation and policy. Changes will bring uncertainties and risks. As the regulator, it is our duty to minimize the regulatory risks to be faced by the operators. We need to make sure that the regulation is clear, predictable and transparent. If regulation is to change as a result of the reviews to cope with technological and market developments, we will make sure that the changes are decided and implemented after proper consultation with the parties affected. During the reviews of our regulation for fixed mobile convergence and spectrum policy, we will maintain close dialogue and exchange views with our operators. We will ensure that the industry players will be given the opportunities to express their concerns and participate to shape the regulatory evolution.

This concludes my presentation, thank you.