

Response to OFTA Consultation Paper of 21 March 2000
Licence Framework for Third Generation Mobile Services

Pacific Century Cyberworks (PCCW) is pleased to submit our response to the Office of the Telecommunications Authority's (OFTA's) consultation paper on the formulation of a licencing framework for Third Generation (3G) mobile services in Hong Kong.

Hong Kong is commonly recognised as being a pre-eminent telecommunications centre both in terms of wireline and wireless infrastructure roll-out, penetration and the availability of a host of telecommunications services. The objectives of any future licencing framework for 3G mobile services should undoubtedly aim to preserve and strengthen this status.

However, the introduction of 3G mobile services and the global trend towards convergence presents a new business paradigm for current 2G mobile service providers. The overall value chain and business model will change. Alliances and partnerships will become the norm and the overall value chain will be disaggregated. Network operators and service providers must migrate from the provision of voice and basic data services, e.g. through short-messaging, to the packaging and delivery of a variety of two-way multimedia content including voice and video content.

The success of players hoping to compete in this new paradigm will be driven by their ability to secure innovative content developed for individual end-consumers, i.e. for B-to-C type applications, and/or specific industries, e.g. bespoke applications. To support this demand, new content-focused businesses will have to be formed, cultivated and supported. PCCW's view is that the new 3G mobile paradigm will offer Hong Kong a chance to broaden its pre-eminence from telecommunications infrastructure and services to include content development, aggregation, applications and software development, systems integration, etc.

Our response to OFTA's consultation paper is thus based on the overall objective of upgrading Hong Kong to become a leading centre for the development of innovative content. The key benefit to Hong Kong would include the ability to grow and nurture an "export-oriented" industry led by start-up companies, such as the new "dot.com players" and more established content developers that seek to develop, aggregate and distribute content both regionally and globally, especially Chinese content that caters to the needs of the global Chinese community. Their success will equate to Hong Kong's success.

The principal requirement for developing and promoting a "world-class" content development industry is the timely and cost-effective availability of world-class, state-of-the-art communications infrastructure, including 3G infrastructure, fixed networks, etc. Hence, PCCW's responses to OFTA's consultation paper all support this overall objective.

OFTA Consultation Paper Reference Paragraph 4.14: *The TA invites comments from industry on his intention to select 3G licensees by evaluation based on merit.*

The current public debate on 'beauty contest' versus auction seems to be proceeding on a flawed assumption that auctions are a "perfect" mechanism in both economic and allocative terms. This assumption is plainly wrong. Auctions are subject to "game behaviour" by the participants; the UK's recent experience amply demonstrates how incumbents have an incentive to keep bidding simply to forestall new entry. Secondly, auctions promote one public policy agenda (namely, revenue raising - particularly for Governments needing to fund budget deficits) over all other public policy agendas including innovation, guaranteed infrastructure development targets, diversity in supply, sectoral promotion etc.

The inefficiencies of auctions are well known in many sectors. In telecommunications, the countries that have employed auctions in the past have had mixed results - the US and India have seen substantial default on licences (and, in fact, these countries never did get to collect all the money bid at auctions and they did not get fast service roll-out either). Auctions work well in markets where there are many buyers, technology issues are non-existent (or largely irrelevant), there are many (and frequently occurring) transactions, innovation is rare (or occurs slowly) and there is little in the way of speculation about future supply and demand conditions for new and largely unknown services. Hence auctions work well in commoditised markets such as raw materials, agriculture, minerals and residential property. These conditions do not apply in the case of complex sectors like telecommunications - particularly in the case of 3G services which as yet are conceptual services that may or may not meet the vague and largely ill-formed expectations of them.

An auction is effectively another form of taxation. While the Government is entitled to broaden the tax base by applying specific taxes to any sector of the economy, the fact that the Government would effectively be applying a discriminatory tax to mobile telecommunications users would need to be recognised. Arguably, such a measure ought to have been the subject of the Financial Secretary's Budget deliberations. This way if the Government were to be changing its previous spectrum allocation policies in order to raise revenue at the expense of its telecoms policies the context should be made known.

PCCW strongly feels that OFTA should support the awarding of 3G licences based on a "beauty contest" approach as opposed to an auction.

- PCCW feels that the awarding of 3G network operations licences should follow the same process as that used to award licences for fixed line services (e.g. FTNS) and fixed wireless services (e.g. LMDS). From a content development perspective, the technology deployed to transmit content to the customer should be irrelevant. Hence, there is no reason why 3G licence holders should be disproportionately financially burdened with an inflated licence fee, the likely result of an auctioning process, while service providers using other technologies

to deliver the same content are not paid this extra premium. The potential result to content developers could end up being disproportionately higher prices for delivering content through 3G infrastructure when compared with delivering the same content through fixed and/or fixed-wireless infrastructure.

- Many have used the argument that auctions be used given that spectrum is a limited resource. PCCW believes that all current and future spectrum licence holders, that operate networks and/or deliver services at any bandwidth, be treated equally. Given that the recent LMDS licencees were not required to enter into an auction for their spectrum licences, precedence would support a “beauty contest” approach for future 3G licencees. A “level playing field” would ensure that no spectrum network operator is disproportionately financially burdened - a burden that could be passed on to the eventual customers.
- It could be argued that the additional financial burden on the 3G licencees, resulting from an auctioning process, could slow down the roll-out of 3G infrastructure in Hong Kong. Future 3G operators will be deploying both regional and potentially global strategies requiring them to seek licences in multiple markets. To achieve their business plan targets, 3G players will have to build economies of scale, share knowledge across its investments and/or markets, share back-office infrastructure, etc. The additional financial burden on players resulting from auctions will mean that those players holding licences in multiple markets will have to prioritise their network roll-out expenditures. For example, [HK's incumbent operators if faced with making a choice between bidding excessively at auction and pursuing licences by 'beauty contest' elsewhere could well decide in favour of the later. This could deprive HK of the best operators in exchange for those that would pay the most \(whether their auction bids proved wise or not\).](#)
- The additional financial burden resulting from an auction could prevent those 3G players holding a Hong Kong licence *only* from competing effectively against other 3G players who have been granted additional 3G licences (in other markets) by way of a “beauty contest”. Even though it could be argued that the price of 3G services would have to be competitively priced regardless of the initial investment, the additional premiums paid by these “local players” will undoubtedly influence the price of their 3G services forcing the cost of content to be higher in Hong Kong than in other markets.
- [The Government in choosing an allocative process for spectrum for new services needs to also consider the consequences of a failed outcome from a spectrum auction. The grant of spectrum to an operator that subsequently cannot finance its acquisition cost or the cost of rolling out a viable service cannot merely be shrugged off as bad luck. It may take years for the market to rectify such a situation in which case the Government would have lost an opportunity to allocating the spectrum to an operator that would have done a better job of putting the spectrum to use but who had been denied the spectrum because in](#)

exercising its responsibilities to its shareholders it declined to make exorbitant auction bids.

- Finally, the beauty contest has worked well in HK since substantial market opening opportunities have been made such that the market has subsequently been allowed to consolidate according to the market's ability to support a given number of operators. Such a consolidation becomes increasingly problematic where licensees have the additional burden of auction fees to contend with. HK should not throw away a system with which it has had good experience just because others adopt different mechanisms in the light of their own specific circumstances.

In conclusion, OFTA's policies for issuing telecommunications licences by way of "beauty contests" has served Hong Kong well. Hong Kong has become a pre-eminent telecommunications centre. PCCW strongly believes that this same approach will continue to serve Hong Kong well, broaden its pre-eminence to include content development and software development and support the overall economic development of Hong Kong in the "information age".

OFTA Consultation Paper Reference Paragraph 4.6: *The TA has not yet formed a view on the preference for any one of the above licensing options and would like to seek comments from the industry prior to making a final decision.*

PCCW strongly feels that OFTA should issue the maximum number of 3G licences as possible *given the current spectrum availability limitations*. It is commonly agreed that the maximum number of 3G licences that could realistically be issued, i.e. ensuring that each licensee has enough spectrum to compete on a level playing field and deliver a full-range of 3G services, is six. Hence, PCCW would support the issuing of six licences.

- A greater number of licences will promote greater competition and demand for content. Consumers will end-up paying more competitive rates for future 3G services
- In 2G mobile services, six operators have served Hong Kong well as the mobile penetration rate in Hong Kong is among the highest in the world. These operators have and are currently supporting the local content and applications development industry by teaming up with local developers and forming alliances and partnerships. The growth of local content development firms would be limited without these partnerships and alliances. PCCW feels that each of these existing players be therefore given a fair chance to obtain a 3G licence, by making six 3G licences available and not giving any specific preference to "new entrants".
- The distinction between incumbents and 'new entrants' is tenuous. For example, in which category is a consortium that contains an incumbent and new partners? What happens if an incumbent subsequently acquires a "new entrant"? What is to stop an incumbent setting up a subsidiary "new entrant" on a seemingly arms' length basis? Thus it would be inadvisable to allocate different amounts of spectrum to incumbents and new entrants

- OFTA has stated its intention of maintaining existing levels of competition, i.e. six players. This level of competition has served Hong Kong well, therefore, it would be appropriate to issue six 3G licences to maintain current levels of competition.

OFTA's policies here and the current six 2G licencees have served Hong Kong well. Six licences will promote healthy competition and support the rapid introduction and usage of 3G services. This growth will consequently support the content development industry in Hong Kong.

In summary, PCCW hopes that the licencing framework for 3G mobile services will promote the growth of the local content and applications development industry and elevate it to "world class" levels. PCCW feels that the growth in this industry will play a key role in supporting the future economic growth in Hong Kong. To facilitate this growth, PCCW strongly suggests that OFTA formulate a licencing framework that supports a minimum of six 3G licences and that licences are awarded using a "beauty contest" approach.