

Update on the Telecommunications Industry in Hong Kong

Presentation by Mr M H Au, Director-General of Telecommunications, Hong Kong Special Administrative Region at a Meeting Organised by the London Office of the Hong Kong Economic and Trade Office and the Asia-Pacific Technology Network in London on 28 June 2006

Good afternoon, Ladies and Gentlemen,

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Thank you very much for coming here to listen to my talk about the telecommunications industry in Hong Kong.

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Today I am going to give you a briefing on the latest developments in the telecom market in Hong Kong, why you should consider investing in Hong Kong's telecom industry, or make it a communication hub in your global network, and how Hong Kong's regulatory environment facilitates investment.

Hong Kong Telecommunications Market

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The success of Hong Kong as a regional finance, commerce, logistics and tourism centre depends critically on the availability of a reliable and efficient communications infrastructure.

The coverage of our broadband infrastructure is extensive. The ADSL network of the incumbent operator covers 98% of households. The cable TV operator's cable modem service covers more than 90%. The self-built customer access networks of other operators cover 71%. A variety of speeds are available – from the lowest 1.5 Mbps/640 kbps asymmetric up to 100 Mbps/100 Mbps symmetric.

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The prices are also very competitive – for example, a 100 Mbps symmetric

service of one operator sells for US\$30 per month. Due to the affordable prices, practically all households with connections to Internet are connected through broadband. The household broadband penetration is 65%. The population penetration is 23%. As a result of the competition, operators bundle different products on the broadband connections, such as IPTV, IP telephony, etc. The IPTV household penetration of 25% is the highest in the world.

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Four 3G networks are in operation, based on W-CDMA. 10% of all mobile customers are 3G users. The 3G networks are now being upgraded to HSDPA. There are five 2G/2.5G network operators. Prices are extremely competitive and affordable to all. The mobile penetration is therefore around 123% including pre-paid and post-paid customers.

Investment in Hong Kong

Opportunities of the City

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As a city, Hong Kong offers many opportunities to potential investors.

Hong Kong has a free and open market. Hong Kong believes in free enterprise, free trade and open market. It is the freest economy in the world¹ - with no foreign investment and ownership restrictions, no trade barriers², no foreign exchange controls.

Hong Kong is the Gateway to Mainland China. Hong Kong has played this role for more than 150 years. The Closer Economic Partnership Arrangement (CEPA) gives Hong Kong some additional Mainland market access benefits. The cooperation between Hong Kong and the other parts of the Pearl River Delta has proved beneficial to all sides. For example, the Pearl River Delta has become the manufacturing centre while Hong Kong has become a centre for management expertise, information, finance and professional services.

¹ Rated by various agencies (such as Heritage Foundation, Wall Street Journal and Fraser Institute of Canada)

² There are no tariffs, no quotas, no exceptions

Hong Kong has a low and simple tax system³.

Hong Kong has a well developed capital market. The Hong Kong stock market capitalization is second in terms of size in Asia.

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Hong Kong has excellent infrastructure, for transportation⁴, power, water and telecommunications. Hong Kong is connected to rest of world by ample capacity of submarine and overland cables.

Hong Kong has an excellent legal infrastructure. Rule of law is fundamental to Hong Kong's success. There is comprehensive intellectual property right protection.

Hong Kong is ideal in geographic location as a transportation and logistics hub of the region. Hong Kong is at the southeast coast of China. The whole country is Hong Kong's hinterland. Hong Kong is at a convenient distance from most of Asia⁵.

Hong Kong has supply of intellectual and service-oriented workforce with trilingual capability.

Opportunities of the Telecommunications Industry

When it comes to investment in the telecommunications industry, Hong Kong also offers great opportunities.

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Hong Kong has a population of 6.8 million. The size of the market is comparable to a medium-sized country.

The population and building density in Hong Kong means that it is possible to rollout networks to cover a large proportion of the population at a relatively low cost per customer and in a reasonably short period.

³ Many types of tax such as capital gain tax, withholding tax in dividends and interest, inheritance tax, value-added tax, are not in Hong Kong.

⁴ Road, airport, port, container terminal

⁵ Most countries can be reached within five hours of flight

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Hong Kong is a developed economy, with GDP per capita of over US 25,000 in 2005. The expected growth rate this year is 4 to 5 %

Hong Kong is a regional hub for finance, commerce, logistics and tourism. The intense activities in these sectors guarantee demand for telecommunications services.

Hong Kong has a tech-savvy population and is ready to embrace new technologies.

Regulatory Environment

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Last but not least, Hong Kong has a regulatory environment favourable to potential investors.

The first aspect of our regulatory environment is open market. There are no regulatory entry barriers. The number of operators is decided by the market unless there are physical constraints such as spectrum availability limiting the number of licences that can be issued. There is no foreign ownership restriction on any telecommunications operator.

The second aspect of our regulatory environment is a level playing field. Once an investor has come into the market, its success and failure is decided by the merits of its products or services. The regulation is technology-neutral – there is no preference for or discrimination against any particular technology. As effective competition has developed in all sectors of the telecommunications market, we have lifted the asymmetric regulation on the incumbent operator. All operators are therefore treated alike and are expected to compete fairly. Although there is so far no general competition law in Hong Kong, there is a sector-specific competition law to safeguard competition in the telecommunications industry.

The third aspect of our regulatory environment is its transparency and predictability. The industry is regulated by OFTA, vested with all the necessary powers under the Telecommunications Ordinance to administer licence conditions, make determinations, and impose sanction for breaches.

OFTA has aimed to implement a transparent and predictable regulatory environment. All decisions are based on law, with reasons published and there are ample checks and balances through the court and appeal board systems. Consultation is made before any changes affecting the interest of stakeholders are made.

Regulatory Principles

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To ensure that our regulatory environment remain favourable, we are conscious to adhere to regulatory principles that are in line with international best practices:

The regulatory policy is market driven. Regulation is applied only to address market failures to achieve the desired public policy objectives.

The regulation is proportionate. We always apply the minimum necessary remedies to deal with market failures.

The application is evidence-based. The case of intervention is established based on the facts and circumstances of each case.

The regulation is technology neutral. There is no discrimination or preference given to any class of operators or technologies.

The regulation is up to date. It will not hinder new technological development.

Past Deregulation Trends

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Based on these principles, we have in the past two years completed a number of reviews and have initiated a series of deregulation measures.

As the market is competitive, the regulator has lifted *ex ante* regulation on the incumbent operator. Since the liberalization of the local fixed network market, we have applied *ex ante* approval requirement on the tariff of the incumbent operator who was presumed to be dominant in the market. This is

to ensure that competition can emerge in the market without hindrance by anti-competitive pricing. As the market becomes more effective, such *ex ante* approval requirement was considered to be no longer necessary and could dampen the competition that the *ex ante* regulation was intended to promote. Therefore we have terminated the asymmetric regulation on the incumbent from January 2005. All operators in the market observe the same set of rules. Fair competition is safeguarded by the competition provisions in our Telecommunications Ordinance. After this lifting of the *ex ante* regulation on the tariffs of the incumbent operator, the regulator no longer regulates prices at the retail level in all sectors of the telecommunications market.

A sunset date has been set on the unbundling of local loops. As I have mentioned, apart from the near full coverage of the incumbent's ADSL network and cable TV operator's cable modem service, 71% of our households are within the coverage of at one alternative access network of new entrants. Four 3G networks with territory-wide coverage are in operation. We estimate that it is economically feasible to lay fibres to buildings covering about 80% of our households. The majority of the remaining 20% can be served by wireless technologies such as Broadband Wireless Access. Therefore, the local loops of the incumbent can no longer be regarded as essential facilities in most cases. To promote facilities-based competition, we have set a termination date of end of June 2008 for phasing out mandatory unbundling of local loops at the telephone exchanges of the incumbent. After this date, unbundling can still be available through commercial agreement or mandated by regulation in the small number of locations where the local loops remain as "essential facilities".

We have completed a review on Voice over IP regulation and introduce the minimal regulation only to protect consumer interest. Operators can be facilities-based and services-based. Telephone numbers will be made available to both types of operators. Broadband access providers are not allowed to block the access to these VoIP services by their customers.

Future Regulatory Developments

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A number of regulatory reviews are in progress.

Communications Authority: The Government has planned to set up a

Communications Authority by merging the existing Telecommunications Authority and Broadcasting Authority. This is to recognise the convergence of the telecommunications and broadcasting industry. The aim is to ensure that our regulatory environment will be favourable to facilitate the development of convergent services.

Spectrum Policy Review: The Government has initiated a review of the radio spectrum management policy. The Government proposes to rely more on market mechanisms in managing the allocation and assignment of spectrum instead of the so-called “Control and Command” systems based on administrative decisions. The aim is to ensure that spectrum is available to meet increasing demand from new wireless technologies.

Fixed Mobile Convergence: The boundary between the fixed and the mobile sectors of the mobile industry is increasingly blurred. The regulator is examining the existing regulation, including interconnection charges, carrier licensing arrangement and proposes the changes necessary to facilitate the convergence of the two sectors. The key issues being examined are the current asymmetric interconnection charging arrangement between fixed and mobile networks and the separate licences for fixed and mobile carriers.

Universal service obligation: With the emergence of new radio technologies that can economically reach customers in remote areas and the VoIP services bypassing the conventional circuit-switched networks, we are reviewing our universal service arrangement to make sure that we have an efficient system to fulfil the universal service obligation and a fair system to share the cost.

Next Generation Networks: We consider that the Next Generation Network environment will provide excellent opportunity for innovation. We shall make sure that we shall maintain the most favourable environment for NGN investment. At present, our thinking is that we do not need to over-regulate. No bottleneck is expected to exist at the lower layers of access and transport in the Hong Kong environment. Regulation in upper layers of control and application would be considered only if market failures are identified.

Conclusion

Ladies and Gentlemen, over the past 20 minutes or so, I hope I have given you

some information for you to consider Hong Kong in your next business planning. If you need additional information, our Economic and Trade Office and OFTA stand ready to assist.

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Before concluding my presentation, I would like to take this opportunity to remind you of a very important telecommunications event that will take place during 4 to 8 December this year in Hong Kong. This is the ITU TELECOM WORLD 2006. This is the first time that this top event of ITU is held outside Geneva. Hong Kong is honoured to host this event. We are expecting 800 exhibitors, 70,000 to 90,000 visitors. All the top telecommunications companies in China will be there. This is an excellent opportunities to build business relationship for participation in the huge Chinese telecommunications market. We are expecting 2,000 delegates, with over 150 ministers, director-generals and 600 CEOs, attending the policy Forum. Therefore please mark you diary if you have not done so. I look forward to meeting you in Hong Kong in December.

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Thank you.