Box 3.1

Mobile data services in Hong Kong

Being one of the most sophisticated and successful telecommunications markets in the world, the public mobile service market in Hong Kong has seen rapid developments through the years. Featured by quality services at affordable prices, a wide variety of services available, keen competition and a level playing field, there is a widespread use of mobile services in Hong Kong. With a total of 14.9 million mobile service subscribers in Hong Kong at end-2011(1), the penetration rate (the ratio of subscriber to population) was equivalent to around 210% and was one of the highest in the world.

In recent years, stimulated by increasingly reliable and faster data transmission services and greater availability of smartphones, the demand for data-related services in the public mobile services market has exhibited spectacular growth. One vivid example is the jump in subscribers for 2.5G/3G mobile services, which provide a wide array of mobile data services such as mobile internet services, social networking services, video calls and entertainment services. The number of 2.5G/3G mobile services subscribers surged by 1.5 million per annum in 2009-2011, sharply above the average increase of 0.6 million per annum during 2003-2008. As a result, the share of these subscribers in total mobile service subscribers rose gradually from 10% at end-2003 to 31% at end-2008, and then rapidly to 54% at end-2011. The mobile data market is further advanced with the launch of the first 4G-LTE mobile network in Hong Kong in November 2010.

Chart 1: 2.5G/3G mobile services subscribers

Note: (^) Data not available before 2002.

(1) Mobile service subscribers include mobile users with pre-paid and post-paid SIM card for 2.5G, 3G, mobile virtual network operators and other services.
The volume of mobile data traffic has also exhibited exponential growth. Total mobile data usage per month soared from a meagre 0.1 terabytes (TB) in 2003 to 69 TB in 2008 and further to 2,792 TB in 2011. On a per 2.5/3G customer basis, the usage per month also surged from a 0.2 megabytes (MB) in 2003 to 22 MB in 2008, and further exploded to 393 MB in 2011. These were equivalent to average annual growth rates of 145% and 162% respectively during 2004-2008 and 2009-2011.

Looking ahead, the ever growing interest in various mobile data services and applications, such as video streaming, social networking and location services, is expected to continue to fuel the growth in mobile data traffic. As such, it is vital for the mobile industry to invest in additional network capacity to ensure the provision of high value-added and creative services. Meanwhile, the Government will continue with the policy of ensuring timely release of new radio spectrum to the market as a key enabler to network capacity expansion. Following the release of 90 MHz of unpaired spectrum in the 2.3 GHz band in February 2012, the Office of the Communications Authority is planning for the release of 50 MHz of paired spectrum in the 2.5/2.6 GHz band in the first quarter of 2013. To facilitate efficient use of frequency spectrum at all time, the Commerce and Economic Development and the then Telecommunications Authority jointly launched a consultation in March 2012 on the possible arrangements for the frequency spectrum in the 1.9 – 2.2 GHz band upon expiry of the current assignments for 3G mobile services in 2016.