



Telecommunications

Overview

Hong Kong has one of the most sophisticated and successful telecommunications markets in the world. This has been an important factor in Hong Kong's development as a leading business and financial centre. The telecommunications sector employed around 18 000 persons in 2024, whilst its gross output amounted to HK\$117 billion in 2023.

All sectors of Hong Kong's telecommunications market have been liberalised with no foreign ownership restrictions. The government's objectives are to provide a level playing field in the telecommunications market and ensure that consumers get the best services available in terms of capacity, quality and price.

The Communications Authority

The Communications Authority (CA) is an independent statutory body established under the Communications Authority Ordinance (Cap. 616) on 1 April 2012, comprising 10 non-officials from various sectors of the community and two public officers. The CA is a unified regulatory body for the broadcasting and telecommunications industries in Hong Kong. It regulates the broadcasting and telecommunications industries in accordance with the Broadcasting Ordinance, Telecommunications Ordinance, Communications Authority Ordinance, Broadcasting (Miscellaneous Provisions) Ordinance, Trade Descriptions Ordinance and Competition Ordinance. It also enforces the Unsolicited Electronic Messages Ordinance.

The Telecommunications Affairs Committee is set up under the CA to offer advice and report to the CA on relevant telecommunications matters.

The Office of the Communications Authority (OFCA), the CA's executive arm and secretariat, helps the CA administer and enforce the relevant ordinances governing the broadcasting and telecommunications industries.

Local Fixed Carrier Services

The local fixed carrier services market is fully liberalised. There is no pre-set limit on the number of licences issued, nor deadline for applications. Furthermore, there is no specific requirement on network rollout or investment. The level of investment is determined by the market.

As at February 2025, there were 29 licensees permitted to provide local fixed carrier services on a competitive basis. They are PCCW-HKT Telephone Limited and Hong Kong Telecommunications (HKT) Limited, HKBN Enterprise Solutions Limited, HKBN Enterprise Solutions

HK Limited, HGC Global Communications Limited, Hong Kong Broadband Network Limited, Towngas Telecommunications Fixed Network Limited, ComNet Telecom (HK) Limited, TraxComm Limited, HKC Network Limited, Hong Kong Cable Television Limited, Reach Networks Hong Kong Limited and Reach Cable Networks Limited, Telstra International Limited, Verizon Hong Kong Limited, SmarTone Communications Limited, Vodafone Enterprise Hong Kong Limited, Hong Kong Telecommunications (HKT) Limited, China Mobile Hong Kong Company Limited, VNET Group Limited, NTT Com Asia Limited, China Telecom Global Limited, PCCW Global (HK) Limited, Xenith IG Hong Kong Limited, China Unicom (Hong Kong) Operations Limited, Village Telephone Limited, Easy Tone Network Limited, China Mobile International Limited, Console Connect (HK) Limited, HKT Global Operation (HK) Limited and Fiber Link Global Limited.

As at March 2024, 92.5 per cent and 81.3 per cent of residential households were able to enjoy a choice of at least two and three local fixed networks respectively.

Fixed-line users can make an unlimited number of calls within Hong Kong on payment of a fixed monthly charge. Internet protocol telephony services are also available in the market. Further, under the unified carrier licence jointly held by PCCW-HKT Telephone Limited and Hong Kong Telecommunications (HKT) Limited, the licensee has a universal service obligation to provide a good, efficient and continuous basic service, including the provision of telephone services to consumers anywhere in Hong Kong within a reasonable period of time.

As at February 2025, there were around 3.27 million fixed lines, including about 1.69 million lines for residential customers. The telephone density was about 43 per cent by population or 61 fixed lines per 100 households, which was among the highest in the world.

Local fixed carriers are required to facilitate fixed number portability which enables consumers to switch to another local fixed operator without having to change their telephone numbers.

Fixed Broadband Services

Fixed broadband Internet access services are very popular in Hong Kong. With the increased competition and coverage of broadband service using asymmetric digital subscriber line (ADSL), fibre-to-the-building (FTTB) / fibre-to-the-home (FTTH), hybrid fibre coaxial cable and other technologies, broadband networks cover virtually all commercial buildings and households. As at February 2025, there were 337 Internet service providers licensed to provide broadband services, and about 2.99 million registered fixed broadband service subscriptions. Fixed broadband services are currently available at speeds up to 50 Gbps (Gigabits per second). In the residential market, 97.1 per cent of the households are using fixed broadband service. The local FTTH/B residential unit coverage rate has reached 92.8 per cent. Hong Kong ranked fifth out of 86 economies in terms of FTTH/B household penetration according to a report published by the Fibre to the Home Council Europe in 2025. In addition, the Speedtest Global Index published by Ookla ranked Hong Kong top three globally in 2024 for the median upload and download speeds over fixed broadband at 230.65 Mbps and 306.58 Mbps respectively in December 2024.

Operators have been actively providing services with Wi-Fi networks. As at February 2025, there were 85 510 public Wi-Fi hotspots in the city. Free Wi-Fi services were available to the public in 1 642 government premises.

External Telecommunications Services

As at February 2025, there were 188 licensees authorised to provide external telecommunications services (ETS) in Hong Kong.

International Direct Dialing (IDD) service to most countries and regions of the world is available. In 2023, the traffic minutes of outgoing and incoming IDD calls were 807 million and 506 million respectively.

Competition has resulted in a substantial reduction in IDD call rates and improved quality of services.

External Telecommunications Facilities

As at February 2025, there were 41 licensees permitted to operate either external cable or non-cable based facilities for the provision of external telecommunications services.

Hong Kong adopts the open sky policy in regulating the provision of satellite services. Satellite-based telecommunications and television broadcasting services are provided via a multitude of satellites in the region with more than 160 transmitting/receiving satellite antennae in earth stations operated by a number of fixed carriers. As at February 2025, there were three licensees operating ten satellites for the provision of satellite communications services.

As a major telecommunications and internet hub in the region, Hong Kong has eight submarine cable landing stations connected to 12 regional and transcontinental

submarine cable systems. The landing stations also connected to the Mainland via 25 overland cables. As at December 2024, the total equipped capacity of external telecommunications facilities was over 284 130 Gbps.

Mobile Services

Competition in public mobile services is vibrant. Currently, there are four major mobile network operators, namely China Mobile Hong Kong Company Limited, Hong Kong Telecommunications (HKT) Limited, Hutchison Telephone Company Limited and SmarTone Mobile Communications Limited, providing a wide range of public mobile services. The availability of mobile number portability service since March 1, 1999 has contributed to promoting effective competition among the mobile network operators as it allows customers to retain their telephone numbers when they switch to another mobile network operator.

In February 2025, the number of mobile service subscriptions was 27.23 million, remaining one of the highest penetration rates[#] in the world at 351 per cent. Among them, over 99% were 4G/5G service subscriptions. According to the research finding provided by GSMA Intelligence, Hong Kong ranked first in the Asia-Pacific region in the 5G Connectivity Index for the third quarter of 2024. According to the Affordability of ICT Services 2024 report jointly issued by the International Telecommunication Union and the Alliance for Affordable Internet, Hong Kong ranked first in mobile-voice affordability out of 208 economies globally. In addition, Hong Kong ranked first in mobile data-and-voice (low-consumption) affordability, second in mobile broadband affordability, and third in mobile data-and-voice (high-consumption) affordability out of 207 economies globally.

Other than basic voice services, mobile data services are very popular among consumers. In February 2025, monthly local mobile data usage surged to 218 873 Terabytes, or an average of about 28 805 Megabytes per capita[#]. This represents a growth of 1.17 times in the mobile data usage over the same period in 2024.

The four major mobile network operators launched their 5G services from April 2020 utilising New Radio (NR) technology. With enhanced Mobile Broadband (eMBB) in 5G technology, mobile service subscribers are able to enjoy data download speed of up to 20 Gbps^{##}. Together with massive Machine Type Communications (mMTC) and Ultra Reliable and Low Latency Communications (URLLC), 5G technology is changing our mode of communications and enables the development of various innovative applications.

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[#] Calculations of mobile penetration rate and mobile data usage per capita do not include machine type connections.

^{##} The ITU has set the targeted download speed for eMBB under ideal circumstances at 20 Gbps. However, the actual data download speed will be affected by various factors including but not limited to the number of subscribers, user devices, network coverage, frequency bands and amount of spectrum used, network settings, network traffic, etc.