More bandwidth
More diversity

Operations Review: Fixed-line Business

As a trusted network operator and ICT adviser, HGC is dedicated to providing customers with one-stop solutions via extensive and advanced infrastructure and facilities.

HGC

HGC continues to address the needs of international and local carriers, as well as corporate clients and residential customers, through an extensive fibre network now extending to more than 1.4 million kilometres and able to serve new data centres.

A 100G fibre backbone network stretching throughout Hong Kong Island, Kowloon and the New Territories enables HGC to offer the ultra-high speed MetroLambda-X Wavelength-Division Multiplexing ("WDM") network service, with super low latency of less than one millisecond.

This enhanced network also supports more than 16,000 Wi-Fi hotspots, making HGC the largest-scale Wi-Fi service provider in Hong Kong. Many of these hotspots are also served by a 1000Mbps fibre backhaul network to carry Internet content at high speed.

International and Local Carrier Business

HGC continues to tap new markets by enriching service portfolios around the world, horizontally and vertically.

On the horizontal axis, HGC has extended global reach following strategic investment in diverse submarine and terrestrial cable systems. Our business reach extends to locations as far flung as Denmark and Djibouti, and into regions such as the Middle East and Africa, as well as various hard-to-enter markets.

HGC's extensive fibre network now stretches more than 1.4 million kilometres.

Vertically, big data and smart device trends prompted us to develop new services in areas such as cloud computing and data centre hosting. Over-The-Top, Application and Content Providers ("ACP"), game providers and eCommerce enterprises now benefit from our ACP solution. This provides one-stop service from project management to hosting and network, while meeting and matching with global eyeballs, with the aim of taking services to the global market.

HGC explores the huge potential held by cloud computing technologies.

As well as serving the **3** Group, HGC's Internet Packet Exchange Platform ("IPX") solution delivers reach to a rising number of mobile network operators, which are now able to exchange all kinds of mobile traffic at higher speeds in a more cost-effective manner. In addition, their end customers are better able to roam seamlessly.

Pioneering on-demand cloud connectivity, On-demand Virtual Lease Line ("ODVLL") and Dedicated Bandwidth-as-a-Service ("DBaaS") has enabled us to attract game providers, corporations and application developers. HGC serves them with instant connectivity via our cloud platforms and Multiprotocol Label Switching ("MPLS") network. Ongoing expansion has taken our service scope beyond Hong Kong, mainland China and the United States of America (the "US") to other continents, as well as enabling HGC to develop relationship with overseas corporate and business market customers.

HGC now benefits from voice interconnections with more than 390 carriers, along with direct mobile connections to 190-plus mobile operators in more than 90 countries. HGC also provides video coverage in 58 countries via 160 carriers.

HGC has been equipping mobile base stations with optical-fibre infrastructure as a leased-line backhaul service since the advent of 2G communications. This has enabled us to cope with ever-rising levels of data traffic such as that generated by smartphone popularity and the introduction of 4G LTE. Over the years, HGC has progressed from low to high-speed Metro Ethernet connectivity, followed by Gigabit Access.

In 2014, HGC became the first local telecommunications operator to deploy a 100G submarine cable backhaul solution based on WDM technology called Metro Lambda. Boasting super low latency of less than one millisecond, this highly-resilient service now links a Hong Kong submarine cable landing station with a data centre for a major US-based carrier.

Corporate and SME Market

Corporate community of Hong Kong continues to rely on ICT services from HGC that include voice, broadband, network and IT offerings. HGC is adept at managing the needs of banking and financial institutions, as well as organisations in the public sector. Year 2014 saw launch of the WiseNET data service, powered by an Metro Ethernet Forum ("MEF") Carrier Ethernet 2.0 platform. This provides our customers – financial institutions in particular – with high-speed, reliable and secure networking for mission-critical applications such as data centre interconnection and extension of securities trading networks.

HGC is a provider of telecommunications infrastructure with a reputation for innovative application of leading-edge technologies, so is ideally positioned to tailor cloud solutions to unique customer needs. Such provision enables organisations to minimise the often prohibitive cost of purchasing and maintaining equipment. Our expertise in this burgeoning area also enables customers to operate with greater flexibility and business agility, with the bonus of being able to channel manpower from routine IT operations to more profitable core business activity.

Cloud-based video conferencing enables enterprises to save cost.

Big data and smart device trends prompted HGC to develop total cloud solutions.

HGC bizCloud

HGC eduCloud

HGC enterprizCloud

homeCloud

HGC ibizCloud

HGC retailCloud

Operations Review

Growing demand for high-quality video-conferencing capabilities prompted launch of a cloud-based solution branded HGC Cloud Video Conference Service. This addresses enterprises wanting a corporate-grade HD multipoint video conference solution that calls for minimal outlay on hardware and ongoing maintenance.

In addition, launch of HGC Superhub Hosted Microsoft Exchange Email Service in 2014 had the effect of providing enterprises with an advanced system to keep workforces connected and productive anytime, anywhere, without the worry of server maintenance. This service contains features that facilitate genuine collaboration and boost productivity. At the same time, customers can enjoy the flexibility of a monthly subscription arrangement and technical support that includes a 24/7 hotline.

HGC Retail Cloud was launched in January 2015, enabling chains of outlets to enhance business flexibility and boost competitiveness. The solution comprises Cloud Surveillance,

Cloud Audience Analytics and Cloud Signage offerings, and enables enterprises of all sizes to save on manpower, while minimising investment in software and hardware used for monitoring and running a business.

Residential Market

High-speed broadband Internet services continued to be high priority in 2014 and saw HGC offering Fibre-to-the-Home ("FTTH") services ranging from 100M to 1000M. Our ever-expanding broadband coverage now amounts to 1.7 million home-passes, as a result of ongoing extension of FTTH technology to major residential buildings.

HGC has developed strong relationships with market leaders in various technologies. The 3Home Broadband Wi-Fi Entertainment Solution, for example, represents a unique bundle that combines our home and outdoor Wi-Fi services with the new Sony PlayStation® Vita TV. This makes a
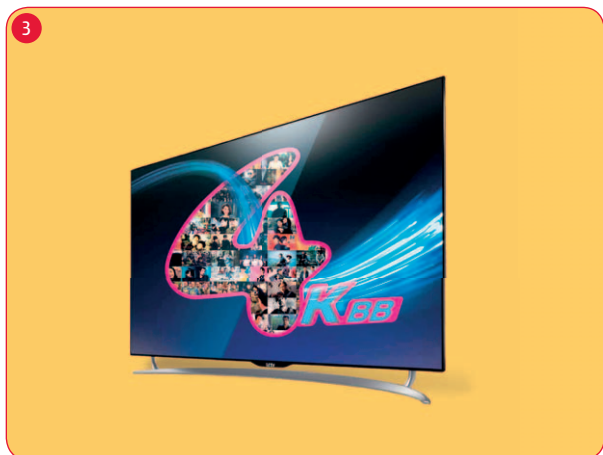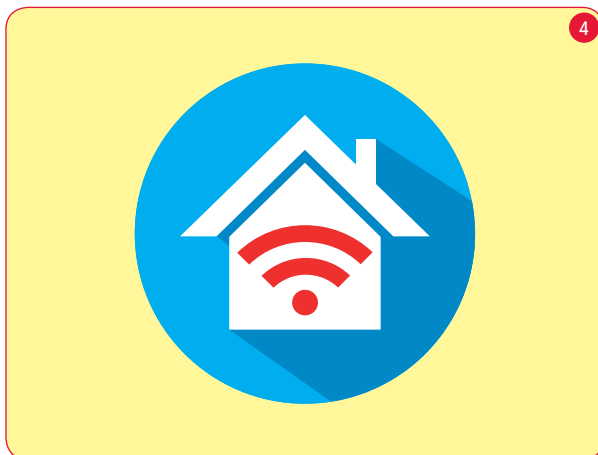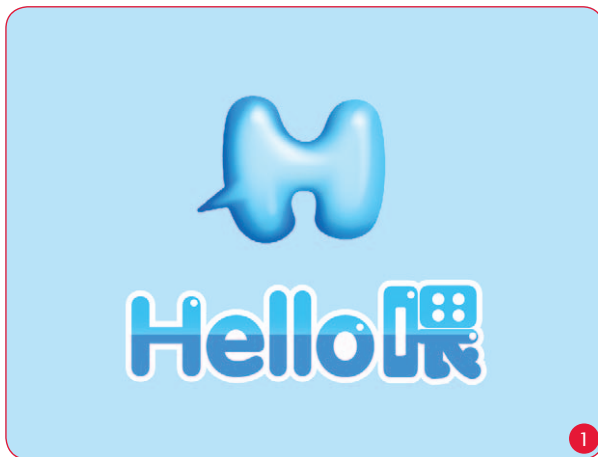
❶ HelloWay smartphone app allows customers to make/receive calls to/from Hong Kong via Wi-Fi and data networks.
❷ HGC boasts 16,000-plus hotspots across town.
❸ 3Home Broadband is first in Hong Kong to launch a bundled offer comprising 4K home broadband service and entertainment content.
❹ 3Home Broadband Total Wi-Fi solutions customers benefit from Home Wi-Fi at speeds up to 1G.

high-quality gaming experience widely available with HGC's home Wi-Fi network.

Another manifestation of HGC Wi-Fi convenience came to the fore when 3Home Broadband partnered with Microsoft to launch the "Wi-Fi Solution X Office 365" bundle. This tie-up delivers real-time collaborative working and learning through the combined strengths of HGC's ultra-fast residential broadband, extensive "hgc on air" outdoor Wi-Fi network and Office 365 Home.

In addition, 3Home Broadband collaborated with one of the largest Internet TV content providers in mainland China to launch a pioneering bundle comprising home broadband service, smart TV and 4K entertainment content. 3Home Broadband customers became first in Hong Kong to enjoy streaming of 4K entertainment video content at an amazingly affordable price.

Data Centre Market

HGC GlobalCentre Limited ("HGCGC") – a joint venture between HGC and Cheung Kong (Holdings) Limited – now runs facilities on Hong Kong Island and in the New Territories, after having met the data centre needs of local enterprises and international corporate customers for more than 13 years.

HGCGC runs facilities on Hong Kong Island and in the New Territories.

These highly-secure and reliable facilities were designed according to the TIA 942 tier-3, or above, standard and are accredited with ISO 27001 information security management and ISO 50001 energy management system certification. They are served by a 24-hour network operations centre and

HGCGC provides enterprises with world-class server colocation, disaster recovery solutions and managed services.

stringent building management system monitoring. These facilities also offer private rooms, or individual cabinets, to satisfy the differing requirements of a diversity of customer organisations.

Our data centres meet the most demanding mission-critical needs across a wide variety of sectors that include government departments, international banks and multinational corporations, as well as cloud service and Internet content providers.

A new facility opened in Kwai Chung in early 2014. This combines with an existing data centre in Wong Chuk Hang to strengthen HGCGC's world-class proposition to enterprises, which offers server colocation, disaster recovery solutions and a variety of managed services solutions.

Outlook

HGC has grown to become one of the leading carriers in Asia. Ongoing reinforcement of our strong service ethic, coupled with a constantly-enriched portfolio plus geographical expansion, distances us from other market players.

HGC continues to lead in various market sectors with increasingly more advanced capabilities. Our confidence is based on an intuitive understanding of corporate customer needs, strong working partnerships with like-minded ICT leaders and an eagerness to harness the latest technologies to delight valued customers.