



Operations Review

Over the years the Group has been devoted to building secure, fast, and reliable 3G, 4G and 5G networks to create a digitally-connected future for all. The Group is continuing to embrace new advances in technologies and invest in building its network and operations, in order to enhance customer experience and capture new opportunities in ever-changing times.

Hong Kong

Robust 5G Network

Since 2019, the Group has launched a vast network expansion project in Hong Kong. In 2022, the number of its 5G base stations has increased by more than 50% compared to the third quarter of 2020. In May 2022, 3 Hong Kong extended its 5G coverage to include the East Rail Line Cross-Harbour Extension of the MTR for seamless 5G connectivity at station concourses, on platforms and in tunnels. During the year, the Group activated its 700 MHz spectrum band on its commercial 5G network, an optimal frequency band for deep indoor penetration and wide coverage in rural areas. The 5G network of 3 Hong Kong was further expanded to cover the Tseung Kwan O - Lam Tin Tunnel and Cross Bay Link. The Group also launched the Honey Bee network initiative. This aims at expanding and deploying the field staff to screen the network coverage and quality of the Group's 5G network, from urban high-traffic commercial locations to rural areas. This initiative demonstrates the Group's ongoing commitment to engaging in the review of and improvement to its network performance and quality.

The Group has also embarked on a digital transformation journey, modernising its network infrastructure and network operations. For example, it has completed an extensive project to optimise its switching centre operations, which included replacing its legacy equipment and adopting more energy-efficient technologies. During the year, the Group completed an upgrade of its network operations centre. This next-generation facility, equipped with a leading-edge artificial intelligence ("AI") system with AI compression, network automation and machine learning, is now maintained digitally for highly efficient and effective network performance management.



 5G Broadband service, coupled with smart double spectrum technology, offers huge flexibility for home and business applications.

5G Broadband Services

5G Broadband service is an efficient and scalable alternative to fixed-line services, delivering ultra-fast connectivity and ultra-strong penetration. When deployed on the Group's robust network, this plug & play 5G Broadband service, coupled with smart double spectrum technology, offers huge flexibility for home and business applications. Targeted deployments in line with the Group's network expansion and enhancement projects have generated encouraging growth in the number of 5G Broadband subscribers since launch.



 The Group's upgraded network operations centre is a next-generation facility, equipped with leading-edge technologies to monitor network performance efficiently and effectively.



 The Group activates its 700 MHz spectrum band on its commercial 5G network, deepening indoor penetration and extending coverage in rural areas.



Strategic Partnership to Cultivate a Digitallyconnected Customer Experience

The Group has continued to leverage its close ties with other members of the CKHH Group to reshape and diversify its services, creating an integrated experience that aligns with customer expectations of a digitally-connected lifestyle. In 2020, the Group collaborated with other members of the CKHH Group to formulate a shop-in-shop strategy, which expanded the distribution channels for its prepaid cards at PARKNSHOP and Watsons stores to over 400 online and offline outlets. "3HK@FORTRESS" provides a one-stop shopping experience for customers of 3 Hong Kong, as well as FORTRESS customers transitioning to a smart home with 5G Broadband or seeking to enrich their digital lifestyle.

The success of the shop-in-shop approach not only created synergetic value for the CKHH Group, but also reshaped customer experience. In 2022, the Group further enhanced this strategy and launched 3|DigiLive, a shop-in-shop retail outlet in 11 PARKnSHOP supermarkets. 3|DigiLive offers diversified telecommunications solutions while introducing, to a wider audience, the potential of embracing a digitally-connected lifestyle by integrating digital offerings into everyday life.



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Apart from expanding its offline presence, in April 2022 the Group announced a collaboration with MoneyBack, the loyalty programme of A.S. Watson Group, that extended its offerings to include a vast array of awards and benefits redeemable at PARKnSHOP, Watsons, FORTRESS and 3 Hong Kong stores. The Group also launched a number of campaigns to cultivate a digitally-connected ecosystem and to increase customer loyalty, including the popular "Happy Share of 20 Million MoneyBack Points Game".

Digital Transformation to Improve All-round User Experience

The launch of the new customer contact centre improved the capacity for the evolving and diversifying channels for customer services. The new customisable functionalities of the My3 and the **SoSIM** mobile applications have made good progress in creating a fully digitised customer experience. Services such as account management, porting in mobile numbers, making purchases on 3Mall and subscribing to insurance services on 3Care are all now available at customers' fingertips. In addition to conventional customer services via hotline, email and iChat, potential customers can now connect to **3** Hong Kong's digital service ambassador at 3toTalk to enjoy online-to-offline services that include sales enquiries and live product demonstrations.



• The My3 app digitises customer experience.

During 2022, **3** Hong Kong ran a special offer for a 3Care BowtieGo Dietian Consultation Plan, bringing customers comprehensive nutritional information from dietitians regarding a balanced diet and a healthy lifestyle.

Corporate Solutions

A high speed and low latency 5G network enables applications such as 5G 4K live streaming, virtual reality and real-time data transfer. **3** Hong Kong provided tailored integrated solutions covering website's architecture, cloud server design and video processing, enhancing and reinforcing 5G network infrastructure for smooth operations.

The Group furthered its efforts to expand the possibilities of 5G technology in 2022 with **3** Hong Kong's implementation of a 5G smart car park solution. This Al-based automatic licence plate recognition technology with high-definition video capture gives car-users a seamless drive-through experience. Data are sent through **3** Hong Kong's high speed, low-latency 5G network and stored at a centralised server that manages multiple carpark operations. The 5G smart car park solution enhances customer experience by minimising waiting time for a parking space, as well as reducing cabling costs for operators, especially for point-to-point optical fibre carparks.

The **3** Hong Kong enterprise solutions team has also been extending its contribution to robotics development, by deploying smart robots in schools with students with special educational needs. In these schools, robots are linked with low energy trackers, worn by students, to monitor student safety and provide real-time alerts. If an incident occurs, the robot can track the student's location and provide real-time video surveillance streaming so that school staff can remotely monitor the student. The smart robots can also take over daily manual work such as patrols around campus and deliver educational materials for teachers, enhancing the learning environment.

Meanwhile, the robotic solutions within PARKnSHOP supermarkets have been extended, with disinfection robots now being deployed at 10 flagship stores. The robots are connected to the 5G network to ensure smooth operation, without interference to the points of sale network connection or data security. For the supermarkets, the robots serve as promotional ambassadors, not only providing disinfection across the stores, but also performing other functions such as quiding customers and handling simple queries.

Another successful use case of the year provided by the 3Education team was the integration of 5G Broadband service and the virtual reality platform to create a smart campus solution to inspire students.

Macau

3 Macau is committed to the continuous enhancement of its network performance and customer experience. **SoSIM** prepaid SIM card was introduced to the Macau market in 2021 and proved a huge success. **3** Macau further extended its points of sale to 24 Watsons and PARKnSHOP stores throughout Macau.

Meanwhile, the simple user interface of its 3Mall online application makes for a quick and easy shopping experience, offering special and monthly promotions and easy access to the 3Fans membership and the 3Care programme.



• The 5G smart car park solution provides a touchless parking experience.

