



HKEVBGA x 3HK

More
Innovation

More
Diversity

Disclaimer



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3 Hong Kong





ABOUT US

- **Hutchison Telephone Company Limited ("HTCL")**, a subsidiary of Hutchison Telecommunications Hong Kong Holdings Limited (HTHKH; stock code: 215) incorporated in Hong Kong
- HTHKH is a group member of CK Hutchison Holdings Limited (CKHH; stock code: 1)
- HTHKH provides 5G, 4G LTE, 3G and GSM dual-band mobile telecommunications services under the **3** brand

LEADING MOBILE SERVICE
PROVIDER IN
HONG KONG

CK Hutchison



At a glance

50+ countries of operation
300,000+ employees worldwide
US\$59 Billion (2019 turnover)

- Among the largest companies listed on the main board of The Hong Kong Stock Exchange
- Renowned multinational conglomerate committed to innovation and technology



6 Core Business Operations Globally

CK Hutchison Telecom



CK Hutchison Telecom in 12 markets globally

APAC

- Australia
- Hong Kong
- Indonesia
- Macau
- Sri Lanka
- Vietnam



Europe

- Austria
- Denmark
- Ireland
- Italy
- Sweden
- United Kingdom



3 Hong Kong Mobile Services

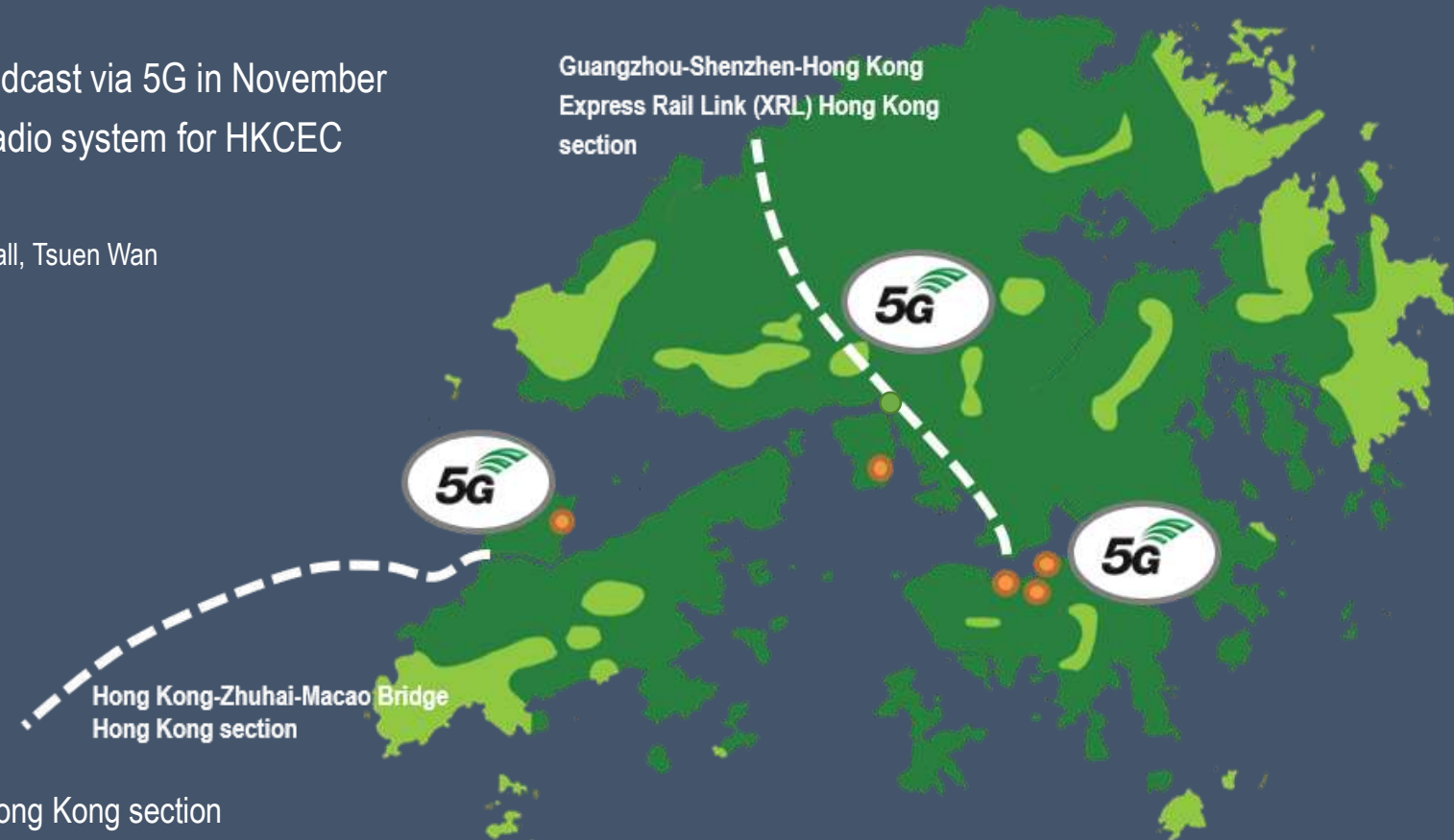


5G Launch

- 2018: First Hong Kong operator to make live outdoor broadcast via 5G in November
- 2019: Appointed lead operator to build an integrated 5G radio system for HKCEC
- 5G network trials done at:
 - HKCEC, Wanchai
 - HK Int'l Airport, Lantau
 - Ocean Pride Mall, Tsuen Wan
 - Causeway Bay
 - North Point
 - Tsing Yi
- 2020 1st April: 5G service launch

Extensive Network Coverage

- The only local operator to own blocks of spectrum across **900MHz, 1,800MHz, 2,100MHz, 2,300MHz** and **2,600MHz** bands for 4G services
- 4.5G coverage along 2 new cross-border channels
 - Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL) Hong Kong section
 - Hong Kong-Zhuhai-Macao Bridge Hong Kong section
- Full outdoor NB-IoT coverage with 900MHz and 1,800MHz band spectrum



Leader in Enterprise Solutions

Retail and Advertising

- SMS Services
- Mobile Advertising
- 4.5G Wi-Fi Router
- Indoor Location Analytics
- Mobile Big Data
- Alipay Mobile Payment

Smart Building

- Wireless Facility Monitoring
- Indoor Location Analytics
- Surveillance Solution
- Smart Parking

SME

- Check Point ZoneAlarm
- Cloud HR
- SMS Services
- Microsoft Office 365

Workforce Communications and Management

- SMS Services
- BlackBerry AtHoc
- Corporate Location-Based Service (CLBS)

Big Data

- Mobile Big Data

Mobile Security and Compliance

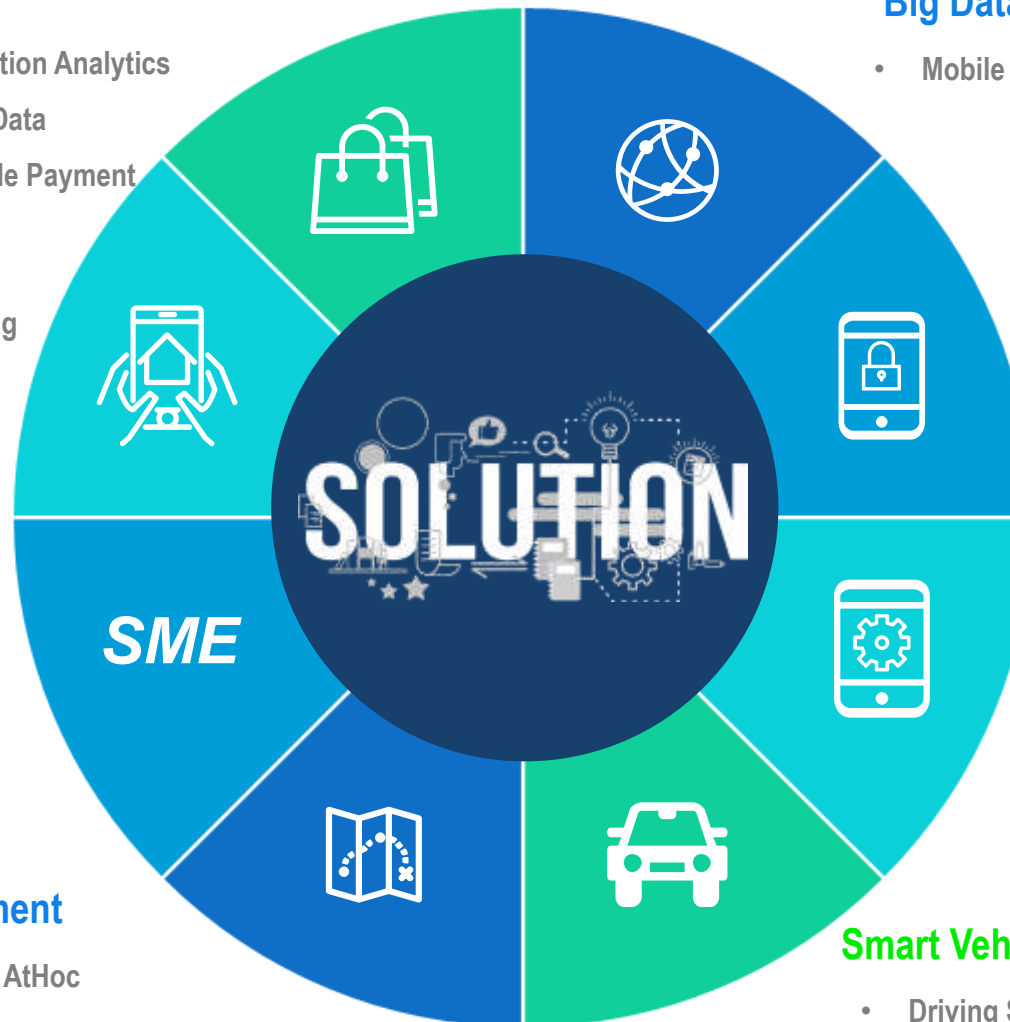
- Enterprise Mobile Recording
- Instant Messaging Archiving
- Check Point SandBlast Mobile
- BlackBerry Workspaces
- Mobile VPN

Device Management

- Device enrollment
- Android zero-touch enrollment
- Apple Device Enrollment Program
- Samsung Knox Mobile Enrollment
- UEM/EMM
- BlackBerry UEM
- Samsung Knox Manage
- Vmwave AirWatch
- Mobile Iron
- SOTI
- JAMF
- Samsung Knox Configure

Smart Vehicle

- Driving Safety and Analytics
- Vehicle Surveillance


















Go 5G with 3 Hong Kong



Evolving Mobile Technologies

1G 1982	2G 1992	3G 2001	4G 2011	5G 2020
				<p>Super High Speed Massive Connectivity Super Low Latency</p> <ul style="list-style-type: none">• Smart devices• IoT• UHD broadcast• UHD surveillance• Smart retail• Smart building• Smart vehicles and more..
				
 Up to 2.4kbps	 Up to 1Mbps	 Up to 21Mbps	 Up to 1Gbps	
				 Up to 20Gbps

5G Advantages

Enhanced
Mobile Broadband



More Contents

Massive Machine Type
Communications



More Devices

Ultra-reliable Low
Latency Communications



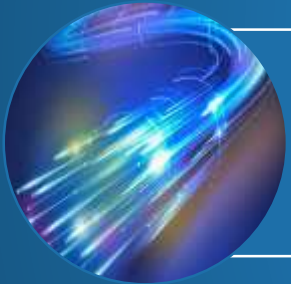
Mission-critical Control

Successful 5G Trials in 2018



First 5G

One of the first network operator to conduct 5G trial in downtown area



Over 2Gbps in Downtown

Achieved over 2Gbps speed in Causeway Bay and Tin Hau



Live 4K Video Broadcast

Real-time 4K video broadcast in a press event

Recent 5G Network Deployment

- HTCL is experienced in acting as Lead Operator (2G, 3G, 4G & 5G) for numerous mobile network deployments in Hong Kong.
- Three major 5G IRS deployment cases:



Exhibition Centre

Hong Kong
Convention and
Exhibition Centre
Phase 1 & Phase 2



Hong Kong Land

- Landmark Atrium
- One Exchange Square
- Two Exchange Square
- Three Exchange Square
 - The Forum
- Prince's Building
- Jardine House
- Alexandra House
- Charter House
- Edinburg Tower
- Gloucester Tower
- York House



OP Mall

OP Mall in
Tsuen Wan

Global 5G Updates

US

Verizon: Fixed and mobile 5G in 9 cities
AT&T: Mobile 5G in 21 cities
T-Mobile: Commercial 5G service six cities; nationwide coverage expected in 2020
Sprint: Mobile 5G in 9 cities

Ireland

Vodafone: 5 cities in trial

UK

3UK: London in Aug 2019. Extends to 25 cities within 2019

Vodafone UK: 15 cities in July 2019
Extends to 22 cities within 2019
EE: 6 cities in May 2019; 10 more cities in 2019; 10 cities in 2020
O2: 20 cities in 2019; 50 cities by summer of 2020

Germany

Vodafone: 6 cities in July 2019
T-Mobile: 5 cities in Sept 2019

Switzerland

Swisscom: launch in April 2019
Sunrise: launch in Sept 2019

Austria

3Austria: Linz in Jun 2019; Worgl and Vienna in Sep 2019

T-Mobile: 17 rural municipalities and in 2 urban municipalities in trial

Italy

Wind Tre: partnered with FastWeb; trials in L'Aquila and Prato.

Vodafone: launched in 5 cities
TIM: launched in 2 cities
Wind Tre

China

China Mobile: trial in 5 cities in Q3 2018; launched 40 cities in Sept 2019
China Unicom: trial in 40 cities
China Telecom: trial in 17 cities expanding to 40.

Australia

Optus: Fixed 5G started in 2 cities; over 1,000 5G sites by Mar 2020
Telstra: trial in major cities
Vodafone: 5G services in 2020

Korea

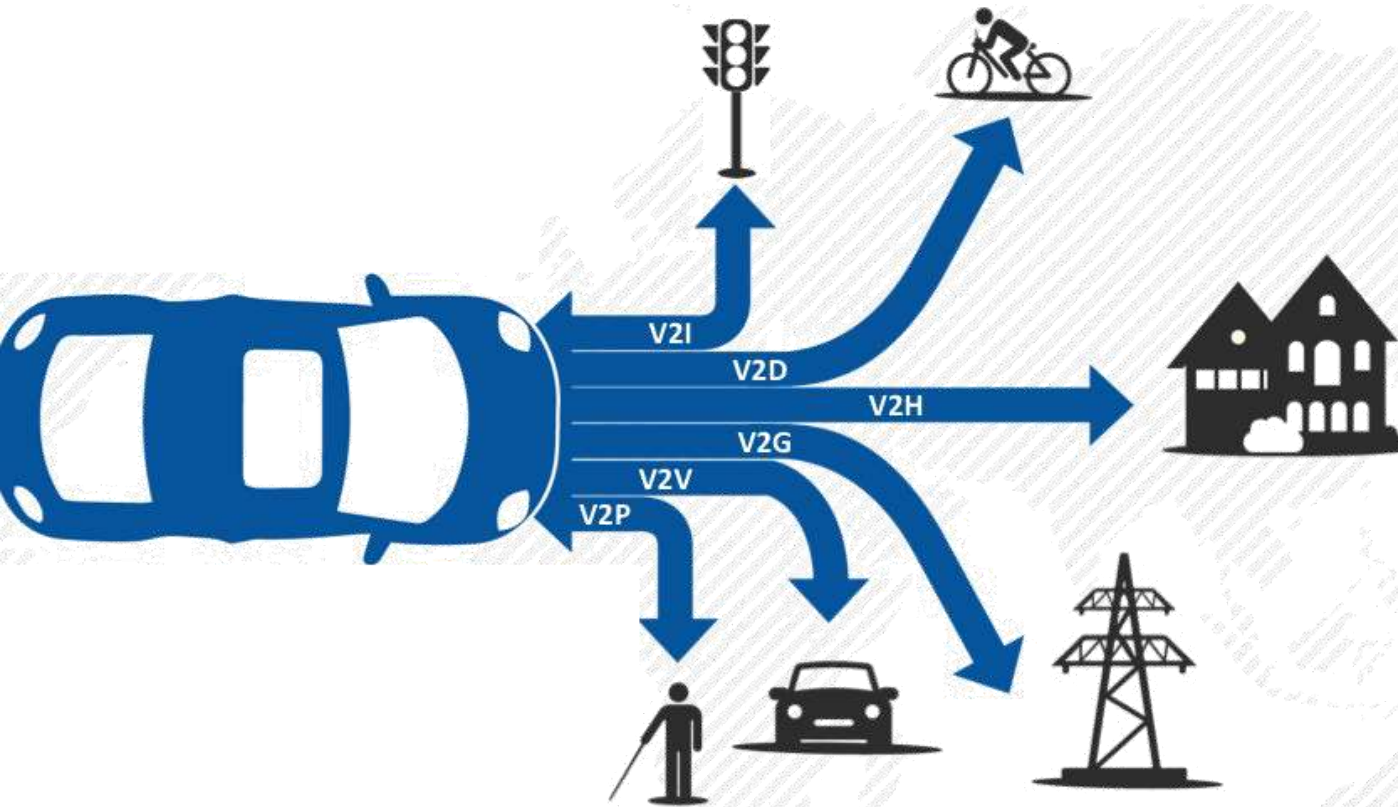
KT, SKT and LG Uplus: all launched 5G services. Over 2 million subscribers as of Aug 2019

Japan

NTT DoCoMo: launched in major cities in Sept 2019; national-wide by mid-2020
Softbank: initial launch by Mar 2020; 60% by 2025
KDDI: selected areas by 2019, full scale in 2020

Vehicle Use Cases

Internet of Vehicle



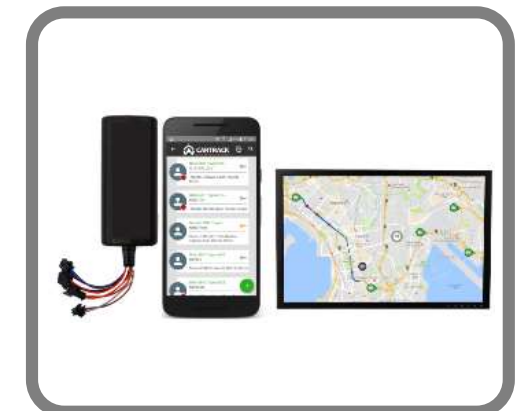
ADAS & Driving Safety



Mobile EV Charger



Smart Parking



Fleet Management & Telematics

Thank you

