# Hong Kong Franchised Public Bus Operations

The Kowloon Motor Bus Company (1933) Limited and Long Win Bus Company Limited are leading franchised public bus operators providing world-class, environment-friendly, value-for-money bus services in Kowloon and the New Territories and on Hong Kong Island. Safety, reliability, comfort and convenience are the bedrock on which their operations are founded.

# The Kowloon Motor Bus Company (1933) Limited ("KMB")

KMB, a wholly-owned subsidiary of Transport International Holdings Limited, is the largest franchised bus operator in Hong Kong, serving around 2.7 million passenger trips each day. A workforce of around 12,000 employees, including some 8,600 bus captains, ensures that customers enjoy high quality service on a fleet of around 3,900 buses operating on 384 routes.

#### **Operational Excellence**

After more than eight decades providing franchised public bus services, KMB leads the industry in terms of operational and service excellence. After becoming, in 1999, the first public bus company – and, thus far, the only one - in Hong Kong to obtain ISO 9001:1994 certification on a corporatewide basis, in 2002, it was awarded ISO 9001:2000 certification for its quality management systems. The following year, Lai Chi Kok and Sha Tin Depots received ISO 14001:1996 Environmental System certification, making KMB the only franchised bus company in Hong Kong with both ISO 9001 and ISO 14001 accreditation. By 2005, the



two depots had been upgraded to ISO 14001:2004 certification. In 2009, KMB received ISO 9001:2008 certification from the Hong Kong Quality Assurance Agency ("HKQAA") on completion of upgrading audits in four certification areas: KMB Headquarters; Operations Office and the four operating depots; the Overhaul Centre; and the Unit Overhaul Depot. In 2012, KMB became the first franchised bus company in Hong Kong to receive Occupational Health and Safety Assessment Series ("OHSAS") 18001:2007 certification from the HKQAA in recognition of its adoption of risk management systems in bus operations and maintenance activities.



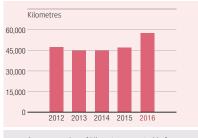
KMB's bus terminus at On Tat Estate in Kowloon East

KMB's bus services link residents of new housing estates in Anderson Road Development Area with the urban areas.



KMB introduced bus services for On Tat Estate in Kowloon East

# Mechanical reliability - KMB



Average number of kilometres operated before a bus has one mechanical breakdown while passengers are on board

# Operational capability - KMB



Percentage of actual number of bus departures to scheduled number of bus departures during morning peak hours (7am-9am) in the peak direction



# Performance Pledge/Safety and Reliability

Mechanical reliability and operational capability are the key benchmarks of an efficient public bus services. Mechanical reliability refers to the average number of kilometres a bus operates before it experiences one mechanical breakdown on the road with passengers on board. In 2016, the mechanical reliability of KMB's fleet was 57,592 km: 1. Operational capability refers to the ratio of actual to scheduled departures in the peak direction during the peak hours of

7:00 a.m. to 9:00 a.m. across the entire bus network. In 2016, we achieved an operational capability of 99.41%.

#### Bus Fleet and Fleet Upgrade

KMB introduces innovation after innovation as it continues to modernise its bus fleet. In 1997, in collaboration with its bus suppliers, it introduced the world's first super-low floor, wheelchair accessible double-deck bus to Hong Kong. Currently, KMB's fleet comprises predominantly super-low floor buses, with non-super-low floor buses due to

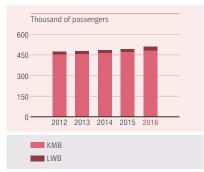
be completely phased out by the end of 2017, affording greater accessibility for all. KMB's technologically advanced and environment-friendly buses feature a range of innovative features, including the On-board Electronic Bus Stop Announcement System. In 2017, as part of its continued improvement efforts, KMB will provide a free Wi-Fi service on its buses to attract more passengers.



### Number of new buses introduced to the fleet



### Total fleet capacity at 31 December



#### Fleet utilisation - KMB





We are committed to contributing to a better environment by investing in environment-friendly buses that meet the exhaust emission standards laid down by the European Union. In 2009, we became the first public bus company in Asia to introduce Euro V double-deck buses at a time when legislation required only Euro IV emission standards for newly-registered diesel vehicles. Plans are in hand to introduce Euro VI airconditioned double-deck buses in 2018, while Euro III and earlier model buses will be completely phased out within the next five years.

In 2016, KMB continued to make substantial investments in new buses with the latest safety, environmental and design features, acquiring a total of 483 new Euro V super-low floor doubledeck air-conditioned buses. As at 31 December 2016, KMB operated a total of 3,920 licensed air-conditioned buses, comprising 3,756 double-deck buses and 164 single-deck buses. In addition, 279 air-conditioned double-deck Euro V buses and 10 electric single-deck buses and 5 supercapacitor single-deck buses were on order for delivery in 2017.

Since 2014, KMB has ordered 154 12.8-metre double-deck buses to provide increased passenger capacity on high-demand routes, and all of them had been put into service by the end of 2016. The 12.8-metre bus boasts a passenger carrying capacity that is more than 10% greater than that of the 12-metre bus, while achieving the same fuel efficiency and reliability.

#### **Bus Service Network**

At the end of 2016, KMB operated a total of 384 bus routes. KMB continuously reviews the viability of its bus routes in respect of the changing operating environment, taking into consideration factors such as railway expansion, population intake and redistribution, and the building of new highways. Matching resource allocation to the new demand patterns to improve the efficiency and competitiveness of its bus network not only safeguards long term sustainability; it also enables expansion into new growth markets.

Following the opening of the West Island Line in late 2014, and the Kwun Tong Line Extension and the South Island Line (East) in the fourth quarter of 2016, some passengers travelling to and from Hung Hom, Ho Man Tin and Island South have shifted from road-based public transport to rail. In response, KMB has started to implement route reorganisation in a timely manner with the concerted efforts of all stakeholders to improve operational effectiveness by redeploying buses to other routes. This is to ensure a sustainable and financially viable bus network that plays its part in easing traffic congestion and improving environmental management through reduced roadside emissions.

KMB's bus fleet	Air-conditioned double-deck buses	Air-conditioned single-deck buses	Total number of buses
As at 1 January 2016	3,717	172	3,889
Additions during year	483	0	483
Disposals during year	(444)	(8)	(452)
As at 31 December 2016	3,756	164	3,920



A Bus-bus Interchange Discount Scheme was introduced between KMB routes and LWB's Airbus routes in 2016

In 2016, we implemented 58 route reorganisation proposals, enhancing the overall route network while bringing the following benefits to the travelling public:

- eliminating wasteful duplication of routes;
- allowing resources to be released for redeployment in new growth areas;
- straightening routes that are unduly circuitous;
- introducing new express routes that utilise the new highway infrastructure: and

• offering greater connectivity between routes by using bus-bus interchanges.

The call for tenders for the route package for Anderson Road Development Area was made in mid-2015 and KMB was notified that it had been awarded the tender in November 2015. Services on the routes commenced in phases from the second quarter of 2016 in line with the population intake. The first route, Route 213M, commenced operations in June 2016, serving residents between On Tat Estate and Lam Tin Railway Station. KMB introduced the new express circular Route 213X in July to provide passengers with an express service

between On Tat Estate and places in Tsim Sha Tsui and Jordan. Route 214 was also put into service in mid-August, operating between Yau Tong and Cheung Sha Wan (Kom Tsun Street) via On Tat. Besides serving residents of On Tat Estate, the route gives residents on Pik Wan Road in Lam Tin direct access to Kowloon West and Wong Tai Sin. In addition, Route 213D from Sau Mau Ping (Central to Mong Kok) via Anderson Road commenced service in late August. Routes running between Anderson Road Development Area and Hong Kong Island/the New Territories will commence operations in 2017.

#### **Bus Route Promotions**

KMB and LWB introduced a Bus-bus Interchange Discount Scheme ("BBI") between KMB's bus routes and LWB's Airbus routes ("A" routes) with effect from 19 November 2016. Under the scheme, which allows more KMB passengers to transfer to LWB buses en route to the airport, passengers can save up to HK\$6.

As part of its drive to point up the individual image of different routes, KMB assigned the "Specialty Shopping" theme to Route 6 in December 2016. Most of the buses on Route 6 feature eyecatching blue livery to make them easily

recognisable for passengers who wish to take this route (including tourists). Apart from the usual Cantonese, Putonghua and English used on the On-board Electronic Bus Stop Announcement System, announcements are also made in Japanese and Korean. In addition, multilingual booklets focusing on this route are being distributed to facilitate travel between different districts. KMB plans to introduce more themed routes during 2017.

KMB also introduced a short-term "20% Same-day Return Discount Concession Scheme" from November 2016 to January 2017.

#### **Depots**

Routine maintenance and repair services are provided by KMB's four major bus depots at Kowloon Bay, Sha Tin, Lai Chi Kok and Tuen Mun. Ten smaller depots supply parking and minor maintenance services, while major overhaul services are provided by the KMB Overhaul Centre in Tuen Mun. Depot facilities are continually upgraded to ensure consistent service quality and a high level of productivity.

Major Depots Serving KMB and LWB Buses								
Depot	Areas served/ main purpose of depot	Gross floor area (square feet)	Number of buses served as at 31 December 2016	Year in which operations commenced	Remarks			
KMB depots:								
Kowloon Bay Depot	East Kowloon	768,038	1,051	1990	The depot land was acquired at market price from the Government in 1986 under a Private Treaty Grant			
Sha Tin Depot	North and East New Territories	720,005	1,113	1988	The depot land was acquired at public auction in 1984			
Lai Chi Kok Depot	South and West Kowloon	648,946	884	2002	The depot land has been leased from the Government on a short term tenancy#			
Tuen Mun Depot	West New Territories	148,961	872	1979	The depot land was acquired at public auction in 1974			
KMB Overhaul Centre	Bus overhaul	380,915	N/A	1983	The depot land was acquired at market price from the Government in 1979 under a Private Treaty Grant			
LWB depot:								
Siu Ho Wan Depot	Lantau Island	82,422	242	1998	The depot land has been leased from the Government on a short term tenancy#			
Total		2,749,287	4,162					

<sup>#</sup> Under the short term tenancy agreements, rentals at market rates are payable to the HKSAR Government.

## Number of bus routes operated at 31 December



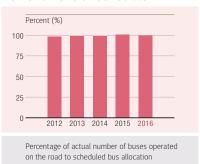
# **Application of Information Technology**

Information technology links offices, bus depots, bus termini and customer service centres via a high-speed network connecting 2,012 PCs and 152 servers. A total of 47 computer applications enhance both customer service and day-to-day operations, as well as facilitating financial and human resources management. Key computer systems used by the Company include the following:

# **Bus Estimated Time of Arrival** ("ETA")

The in-house developed ETA service had been applied to all of KMB's and LWB's regular routes, making them the first two bus companies in Hong Kong to provide such a service across the entire regular fleet. Passengers are able to obtain bus arrival information via display panels at bus termini and bus stops, as well as on App 1933 and the KMB and LWB websites.

#### Achievement of schedule - KMB



# **Integrated Bus Service** Information Display System ("IBSID")

IBSID panels have been installed at 57 bus termini to offer passengers information on bus route destinations, departure times, fares and major traffic disruptions.

# **Electronic Bus Stop** Announcement System ("BSAS")

The entire KMB and LWB fleets are equipped with the on-board BSAS, which provides passengers with the name of the next stop in Cantonese, English and Putonghua, backed up by the same information on LED displays. The system also gives safety reminders and bus service messages.

# **Terminus Management System** ("TER")

TER supports daily bus operations at 190 termini by displaying the next departure time and any special instructions when bus captains present their personalised Octopus card as they report for duty.

# **Traffic Operations Management** System ("TOM")

TOM generates duty assignment for more than 8,000 bus captains in line with the working guidelines set by the HKSAR Government. The system also streamlines the duty dispatch process by recording bus parking locations.

# **Bus On-board Monitoring System** ("BOM")

BOM records the driving performance of bus captains for analysis by depots and departments with the aim of raising driving standards with a particular focus on safety and passenger comfort.

# **Operations Communications** Management System ("OCM")

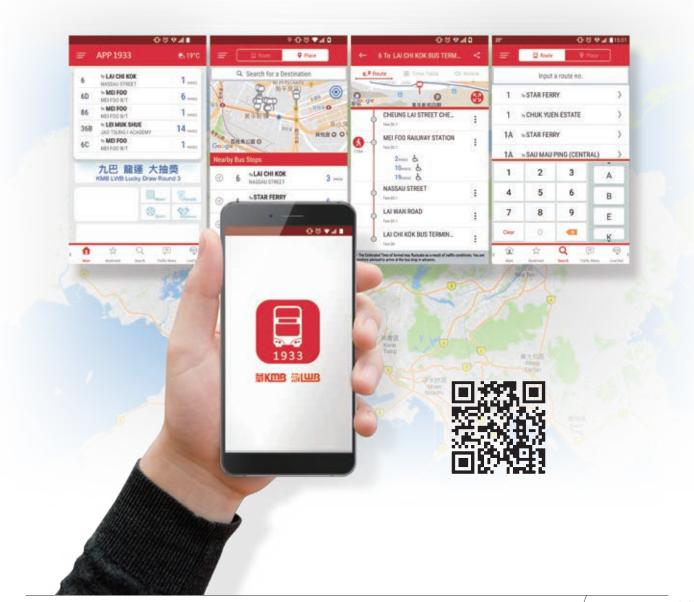
OCM streamlines the handling of real-time information on operational incidents such as traffic accidents, road congestion and weather conditions, as logged by our Radio Control Section, thus improving the speed and accuracy of message dissemination to depots and departments.

# **Upgraded Smartphone App**

The new App 1933 was launched in September 2016 to allow passengers to check information on bus routes and estimated time of bus arrival more conveniently. App 1933 comes with a brand new interface, and features a smarter, more personalised home page that shows frequently used bus routes and bus routes serving nearby bus stops. Three icons enable passengers to bookmark frequently used bus routes for home, work and school, and to search for routes that will shortly arrive at their location and the fastest bus routes. The

most user-friendly feature of the various app functions is route-searching. When a passenger enters a desired destination, the program will immediately display all recommended routes available at nearby bus stops, including information on estimated time of arrival, destinations for the routes, journey distance and fares. After choosing or inputting a location, the app will display each bus stop with the expected arrival time of the next bus. If you need to make use of a bus-bus interchange on the journey, the app will immediately calculate the total fare after taking the relevant fare

concession into account. In addition, we are conducting a trial of real-time passenger counting on Routes 6 and 108 so that App 1933 users know the ridership status of arriving buses.



# Hong Kong Franchised Public Bus Operations

LWB has been operating franchised public bus services to and from the New Territories, Hong Kong International Airport and North Lantau since 1 June 1997. LWB's network currently covers the Airport, Tung Chung, Hong Kong Disneyland, the Ngong Ping 360 cable car and AsiaWorld-Expo. 應端 A31

# Long Win Bus Company Limited ("LWB")

In order to offer higher quality airport bus services, in June 2016 LWB A-route Airbuses underwent a major transformation designed to provide passengers with a more comfortable and enjoyable travelling experience. The multifaceted overhaul encompassed a new logo, a new bus livery, a new bus compartment design and a new image for the bus captains.

#### Performance Assurance

LWB constantly reviews its bus services and maintenance regime to ensure that safety and efficiency are maintained at the highest levels across its bus fleet. LWB measures its operational performance by reference to two key performance indicators: mechanical reliability and operational capability. Mechanical reliability is the average number of kilometres a bus operates



before it experiences a mechanical breakdown on the road with passengers on board. Operational capability is the ratio of actual to scheduled departures in the peak direction in the peak hours of 7:00 a.m. to 9:00 a.m. across the whole bus network. In 2016, LWB achieved 48,137 km: 1 in mechanical reliability and 102.28% in operational capability.

Having obtained ISO 9001:2008 quality management systems certification in November 2012, LWB had its certification extended for three years to September 2018 after undergoing a certification renewal audit in 2015.



# LWB launched new bus captain uniform and bus livery

In 2016 LWB A-series buses were transformed to provide passengers with a more comfortable and enjoyable travelling experience. The overhaul included new logo, new bus livery, new bus compartment design and new bus captain uniform.



LWB A-series buses offer ergonomic seats, free Wi-Fi service, USB chargers, spacious luggage racks and bus arrival time

#### Mechanical reliability - LWB



Average number of kilometres operated before a bus has one mechanical breakdown while passengers are on board

#### Operational capability - LWB



Percentage of actual number of bus departures to scheduled number of bus departures during morning peak hours (7am-9am) in the peak direction

#### Bus Fleet and Fleet Upgrade

Presented in its traditional vivid orange. LWB's new logo features the Chinese character for "Dragon" and the English letters "LWB", following the concept applied by its sister company KMB, with an eye to forging a clearer connection between the two companies. The bus livery and compartments come in orange complemented by warm grey and khaki. Reflecting an interior design focused on luxury, ergonomically designed seats with increased legroom are provided, while the upper compartment adopts a more spacious design. The buses provide a free 30-minute Wi-Fi service, USB chargers, seatback magazine bags, spacious luggage racks, a screen displaying the bus arrival time and glass windows with a high degree of opacity, mirroring the experience of flying.

The new LWB Airbuses are operated by a selected group of elite bus captains offering professional and friendly services. The design of their new uniforms, featuring orange and grey, is consistent with the style of KMB uniforms, further consolidating the connection between the two companies.

In 2016, LWB introduced 82 new Euro V super-low floor air-conditioned doubledeck buses. As at 31 December 2016, LWB operated 242 super-low floor airconditioned double-deck buses, all wheelchair accessible and equipped with the On-board Electronic Bus Stop Announcement System. To meet growing passenger demand, 42 of these buses are 12.8 metres in length, offering a higher carrying capacity.

LWB's air-conditioned double-deck bus fleet	Total number of buses
As at 1 January 2016 Additions during year Disposals during year	190 82 (30)
As at 31 December 2016	242

In addition, LWB has on order 19 Euro V super-low floor air-conditioned doubledeck buses and four electric single-deck buses scheduled for delivery in 2017. The vast majority of these buses are premium design buses, which are slated to operate on existing or new Airbus routes.

#### **Bus Service Network**

At the end of 2016, LWB operated 28 routes. To cater for passenger growth and increased service expectations,

LWB added 35 new buses to enhance the service of Airbus routes. Besides, one bus was added in response to the extension of the service hours of Route E33P.

Airbus networks in different districts were restructured in phases in 2016. LWB introduced new routes, converted existing routes to whole-day services and strengthened bus frequencies to every 20-30 minutes for increased passenger convenience.

In the western New Territories, LWB added new Airbus Route A37, serving Hung Shui Kiu and Tin Shui Wai, in July and converted Route A36 serving Yuen Long to a whole-day service in August. Route A33 serving Tuen Mun was converted to a whole-day service in August, while some departures of A33 include stops at the Gold Coast.

To provide a more convenient bus service for Tsuen Wan and Sham Tseng residents travelling to and from the Airport, in August LWB introduced Route A31P. In December, residents in Tsuen Wan and Kwai Tsing Districts were benefited by the introduction of Route A32 and by the rerouting of Route A31, which allowed those in Kwai Chung and Tsuen Wan to travel directly to the airport, while serving the residents of South and North Tsing Yi.





LWB has strengthened the service of its Overnight Airbus Routes to meet increasing demand

In the eastern New Territories, LWB enhanced the service of Airbus Route A43P from the Airport to Fanling in June to provide a whole-day service for passengers between the Airport and San Tin. In August, Airbus Route A47X was added to allow Tai Po residents to enjoy direct whole-day travel to the airport.

To satisfy the needs of the increasing number of air passengers arriving late at night and Airport staff working night or early morning shifts, LWB strengthened the service of Overnight Airbus Routes NA33 and NA34 in August and September, serving Tuen Mun, and Yuen

Long and Tin Shui Wai, respectively. In December, LWB also introduced three Overnight Airbus Routes - NA40, NA41 and NA43 – to serve Sha Tin/Ma On Shan, Tai Wai and Sheung Shui/Fanling, respectively.

LWB is committed to maintaining high standards of network coverage and service for all its passengers, while exploring ways to meet increasing travel demand in the tourism and leisure sectors. It will continue to operate according to its mission of providing the most efficient, direct and user-friendly bus services for its passengers.

LWB and KMB introduced a Bus-bus Interchange Discount Scheme ("BBI") between LWB's Airbus routes and KMB's bus routes with effect from 19 November 2016. Under the scheme, which allows more LWB passengers to transfer to KMB buses en route to the airport, passengers can save up to HK\$6.

#### **Depots**

The depot at Siu Ho Wan provides daily bus maintenance, refuelling, bus washing and parking for the LWB fleet. The depot is equipped with a waste water treatment system to ensure that waste water quality complies with the statutory requirements before discharge into the public drainage system.

#### Safety and Customer Service

Regular and thorough inspections of LWB's buses are undertaken to make sure that they are maintained at the highest standards. Driving instructors monitor bus captains' driving performance and customer service delivery, while safety briefings are held from time to time and safety reminders circulated to all bus captains. LWB runs various quality campaigns to recognise and reward good performance.

To provide passengers with real-time bus trip information to assist journey planning, App 1933 provides estimated time of arrival information on all LWB routes with a regular service, along with other bus service information. Estimated time of arrival information is also provided on LWB's website, which also furnishes passengers with convenient access to route information, and on display panels at selected bus stops.

In addition to a brand new interface and smarter functions, App 1933 automatically displays on its home page each user's regular bus routes as well as information on buses at bus stops near the user's location. The app also has icons for bookmarking locations such as home, work place and school. A single tap gives users access to the quickest route to their destination from their current location.

LWB offered the "Same-day Secondtrip Discount Concession" from 10 September 2016 to 7 January 2017. Passengers making any two trips on the same day within the same route group of "A" routes or "E" routes enjoyed a 20% or 10% discount, respectively, on the same-day second trip. The concession was offered in accordance with the passenger reward arrangement agreed with the Government.

#### **Environmental Protection**

LWB is fully aware of the importance of environment protection and continues to invest in environment-friendly buses that meet the stringent emission standards of the European Council of Environmental Ministers. In 2016, LWB introduced 82 new Euro V buses to its fleet, bringing the proportion of Euro V buses up to 79%. In addition, it has retrofitted Diesel Particulate Filters on all its Euro II and Euro III buses to reduce the emission of particulates. To further improve air quality, Near Zero Sulphur Diesel ("NZSD") has been used fleet-wide since 2010.

The electrostatic air filtration function in the air-conditioning system of LWB buses significantly improves the air quality in the bus compartment, while the Eco-driveline system reduces both fuel consumption and exhaust emissions.

To improve roadside air quality, the HKSAR Government has set aside HK\$180 million for Hong Kong's franchised bus operators, including LWB, to purchase 36 electric buses for trial on different routes to evaluate their performance in different operating environments. Under this scheme. LWB has received funding to procure four single-deck electric buses. The procuring arrangement for these four buses has been approved by the HKSAR Government. One of these buses has arrived in Hong Kong and is currently undergoing trials.