

# Operational Review



## Hong Kong Franchised Public Bus Operations

Franchised public bus operations drive the Group's business. The Kowloon Motor Bus Company (1933) Limited and Long Win Bus Company Limited provide passengers with reliable and comfortable public transport services on vehicles that set the standard for design, innovation and the latest environment-friendly technologies.

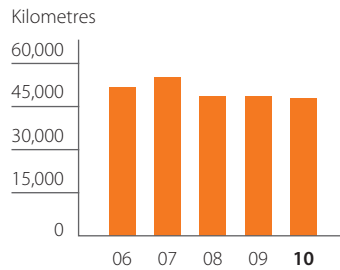
### THE KOWLOON MOTOR BUS COMPANY (1933) LIMITED ("KMB")

KMB, founded in 1933, a wholly-owned subsidiary of TIH, provides extensive public bus services covering Kowloon, the New Territories and Hong Kong Island. With a dedicated workforce of around 12,000 employees, including some 8,000 bus captains, and a fleet of over 3,800 buses running on some 400 routes, KMB serves approximately 2.6 million passenger trips each day.

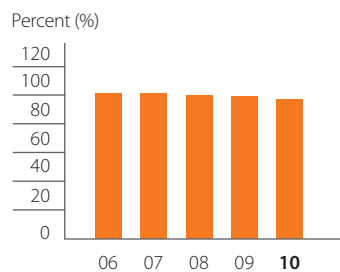
### OPERATIONAL EXCELLENCE

**T**hroughout its 77 year history, KMB has been distinguished by its dedication to providing public bus services of world-class standards in Hong Kong. It has maintained industry leadership by adopting the highest standards in all aspects of its operations, as evidenced by the following service milestones:

- 1999 KMB became the first public bus company in Hong Kong to achieve ISO 9001:1994 certification on a company-wide basis as accredited by the Hong Kong Quality Assurance Agency ("HKQAA").
- 2002 KMB successfully achieved ISO 9001:2000 certification.
- 2003 KMB's Lai Chi Kok and Sha Tin Depots were awarded ISO 14001:1996 Environmental Management System certification, making KMB the only franchised bus company in Hong Kong with both ISO 9001 and ISO 14001 accreditation.
- 2004 KMB's Lai Chi Kok Depot was upgraded to ISO 14001:2004 Environmental Management System certification.
- 2005 KMB's Sha Tin Depot was upgraded to ISO 14001:2004 Environmental Management System certification.

**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

2007 All the main operating depots of KMB at Lai Chi Kok, Sha Tin, Kowloon Bay and Tuen Mun were certified by the Q-Mark Council of the Federation of Hong Kong Industries as having met the Green Mark Standard under the Hong Kong Green Mark Certification Scheme.

2009 KMB successfully obtained from HKQAA the newest ISO 9001:2008 certificates on completion of upgrading audits in the four certification areas: KMB Headquarters; Traffic Department and the four main operating depots; the Overhaul Centre; and the Unit Overhaul Depot.

The strength of the KMB brand was recognised in 2010 when it won in the Logistics/Transportation category of the Yahoo! Emotive Brand Awards 2009-2010 organised by Yahoo! Hong Kong. KMB was also named winner of Best Brand for Home Award 2009-2010 and Best for Green Brand Award 2009-2010 by Take Me Home magazine, as well as being named among Hong Kong's 100 Most Influential Brands by World Brand Lab.

**The strength of the KMB brand was recognised in 2010 by Yahoo! Hong Kong, Take Me Home magazine and the World Brand Lab.**



KMB's services span Hong Kong



*Hong Kong people are served by KMB's vast fleet both day and night*



We are committed to providing our customers with safe and efficient bus services of the highest quality. Mechanical reliability and operational capability are two key performance indicators we set for ourselves in measuring the operational performance of our public bus services.

#### PERFORMANCE PLEDGE

We are committed to providing our customers with safe and efficient bus services of the highest quality. Mechanical reliability and operational capability are two key performance indicators we set for ourselves in measuring the operational performance of our public bus services. Mechanical reliability is defined as the average number of kilometres a bus operates before it experiences one mechanical breakdown on the road with passengers on board. Operational capability is the ratio of actual to scheduled departures in the peak direction during the peak operational hours of 7:00 a.m. to 9:00 a.m. across the entire bus network. In 2010, the mechanical reliability of KMB's fleet measured 48,023 km : 1 against a target of 45,000 km : 1 and the operational capability achieved was 97.2% against a target of 100%.



*KMB's Euro V single-deck buses are both green and efficient*

**The latest generation bus models include innovative features such as straight staircases, wider bodies, 2+2 seating, priority seats, a wheelchair space, brightly coloured handrails, bell pushes, and advanced air-conditioning systems.**

### **BUS FLEET AND FLEET UPGRADES**

KMB is committed to constant innovation and to the modernisation of its bus fleet. Fleet upgrade is an ongoing process for KMB's operations and a key priority of its service enhancement programmes.

Since 1997, when KMB, in collaboration with its bus suppliers, introduced the world's first super-low floor, wheelchair accessible double-deck bus to Hong Kong, different generations of technologically advanced and environment-friendly buses have been added to KMB's fleet.

The latest generation bus models include innovative features such as straight staircases for easier access to the upper deck, wider bodies, 2+2 seating, priority seats, a wheelchair space near the entrance or exit, brightly coloured handrails, bell pushes, and advanced air-conditioning systems for better control of the temperature and humidity inside the bus compartment. In 2009, we demonstrated our leadership in environment-friendly bus services by becoming the first public bus company in Asia to introduce the Euro V double-deck bus. Another part of our service upgrade has seen the continuous replacement of retiring single-deck buses with brand new wheelchair accessible super-low floor single-deck buses. These models combine stylish design with higher headroom to provide passengers with a quality ride.

In 2010, we continued to make substantial investments in new buses featuring the latest safety, environmental and design features. A total of 131 new super-low floor air-conditioned buses, comprising 35 Euro IV and 48 Euro V double-deckers and eight Euro IV and 40 Euro V single-deckers, were added to KMB's fleet.



As at 31 December 2010, KMB operated a total of 3,822 buses, comprising 3,665 double-deck buses and 157 single-deck buses, of which 96.6% were air-conditioned.

KMB's bus fleet	Air-conditioned double-deck buses	Air-conditioned single-deck buses	Non Air-conditioned double-deck buses	Total number of buses
As at 1 Jan 2010	3,550	151	179	3,880
Additions during year	103 <sup>(1)</sup>	48	–	151 <sup>(1)</sup>
Disposals during year	(119)	(42)	(48)	(209)
As at 31 Dec 2010	3,534	157	131	3,822

<sup>(1)</sup> Includes 20 air-conditioned double-deck buses transferred from Long Win Bus Company Limited.

In addition, KMB had on order 11 air-conditioned double-deck Euro IV buses and 279 air-conditioned double-deck Euro V buses, as well as 60 air-conditioned single-deck Euro V buses, for delivery in 2011.

## BUS SERVICE NETWORK

KMB operated a total of 394 bus routes at the end of 2010. The opening of the Kowloon Southern Link, the railway linking Sham Shui Po and Tsim Sha Tsui, in August 2009 continues to adversely impact KMB's patronage. To better deploy our resources while meeting the travel demand of our passengers, KMB has been implementing service rationalisation measures to mitigate the effects of passenger shifts to the new railways. To enable redeployment of resources from low utilisation routes to areas of increasing demand, KMB continued its rationalisation effort by submitting 16 proposals, involving the reduction of 19 buses, to the Government for implementation in 2010. However, only nine of these proposals were approved, corresponding to a reduction of nine buses. Challenges in implementing route rationalisation have led to lower efficiency in the bus network and higher operating costs.

To improve our service delivery efficiency, KMB will continue to explore cancellation of bus routes that are no longer required as a result of the introduction of new railways, as well as reduction of frequency on routes with diminished passenger demand. The resources saved as a result of such route reorganisation will be redeployed to areas with higher or increasing demand. This will also be beneficial in relieving traffic congestion, preserving the environment and easing fare increase pressure. KMB's response to changing market conditions will remain rooted in strategic bus network reorganisation.

A summary of the bus network rationalisation carried out in 2010 is tabulated below:

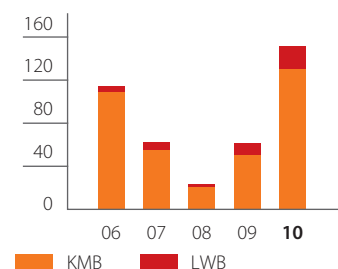
	Proposed		Implemented	
	Number of proposals	Number of buses to be saved	Number of proposals	Number of buses saved <sup>(1)</sup>
Rationalisation proposals	16	19	9	9 (47.4%)

<sup>(1)</sup> Includes cancellation of special departures of Routes 38P and 44S, which did not involve vehicle savings as buses were deployed from other routes.

## Number of new buses introduced to the fleet

(Franchised Public Bus Operations)

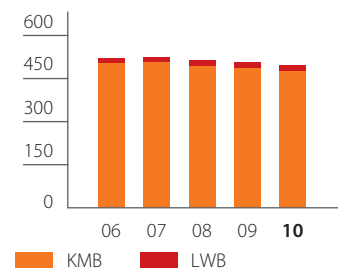
Number of buses



## Total fleet capacity at 31 December

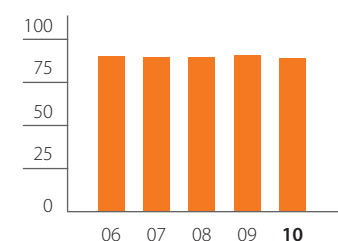
(Franchised Public Bus Operations)

Thousand of passengers



## Fleet utilisation - KMB

Percent (%)



Percentage of actual number of buses operated on the road to licensed bus fleet

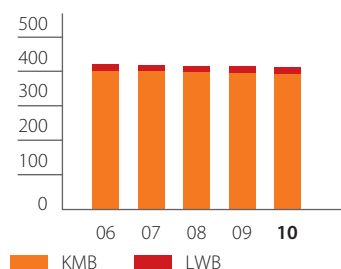
In 2010, we made substantial investments in new buses featuring the latest safety, environmental and design features. A total of 131 new super-low floor air-conditioned buses powered by Euro IV or Euro V engines were added to KMB's fleet.



KMB takes passengers to the heart of the business district

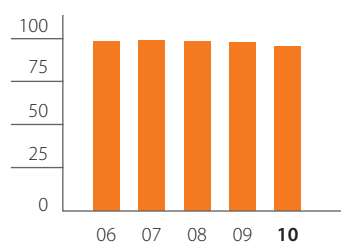
## Number of bus routes operated at 31 December

Number of bus routes



## Achievement of schedule - KMB

Percent (%)



Percentage of actual number of buses operated on the road to scheduled bus allocation

## Bus Route Promotion in New Territories West

Promotional activities were conducted on a total of 13 direct bus routes serving Tuen Mun and Yau Tsim Mong through distribution of publicity leaflets and posters. The campaign highlighted KMB's competitive edge and distinctive advantages over other transport modes, namely, direct, door-to-door services and value for money services. Promotion activities were also conducted on Route B1 (Tin Shui Wai Station – Lok Ma Chau Station) through extensive bus shelter and bus pole advertising on three routes (68M, 68X and 268C) with the aim of attracting passengers from Kowloon and Tsuen Wan to interchange with Route B1 to Lok Ma Chau.

## Joint Promotion between major Shopping Malls and KMB

A joint promotion campaign between SHKP Shopping Malls and KMB was held between October and December 2010. Individual Visitor Scheme customers who spent HK\$400 or more at Sun Yuen Long Centre, Yuen Long Plaza, Metropolis Plaza or Landmark North were eligible for one-way pre-paid tickets on any of Routes B1, 76K and 276B and then the Huang Bus service. The promotion is set to run again from 22 January to 2 May 2011 (both dates inclusive).

## DEPOTS

KMB has four major depots at Kowloon Bay, Sha Tin, Lai Chi Kok and Tuen Mun, providing routine maintenance and repair services for our entire bus fleet. Ten other depots provide parking and minor maintenance services, while the KMB Overhaul Centre provides major bus overhaul services. The depot facilities are continually improved to ensure that they consistently maintain a high level of productivity and quality service for our buses.



### Major Depots Serving KMB and LWB Buses

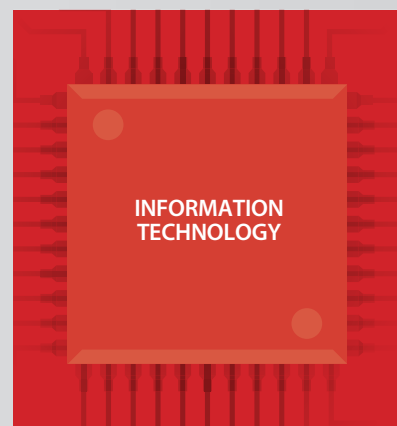
Depot	Areas served/ main purpose of depot	Gross floor area (square feet)	Number of buses served as at 31 December 2010	Year in which operations commenced
<b>KMB depots:</b>				
Kowloon Bay Depot	East Kowloon	768,038	1,043	1990
Sha Tin Depot	North and East New Territories	720,005	1,094	1988
Lai Chi Kok Depot	South and West Kowloon	648,946	836	2002
Tuen Mun Depot	West New Territories	148,961	849	1979
KMB Overhaul Centre	Bus overhaul	380,915		1983
<b>LWB depot:</b>				
Siu Ho Wan Depot	Lantau Island	82,422	166	1998
<b>Total</b>		<b>2,749,287</b>	<b>3,988</b>	



KMB's Euro V buses serve passengers on busy corridors

## INFORMATION TECHNOLOGY

KMB widely applies advanced information technology in its daily operations for performance monitoring, internal and external communications, and productivity enhancement. At the end of 2010, a total of 1,907 personal computers were installed at various KMB facilities. These computers are interlinked via high-speed communication lines to 161 computer servers at headquarters. This sophisticated data network integrates the information channels between headquarters, eight Customer Service Centres, 14 bus depots and 163 bus termini. Further, 37 software applications, including in-house developed programs and proprietary software, are used for our daily operational and financial management. We constantly seek to upgrade our information technology systems to improve our performance in customer service, human resources management, fleet and depot operations, and financial management.



### Electronic Bus Stop Announcement System

KMB's entire bus fleet has been equipped with the On-Board Electronic Bus Stop Announcement System. The system, which delivers voice announcements in Cantonese, English and Putonghua and shows the name of the next bus stop on light emitting diode ("LED") displays, provides passengers with details of the next stop in advance.

### Bus Service Information Display System

KMB has installed the Integrated Bus Service Information Display System ("IBSID") at its termini to present bus service information to its passengers. Information on bus route destinations, departure times and fares, as well as up-to-date messages on contingencies such as major traffic disruptions, is displayed on large LED display panels. The traffic and operating conditions in the area surrounding the termini can also be monitored at the termini themselves and at headquarters via IBSID's closed circuit television systems. At the end of 2010, 28 termini were equipped with IBSID.

### Lost Property Management System

The Lost Property Management System ("LPM"), developed in 2009, helps us handle lost property claims and inquiries more efficiently, as it tracks lost items from initial location to reclaim by passengers or eventual disposal. Besides improving the handling of passenger inquiries about lost property, LPMS also helps our staff to accurately keep track of the status of lost property.

### Boarding and Alighting Analysis System

In 2010, the Boarding and Alighting Analysis System ("BAA") was developed by KMB to replace the old Boarding and Alighting System ("BAS") as part of our commitment to continually improving our passenger survey procedures. Survey data is now collected on Windows Mobile-based PDAs and uploaded to BAA, which is integrated with other in-house KMB projects such as the Bus Stop Information System ("BSI"), the Route Revenue Management System ("RRM"), the Terminus Management System ("TER"), the Octopus Management System ("OMS") and the Traffic Operations Management System ("TOM"), to enable seamless data integration and enhance the efficiency of data analysis

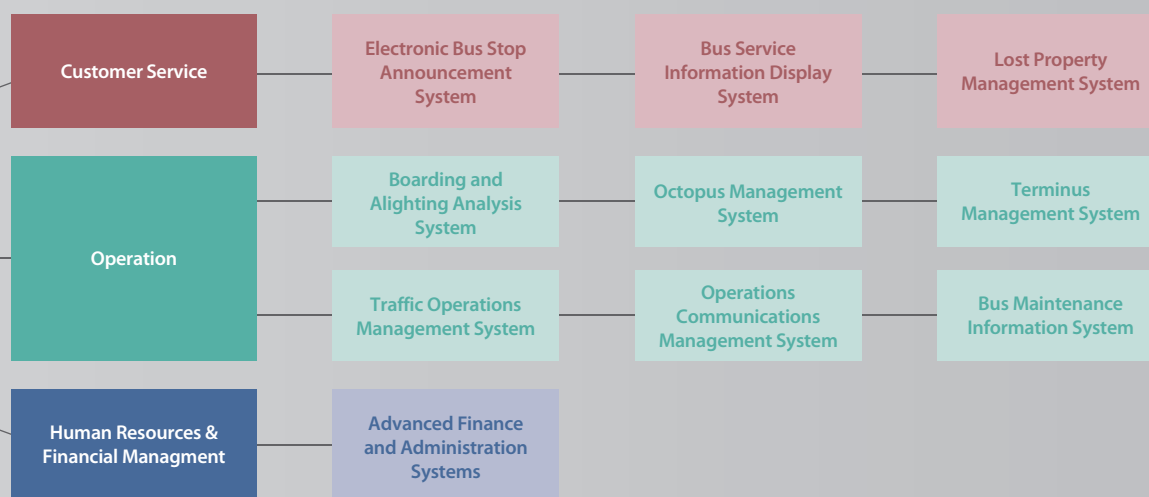
and report production. The new system was launched in August 2010.

### Octopus Management System

A new computer software system, the Octopus Management System ("OMS"), was developed by the Information Technology Department in 2010 to replace the Contactless Smartcard System ("CSS") and the Device Maintenance System ("DMS"). OMS retrieves the detailed maintenance records of Octopus devices and traces the location of those devices whose fare revenue record has not been downloaded to our system or which lack the latest fare table. It also provides accurate reports on Octopus revenue reconciliation. With its enhanced user interface functions, increased data storage capacity and enhanced data analysis functions, OMS streamlines daily Octopus operations. After thorough testing in parallel with CSS and DMS, OMS will come into full operation by mid-2011.

### Terminus Management System

KMB has developed the Terminus Management System ("TER") to facilitate the management of daily bus operations. Bus captains use their personalised Octopus cards to report arrival at bus termini, and next departure



time and special instructions are automatically displayed on the screen for their attention. Recorded bus arrival and departure times are instantly transmitted to headquarters, depots and relevant departments so that service adjustments and any other necessary operational decisions can be made. Our Customer Service Hotline staff can also use the arrival and departure information to answer passengers' inquiries. By the end of 2010, 163 termini were equipped with TER.

### Traffic Operations Management System

KMB's self-developed Traffic Operations Management System ("TOM") gained external recognition at the 2009 Hong Kong Radio Frequency Identification ("RFID") Awards, winning the Gold Award for Best EPC/RFID Implementation and the Bronze Award for Most Innovative Use of EPC/RFID. TOM greatly improves the efficiency of bus captain duty assignment and despatch by enabling depot staff to use a handheld RFID reader to identify the parking location of buses and upload the information to the system. This information, as well as vehicle registration numbers, route numbers, duty schedules and ad hoc operational arrangements, is retrieved by bus captains via their Octopus cards

at Duty Dispatch Offices. Using TOM, management is able to keep up to speed on duty allocations and dispatches, as well as receive the details of the latest operational arrangements. By means of its fleet database, TOM is also able to prioritise the deployment of buses with lower emissions on routes running on busy corridors.

### Operations Communications Management System

Developed in 2009, the Operations Communications Management System ("OCM") streamlines the recording and dissemination of real-time information on bus operation incidents logged by KMB's Radio Control Section. The system improves the speed and accuracy of message dissemination by updating depots and relevant departments with operational information on aspects such as traffic congestion, road incidents and adverse weather conditions. Besides improving KMB's contingency management procedures, OCM also saves 100,000 sheets of paper each year.

### Bus Maintenance Information System

Developed in-house, the Bus Maintenance Information System ("BMS") provides useful information on buses, including bus type and repair and

maintenance records, as well as the work records of maintenance workers, helping management assign jobs and monitor maintenance costs. BMS also keep tracks of the performance and durability of retreaded tyres, optimising their use and ensuring safety and environmental protection.

### Advanced Finance and Administration Systems

KMB employs SAP e-Business Software for financial and human resources management. The financial management system was upgraded from SAP version R/3 Release 4.6C to ERP 6.0 in 2009, and the human resources management system followed suit in 2010. Besides processing large amounts of data, these advanced proprietary systems enhance the efficiency of financial planning, control and reporting, and improve staff administration and planning. The employment of SAP e-Business Software together with an advanced electronic document management system, e-tendering, e-payslips, and company-wide e-mail in our daily operations has significantly reduced paper usage and improved internal and external communications, document distribution, filing and retrieval.



### LONG WIN BUS COMPANY LIMITED ("LWB")

LWB commenced bus services linking the New Territories with Hong Kong International Airport and North Lantau on 1 June 1997. Today, the area served by LWB's network covers the Airport and Tung Chung, as well as leisure and tourism developments on North Lantau, including Hong Kong Disneyland, AsiaWorld-Expo and the Ngong Ping 360 cable car.

**R**eflecting the steady recovery from the global financial downturn, ridership on LWB picked up from May 2010 (compared with the previous year), with significant growth noted in July and August. Looking forward, with the increase in air travel demand, the growth of the population of Tung Chung, the expansion programme of Hong Kong Disneyland and the commencement of infrastructural projects at the Airport, travel demand to and from North Lantau is expected to increase. With its comprehensive network, LWB is well positioned to serve a steadily expanding market.

### PERFORMANCE PLEDGE

LWB constantly reviews its bus services to ensure that safety and efficiency are maintained at the highest standards across its bus fleet. LWB measures its operational performance by reference to two key performance indicators, namely, mechanical reliability and operational capability. Mechanical reliability is defined as the average number of kilometres a bus operates before it experiences one mechanical breakdown on the road with passengers on board. Operational capability is the ratio of actual to scheduled departures in the peak direction during the peak operational hours of 7:00 a.m. to 9:00 a.m. across the entire bus network. In 2010, LWB's buses achieved 60,123 km : 1 in mechanical reliability and 101.37% in operational capability against targets of 50,000 km : 1 and 100% respectively.

### BUS FLEET AND FLEET UPGRADE

To meet the demand for enhancement of services on its External routes, LWB has modernised its fleet by introducing 21 new super-low floor air-conditioned double-deck buses, 20 of which replaced existing mid-life buses.



As at 31 December 2010, LWB operated 166 air-conditioned super-low floor double-deck buses, all equipped with wheelchair access, the electronic bus stop announcement system and the electronic tachograph, which records vehicle speed and other operational information.

LWB's bus fleet	Air-conditioned double-deck buses	Air-conditioned single-deck buses	Total number of buses
As at 1 Jan 2010	165	2	167
Additions during the year	21	–	21
Disposals during the year	(20)	(2)	(22)
As at 31 Dec 2010	166	–	166

To meet growing travel demand and enhance the quality of its services, at the end of 2010, LWB had on order six Euro V super-low floor air-conditioned double-deck buses for delivery in 2011.

LWB will continue to look for ways to capture the business potential arising from tourism growth, while maintaining the highest standards of network coverage and service for local customers.



LWB provides efficient services for many travellers

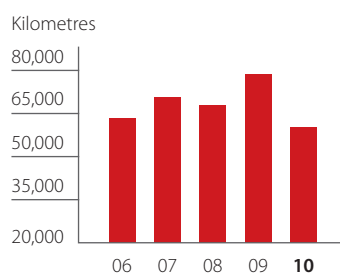
# Operational Review Hong Kong Franchised Public Bus Operations



📍 LWB's bus termini on Lantau Island



## Mechanical reliability - LWB



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

## BUS SERVICE NETWORK

At the end of 2010, LWB had 19 routes in operation. To improve service levels, two buses were added to Route E34 in May 2010 and the route was split into two, serving the Yuen Long and Tin Shui Wai areas separately during the morning peak period.

LWB will continue to look for ways to capture the business potential arising from tourism growth, while maintaining the highest standards of network coverage and service for local customers. LWB is committed to providing the most efficient and direct mode of transport to and from the North Lantau area.

## DEPOT

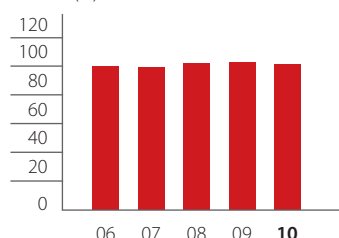
LWB operates a depot at Siu Ho Wan for daily bus maintenance, refuelling, bus washing and fleet parking. The depot is equipped with a waste water treatment system, which ensures that the quality of waste water complies with statutory requirements before being discharged into the public drainage system.



*LWB and Hong Kong International Airport – the perfect partnership*

### Operational capability - LWB

Percent (%)



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

### SAFETY

LWB conducts regular and thorough inspections of its buses to make sure they are maintained in the best condition. In addition, driving instructors are assigned to monitor both the driving performance and the customer service of bus captains. Safety briefings are conducted periodically and safety reminders issued to all bus captains. LWB also runs various quality campaigns in which good performance at both team and individual levels is rewarded.

### ENVIRONMENTAL PROTECTION

To reduce carbon particle emissions, LWB has retrofitted Diesel Particulate Filters on most of its Euro II and Euro III buses (92% of the relevant fleet). Besides, the introduction of 32 Euro IV buses (representing about 20% of the whole fleet) has helped to decrease nitrogen oxide emissions.

The provision of electrostatic air filtration in the air-conditioning system greatly improves the air quality in the bus compartment, while the adoption of the Eco-driveline system has effectively reduced fuel consumption.