# Legislative Council Panel on Transport Subcommittee on Matters Relating to Railways

# Manpower resources for railway services

# Purpose

This paper provides information on the investment made by the MTR Corporation Limited ("MTRCL") in the manpower resources to provide quality railway services.

# **Manpower resources**

2. The Rail Merger took place in 2007. The railway network continued to expand over the past 10 years<sup>1</sup>, with the total route length of the MTR network growing from about 212 km in 2008 to about 231 km of today. Meanwhile, the total number of stations increased from 150 to 161<sup>2</sup>. Total revenue car-km<sup>3</sup> covering both heavy and light rail rose from about 270 million car-km per year to about 330 million car-km per year during the same period, representing an increase of about 22%.

<sup>&</sup>lt;sup>1</sup> New railways commissioned in the past 10 years include LOHAS Park Station of Tseung Kwan O Line (2009), the Nam Cheong to Hung Hom Station section of West Rail Line (2009), Island Line extension to Western District (2014), extension of Kwun Tong Line (2016), and South Island Line (2016).

 $<sup>^{2}</sup>$  The number of heavy rail stations increased from 82 to 93 while the number of Light Rail stops remains at 68.

<sup>&</sup>lt;sup>3</sup> "Revenue car-km" refers to the total distance travelled by train cars while carrying passengers (for example, if a train with 8 cars travels 100 km while carrying passengers, the total revenue car-km are 800 km).

3. Whilst the MTR network has been expanding and its patronage increasing, MTRCL is still able to maintain the passenger journeys on time at 99.9%. The provision of convenient, reliable and quality railway service to passengers is attributable to the efforts of each and every MTR staff, especially the operating and maintenance frontline staff. Currently, the MTRCL employs over 17 500 staff in Hong Kong<sup>4</sup>  $\circ$ 

#### Proactively recruit additional manpower

4. To meet operational needs, MTRCL has substantially increased its manpower for railway services in recent years. The following figures reflect that MTRCL has invested much resources in the manpower for operations and maintenance in recent years.

- a) The number of full time operating staff (managerial and nonmanagerial) rose from 3 684 in 2008 to 4 633 in 2017, representing an increase of about 26%. Operating staff primarily comprise staff members who work at the Operations Control Centre or for train and station operations;
- b) The number of part-time operating staff, meanwhile, grew from 1 121 in 2008 to 2 738 in 2017, an increase of about 144%. These part-time staff are mainly responsible for managing passenger flow at stations and platforms, assisting passengers in boarding and

<sup>&</sup>lt;sup>4</sup> Among which about 80 are deployed for the operation of railway businesses outside Hong Kong. Some of them are based in Hong Kong, responsible for coordinating Mainland and overseas businesses, as well as handling tasks such as budgeting, risk assessment and strategy formulation for various projects. The remaining staff are posted to a subsidiary or joint venture company in the Mainland or overseas to provide support for the construction, daily operation and maintenance of local railways.

alighting trains during peak hours or at busy stations, reminding passengers of not rushing into trains when the doors are closing and pay attention to safety while they are on escalators, providing assistance to passengers when necessary, etc.. Additional platform assistants will also be hired to provide information and assistance to passengers when there are specific projects at stations; and

c) The number of MTR staff responsible for maintenance of the railway system (managerial and non-managerial) grew from 3 724 in 2008 to 5 006 in 2017, an increase of about 34%. All maintenance works directly related to the smooth operation of the railway (such as repair and maintenance of major systems and components including trains, signalling system and overhead line) are handled by MTR staff.

#### Flexibly deploy manpower resources

5. Railway safety has always been the top priority of MTRCL. MTRCL adopts prudent management principles and takes into account various factors, including staff ranking, full-time or part-time employment, and backup/alternate staff, so that we can suitably deploy or adjust manpower to meet operational needs. For example, in deploying manpower at stations, MTRCL will take into consideration the passenger volume at the station and the complexity of its operations (such as whether it is an interchange station). To handle temporary surge in passenger volume during peak hours or special festivals, part-time staff will be arranged to maintain order at stations. In the event of service disruption, MTRCL will also flexibly deploy manpower including the Customer Service Support Team, which consists of staff from different departments, to offer assistance to affected passengers at stations. 6. While abiding by the overriding need to ensure a smooth railway operation, in order to increase cost effectiveness<sup>5</sup>, MTRCL outsources the maintenance of some of the non-major systems and components to contractors, paying due regard to the nature of works as well as the required skills and the time required for such works. In 2017, 1 456 contractor staff were involved in the maintenance of non-major systems and components<sup>6</sup>, accounting for about 22% of the total number of maintenance staff. MTRCL also hires outsourced contractors to provide other supporting services, such as security and cleaning works, and requests the relevant contractors to comply with the Employment Ordinance. If manpower deployment has to be changed due to operational needs, MTRCL would request the contractors to properly address staff needs and maintain service quality.

7. Details of the manpower resources for supporting railway services (operating and maintenance) are set out in <u>Annex</u>.

### **Training for staff**

8. MTRCL attaches great importance to the training and development of talents. About 7 100 occupational or management training courses were conducted in 2017, offering each MTRCL staff on average 7.1 training days in the year.

<sup>&</sup>lt;sup>5</sup> MTRCL adopts a stringent maintenance regime which was established in accordance with international standards. It is mandatory that contractor staff must have the required qualification and certification to prove that they have sufficient skills and capability to perform their work. For specialised works such as those related to fire prevention equipment or repair of lifts and escalators at stations, there are statutory regulations that such works be carried out by registered contractors. MTRCL's maintenance departments also monitor and guide contractor staff to ensure that the quality of their service complies with established standards.

<sup>&</sup>lt;sup>6</sup> These include the passenger information display equipment, CCTV equipment, platform screen doors, lighting system at stations, fire prevention equipment, lifts and escalators at stations and baggage handling equipment on Airport Express, etc.

#### Induction and on-the-job training

9. All MTR frontline staff involved in supporting railway services have received systematic training, including induction and on-the-job training. The form of training includes classroom lectures, group discussions, practical sessions with simulator and real equipment, as well as providing on-job guidance to new colleagues by experienced and trained staff. Operating staff also join refresher courses regularly to acquire and reinforce their knowledge of safety management and incident handling. MTRCL reviews and modifies its training materials on a regular basis. For example, additional fire safety training has been provided to station staff subsequent to the arson case in February 2017.

10. On professional skills, the Mass Transit Railway Corporation (predecessor of MTRCL) has launched the Apprentice Training Scheme ever since its establishment. The programme has already been running for 39 years. Trained apprentices go through a systematic on-the-job training programme, including classroom lectures and practical sessions, to gain technical knowledge and know-how from skilled personnel. They also receive coaching and guidance from trainers. Moreover, MTRCL gives full sponsorship for craft and technician apprentices to attend designated Vocational Training Council programmes to acquire recognised academic qualifications.

11. In 2011, MTRCL set up a two-year Technician Associate training scheme which targets Higher Diploma graduates from engineering disciplines. The scheme provides apprentices/associates with a range of onthe-job and professional training relating to railway maintenance. MTRCL has been substantially increasing the admission number under the Apprentice Training Scheme in recent years. For example, 165 craft/technician apprentices and technician associates were hired in 2017. Currently, over 500 craft/technician apprentices and technician associates are under training and they will gradually join the maintenance team under the Operations Division between 2018 and 2021.

#### MTR Academy nurtures railway talents

12. Leveraging on its extensive railway experience and expertise of almost 40 years in railway operations, MTRCL established the MTR Academy ("MTRA") in 2016 to nurture railway professionals. MTRA currently offers two courses<sup>7</sup>, which have been accredited by the Hong Kong Council for Accreditation of Academic and Vocational Qualifications. In 2017, 85 students for the Advanced Diploma in Railway Engineering were admitted and about half of them are MTR staff. The knowledge received from MTRA facilitates graduates in their career development in the railway industry. In addition, MTRA supports the development and delivery of the Applied Learning subject "Railway Studies" offered by the Hong Kong College of Technology. This programme was approved by the Education Bureau in September 2017 and will be offered as one of the electives of the Senior Secondary School Curriculum in the school year of 2018. It is the first railway-related Applied Learning subject approved for the Hong Kong Diploma of Secondary Education Examination (HKDSE). MTRA also offers short introductory and continuing professional development courses on railway operation, as well as corporate training programmes.

<sup>&</sup>lt;sup>7</sup> "Advanced Diploma in Railway Engineering" [Qualifications Framework (QF) Level 4 accredited] and "Diploma in Transport Studies" [Qualifications Framework (QF) Level 3 accredited] respectively

13. Upon the establishment of MTRA, MTRCL has made suitable arrangement and manpower deployment to maintain reasonable workload for its trainers and staff. The objective is to keep up the teaching quality of MTRA, while ensuring that existing training opportunities for frontline staff will not be affected, thus maintaining the quality of railway service.

#### **Future plans**

14. MTRCL places a lot of emphases on communication with staff. It has established mechanisms and various channels (including regular meetings with staff unions) to maintain close liaision and communication with unions and staff on issues of concern.

15. In 2017, the turnover rates of operating and maintenance staff were at the low levels of 3.2% and 2.4% respectively. MTRCL will continue to recruit suitable talents through various channels (such as community recruitment). To meet future operational needs, MTRCL will continue to recruit suitable young people to join its Apprentice and Technician Associate Training Programmes. MTRCL will also nurture more high quality railway professionals through MTRA.

MTR Corporation Limited April 2018

# Annex

Figures related to MTR Network and Manpower Resources for Railway Services (Operating and Maintenance) in 2008 and 2017

	2008	2017	Change
MTR Network			
Total Route	211.6	230.9	+9%
Length (km)	211.0	230.9	+ 7 70
Heavy Rail	82	93	+13%
Station			11370
Light Rail Stop	68	68	+0
Total of Heavy			
and Light Rail	274 731 000	335 888 000	+22%
Revenue Car-km			
Manpower Resources			
Operating Staff Note 1	3 684	4 633	+26%
Maintenance Staff	3 724	5 006	+34%
Total Operating			
and Maintenance	7 408	9 639	+30%
Staff Note 1			
Part-Time			
Operating Staff	1 121	2 738	+144%
Note 2			
Total Full Time			
and Part-time	8 529	12 377	+45%
Staff Related to			
Railway Services			
Contractor	1 182 <sup>Note 3</sup>	1 456	+23%
Maintenance Staff			

- Note 1 Includes managerial and non-managerial staff
- Note 2 Mainly station and platform assistants
- Note 3 2010 figure