

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

Latest Progress of Enhancement of MTR Station Facilities

Purpose

This paper briefs the Subcommittee on the latest progress of the enhancement of station facilities by the MTR Corporation Limited (“MTRCL”).

Background

2. The MTR network carries more than 5 million passenger trips per day. The MTRCL is committed to providing safe, reliable and smooth railway service for passengers. For this, the MTRCL invests billions of dollars¹ annually in enhancing, revitalising and maintaining its railway assets and infrastructure, including station facilities.

3. The MTRCL always attends to passengers’ views and regularly conducts surveys, with a view to understanding passengers’ needs. Survey results show that 90% of the interviewed passengers agree with the continuous investment by the MTRCL in railway development and enhancement of existing railway service and facilities. After studying passengers’ views and reviewing railway operational needs, the MTRCL has been continuously upgrading various station facilities, with the major ones being highlighted in the ensuing paragraphs.

Installation of new lifts

4. At present, all MTR stations are equipped with at least one barrier-free access to facilitate physically-challenged persons to enter or leave stations. These accesses are equipped with passenger lifts, wheelchair aids, stair lifts or ramps. The MTRCL aims, as far as practicable, to provide one passenger lift connecting the street level with

¹ The MTRCL invested over 6 billion dollars in 2014 in enhancing, revitalising and maintaining its railway assets and infrastructure. This investment has increased significantly per year to over 8 billion dollars in 2016, which accounts for more than 40% of the 17.7 billion dollars revenue from the Corporation’s Hong Kong transport operations.

station concourse in every station. Nevertheless, as installation of passenger lifts was not included in the design of some of the existing stations (in particular those constructed in the 1970s or 1980s in the urban areas), it is technically challenging, both in terms of space availability and land ownership, to install lifts in these stations.

5. In 2016, five new passenger lifts connecting station concourse with the street level were installed at Shau Kei Wan, Yau Ma Tei, Admiralty, Tsim Sha Tsui and Lai King stations. In the previous four years (from 2012 to 2015), another eight passenger lifts were installed at Sai Wan Ho, Lai Chi Kok, Cheung Sha Wan, Shum Shui Po, Prince Edward, Jordan, Sheung Wan and Shek Kip Mei stations. As a result, a total of 13 stations were installed with a new passenger lift in the past five years (from 2012 to 2016).

6. Currently, among the 93 MTR stations, 56 are equipped with passenger lifts, whilst installation of lifts is not necessary for the other 34 stations because they are either at-grade, equipped with ramps for wheelchair access, or passengers can get access to the MTR stations through nearby facilities (e.g. shopping malls).

7. MTRCL is now actively engaging in the study, planning or implementation of lift installation works at the remaining 3 stations which are currently not provided with lift access between station concourse and the street level. They are Fortress Hill, Diamond Hill and Tin Hau stations. The latest progress of the planning and implementation works is set out in Annex.

Replacement of existing lifts

8. Apart from installing new passenger lifts at stations where it is technically feasible, MTRCL is also gradually replacing 25 hydraulic lifts at various stations with traction lifts to facilitate more convenient and comfortable movement of passengers entering and leaving stations, and between station concourses and platforms. Replacement of 16 of these lifts at Mong Kok, Kowloon Tong, Heng Fa Chuen, Quarry Bay, Ngau Tau Kok, Kwun Tong, Olympic, Yau Ma Tei, Sheung Shui, Lok Fu, Prince Edward and Kowloon Bay stations has been completed and reopened for service. The replacement of the remaining 9 hydraulic lifts at 7 stations will continue to be carried out by the MTRCL and is targeted for completion in 2018.

Refurbishment of escalators

9. Currently, there are over 1 000 escalators in the MTR network². MTRCL has a stringent maintenance and repairing regime for escalators all along. The design, construction, inspection, testing, operation and repairing of all the escalators in the MTR network need to comply with the Lifts and Escalators Ordinance, and the Code of Practice issued by the Electrical and Mechanical Services Department (“EMSD”). Approval from EMSD is needed before the escalators are put into service. The escalators will be checked and maintained by escalator contractors every two weeks, supplemented with regular inspections, in order to meet the statutory requirements and ensure that the escalators are safe and reliable.

10. The life expectancy of escalators in the MTR network is more than 40 years. MTRCL will arrange a major overhaul for the escalators which have been used for around 25 years. MTRCL has launched a refurbishment programme for the escalators in the network since 2002. Up to now, a total of 344 escalators have been refurbished, and another 3 escalators located at Lam Tin and North Point stations respectively are being refurbished and are targeted to complete in the second quarter of 2017. MTRCL will continue the refurbishment programme for the escalators at other stations which have been used for around 25 years. The refurbishment works for each escalator takes three months. Different from the regular maintenance and repairing procedures, when refurbishment is being carried out, the contractors are required to conduct thorough maintenance and repairing works for all the parts of the escalators and replace worn-out parts.

11. To remind passengers on escalators safety, announcements and notices are made at stations, reminding passengers to refrain from standing too close to the edge of the steps and using mobile phones on the escalators.

Enhancement of other station facilities

12. The enhancement works at Fo Tan and Mong Kok stations were completed in 2015. The two paid areas of these two stations are now reconnected at concourse level, allowing smooth passenger flow at the stations, to and from each entrance/exit and easy access to all station

² 1 092 in total, 35 of which are longer escalators with a vertical height of over 15 meters.

facilities.

13. Apart from the above-mentioned station enhancement works, installation of new lifts and escalators is being carried out by phases in Kowloon Tong and Mong Kok stations to connect the station concourse and platform. This will strengthen the connectivity of different storeys within the stations to facilitate passenger flow. The works are targeted for completion in 2018. In addition, MTRCL is also planning to build a new entrance and widen a staircase on the Hung Hom-bound platform at Sheung Shui Station to improve the passenger flow at station. The works are targeted to be completed in the first half of 2020.

14. On the night of 14 February 2017, the connection of a fresh water pipe outside Entrance/Exit B of South Horizons Station was loosened. Fresh water burst and damaged part of the roof of Entrance/Exit B constructed with fire resistance boards. Water then flowed into the concourse from the damaged roof. The MTRCL sought assistance from the Water Supplies Department (“WSD”) immediately and the Department fixed and strengthened the supports of the pipe shortly that night. After confirming that the structural integrity of the station was not affected, normal service was resumed to the Station at around 00:25 a.m. of the next day. After the incident, MTRCL already installed additional supports for stabilisation such that the risk of loosening at the connection of the pipe was lowered, and temporarily mended the damaged part of the roof at Entrance B.

15. In general, underground MTR stations are constructed in the soil or rock layer using concrete structure with waterproof layer to prevent ingress of water into stations. Nevertheless, the portion of the Entrance/Exit B of South Horizons Station, which is adjacent to the concourse, is located within a void surrounded by concrete structure for placing underground utilities underneath the road level of South Horizon Drive. As that void is completely isolated, it would not be affected by underground water or rain. Furthermore, it is restricted by the space of that void. In this regard, the design of the Entrance/Exit B is rather special, and thinner fire resistance boards are used for constructing its roof. To further strengthen the waterproof facilities at Entrance/Exit B, MTRCL is now carrying out improvement works at Entrance/Exit B, including installing steel plates at the location concerned for further separating the structure of the station and other underground utilities, and applying water resistant coatings to the roof at Entrance/Exit B. The improvement works are targeted to be completed in mid-May 2017.

Installation of new toilets

16. When designing and planning new railway lines, the MTRCL will provide toilets for passengers in or near the new stations. For the two new stations along the Kwun Tong Line Extension (including Ho Man Tin and Whampoa stations), and the five new stations along the South Island Line (including Ocean Park, Wong Chuk Hang, Lei Tung, and South Horizon stations, and the extended part of Admiralty Station), toilets are provided in the stations. Similar arrangement will be applied to new stations along the Shatin-to-Central Link.

17. As regards existing stations, MTRCL has committed to providing toilets for passengers in 10 interchange stations (including Mong Kok, Prince Edward, Admiralty, Tsim Sha Tsui, Yau Ma Tei, Lai King, Central, North Point, Yau Tong and Tiu Keng Leng stations), to bring convenience to passengers. Amongst them, the new toilets in Mong Kok and Prince Edward stations have been opened for use since January 2015. The new toilet in Admiralty Station has also been opened in December 2016 alongside the commissioning of South Island Line. The toilet installation works in the remaining 7 stations will be carried out alongside major enhancement works. When planning and implementing toilet installation works, statutory requirements and technical feasibility (including the availability of suitable locations for placing ventilation shafts, septic tanks and other auxiliary facilities) need to be fully taken in account, hence it is technically challenging. MTRCL will actively overcome these issues and strive for completing the installation of toilets in these 7 stations by 2020. Besides, the refurbishment of toilets in stations along the Ma On Shan Line and Kowloon Station were completed in 2015 and 2016 respectively. MTRCL is also planning for the refurbishment of the toilets at Nam Cheong and Hung Hom stations in phases by 2018.

Provision of breastfeeding rooms

18. MTRCL understands the public opinions on the provision of breastfeeding rooms in MTR stations. When planning for the provision of breastfeeding rooms, the availability of space, passenger flow, and evacuation arrangements at stations need to be fully taken into account to ensure passenger safety. When designing and planning future new railway lines, MTRCL will provide breastfeeding rooms for passengers in new stations.

19. MTRCL is also studying the possibility of providing breastfeeding rooms at existing stations. Currently, passengers can contact station staff for assistance so that a suitable area will be arranged for them for breastfeeding.

Provision of seats

20. For the benefits of passengers, 326 seats were installed on platforms and long adits in the network in 2013 and 2014. For the stations of new railway lines launched in 2016, including Ho Man Tin, Whampoa, the extended part of Admiralty Station, Ocean Park, Wong Chuk Hang, Lei Tung, and South Horizon stations, 226 seats were installed on the platforms and long adits. Apart from that, 78 seats were also installed along Ma On Shan Line in 2016. Currently, there are in total over 2 000 seats at 93 MTR stations.

Replacement of chillers

21. Since most of the MTR stations are built underground, the stations are equipped with chillers and ventilation systems to ensure comfortable journeys for passengers. The function of chillers is to adjust station temperature, while that of ventilation systems is to introduce fresh air from outside of the stations and facilitate good ventilation within stations. In the MTR network, some chillers have been in use without replacement since the station commissioned operation. MTRCL is implementing a massive programme to replace 160 chillers (around 50% of the total). The MTRCL will use new and environmentally friendly devices, with a view to increasing energy efficiency.

22. Apart from 36 MTR stations along 7 MTR lines, the replacement programme will cover 4 MTR Depots and the Tsing Yi Operations Control Centre. The replacement works will be conducted between 2017 and 2023 by phases and in an orderly manner, with about 27 chillers being replaced every year. Currently, during winter time, only good ventilation is required in stations and there is no need to lower the in-station temperature. Therefore, the ventilation systems are operated to draw fresh air into stations but not the chillers. In this regard, the replacement works for chillers will be implemented in winter months. The replacement works for the chillers at Wan Chai Station

starting from November 2016 are in good progress and are expected to be completed in April 2017.

23. MTRCL will closely monitor the situation during the replacement works and implement appropriate contingency measures (such as using temporary fans) to maintain a comfortable environment.

Enhancement of information services

24. MTRCL plans to strengthen communication with passengers and provide more timely information to them. Measures include installing a new LCD passenger information display system on station platforms to provide real-time information on train operation in a timely and flexible manner. The installation at stations along the Tung Chung Line, Airport Express, Kwun Tong Line, Island Line and Ma On Shan Line was completed and this will be extended to stations along Tsuen Wan Line, Tseung Kwan O Line, East Rail Line and West Rail Line gradually. These facilities play a crucial role especially during railway incidents. MTRCL will from time to time review how best communication with passengers can be further strengthened.

25. MTRCL understands passengers' high demand for Internet access. Free Wi-Fi hotspots have been provided at all MTR heavy rail stations since 2013 so that passengers can access the Internet in the MTR network. This service is also provided at the stations of the new railway lines launched in 2016, including Ho Man Tin, Whampoa, the extended part of Admiralty Station, Ocean Park, Wong Chuk Hang, Lei Tung, and South Horizon stations.

26. With an increasing number of passengers using mobile phones and mobile devices, MTRCL launched a free mobile device charging service at 13 MTR stations in late February 2017. Passengers can enjoy the charging service with their own charging cable at the i-Centres of the stations equipped with USB sockets.

Station art

27. MTRCL is mindful about the need of providing a friendly and pleasant in-station environment for passengers. Since 1998, MTRCL

has been allocating space in some stations to implement the “art in station architecture” programme, subject to no disruption to railway operation.

28. Since the introduction of the “art in station architecture” programme in 1998, art pieces such as sculptures, roof hangings and mosaics have been incorporated by MTRCL into the design and structure of stations. Since then, this programme has been extended to the whole MTR network. Currently, 72 works created by local and international artists have become a part of various MTR stations, and some of them highlighting the characteristics of the districts. For example, the “High Street Heritage” and “Western Street Heritage” at Sai Ying Pun Station were created by Hong Kong Youth Arts Foundation. Youth groups were invited to explore the community with an artist and capture images of local heritage buildings. Another example is the “Life in Mei Foo - Now and Then” at Mei Foo Station. It describes the past of Mei Foo and illustrates the life of the Mei Foo residents at the present moment.

29. Besides, MTRCL has been incorporating arts pieces when planning and designing new stations. Art pieces with characteristics of Kowloon City and Southern District are now on display at the new stations commenced service in 2016, including Ho Man Tin, Whampoa, the extended part of Admiralty Station, Ocean Park, Wong Chuk Hang, Lei Tung, and South Horizon stations and respectively.

Way forward

30. MTRCL will continue to invest more resources in enhancing the station facilities and to provide passengers with more convenient and comfortable services. MTRCL will also continue to collate views from passengers on station facilities through various channels (such as station surveys and online feedback forms) for further enhancements.

31. Members are invited to note the above details on the enhancement of MTR station facilities.

MTR Corporation Limited
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**Latest progress of lift installation by MTRCL
at three stations not yet installed with lifts
connecting station concourses with the street level:**

Station	Progress
Fortress Hill	MTRCL plans to extend the two existing lifts adjacent to entrance/exit A of Fortress Hill Station connecting street level with mid-level downwards to the underground concourse of Fortress Hill Station.
Diamond Hill	Installation works to be carried out alongside the construction works of the Shatin-to-Central Link.
Tin Hau	The construction of lift at Tin Hau Station is limited by geographical, land ownership and technical constraints. MTRCL has studied many different options in the past, but cannot come up with a feasible proposal. After detailed studies, in order to facilitate wheelchair users to enter and leave Tin Hau Station, MTRCL is now planning to install a vertical platform lift at Entrance/Exit B connecting the station concourse and the King's Road. At the same time, 3 new escalators will be installed at Entrance/Exit A to provide more convenient access for passengers. The installation works will commence in mid-2018 and is targeted to be completed by 2021.