

Electrical Blog No. 43 - Railway Development Trend in Hong Kong

The railway network in Hong Kong is one of the most safe, reliable and effective railway networks in the world. It is now carrying an average of 3.7 million passengers every weekday. The railway network comprises nine railway lines serving Hong Kong Island, Kowloon and the New Territories. In addition, a Light Rail network serves the local communities of Tuen Mun and Yuen Long in the New Territories. The Airport Express is a dedicated high-speed link to Hong Kong International Airport.

For domestic services, several new railway lines, namely the West Island Line, South Island Line and Shatin to Central Link & Kwun Tong Line Extension are under planning, design or construction stages. From Hong Kong, passengers can also travel to Guangdong Province, Beijing and Shanghai in the Mainland China with the MTR's intercity railway services using the East Rail.

The Guangzhou–Shenzhen–Hong Kong Express Rail Link (XRL), one of the ten major infrastructure projects announced in the Chief Executive 2007-08 Policy Address, is already at the detailed design stage and scheduled to be completed in 2014/15. The XRL will connect cross-border cities of Hong Kong, Shenzhen, Dongguan and Guangzhou. At maximum speed of 200 kph, the XRL trains will take only 14 minutes to travel the 26 km from Hong Kong to Futien in Shenzhen; and only 48 minutes to travel the 142 km from Hong Kong to Guangzhou. Once in the Mainland, the XRL trains can travel at a speed up to 350 kph.

The shuttle trains will probably of 8-car formation, about 200m long and carrying more than 600 passengers. The long-haul trains from other provinces of the Mainland will probably of 16-car formation.

The tunnel ventilation system will be specially designed for the 26 km twin-tube tunnel with ventilation buildings located at suitable intervals for push-and-pull operation during congested or emergency situations.

The Electrical Blog is contributed by the Electrical Division. If you would like to know more about this topic, please contact the Division Hon Secretary, Ir K.M. LEUNG at 'kmlung@emsd.gov.hk'