

## Technical Forum: *First High Speed Rail Connecting Hong Kong (West Kowloon Station) to Mainland*

**Date:** 26th September 2023 (Tuesday)  
**Time:** 18:00 hrs. - 19:00 hrs.  
**Venue:** Auditorium, MTRHQs Building,  
Telford Plaza, Kowloon Bay, Kowloon.  
**Speaker:** Mr. TANG Patrick Wai Fat  
Signalling System Lead Design Manager,  
ex-XRL Construction Manager - Signalling  
HKTS-T&ES  
MTR Corporation Limited

*All IRSE(HK) Members and MTRC Staff are welcome*

**Abstract:** **Express Rail Link (XRL)** was a super mega project in Hong Kong and West Kowloon Station (WEK) is the biggest station that MTR has ever built. XRL (Hong Kong Section) is around 26km long and 3-minute signalling design headway for normal direction of running was delivered so as to ensure the interoperability and service with Mainland High Speed Rail (HSR).

The Signalling System adopted in XRL Hong Kong Section was based on proven technology and design, with successful revenue service records on CTCS3/CTCS-2 Signalling and Train Control applications. The Chinese Train Control System – Level 3 (CTCS-3) is the primary Signalling Train Control System for XRL with CTCS-2 as the backup system. The Signalling System is fully compatible with that adopted in the Guangzhou-Shenzhen section and fully compatible with the CTCS3/CTCS2 trainborne signalling system used by the Mainland rolling stocks.

Various challenges have been faced during the XRL construction



period despite the interface with Mainland counterparts; late changes arisen from China Railway (CR) standards and prolonged delay of local site readiness etc.

This presentation will cover the CTCS Configuration of XRL Signalling System, difficulties encountered throughout the project phases; credits performed so as to make the project a final success. In addition, CTCS with ATO Solution has been developed and put in service in Mainland HSR and some highlights of such technology will be given.

**Fees:** Free-of-charge

**No. of** 80

**Participants:**

**Registration Methods:** **Prior registration is required.** Applications will be accepted on a first-come, first-served basis.

(1) Members of IRSE(HK) are invited to make registration via the [Activity] page of the IRSE(HK) website. The IRSE(HK) website will offer a free service to record the CPD hours for registered members who have attended the activity as scheduled.

**URL:** <https://irse.org.hk/activity/>

(2) Staff of MTRC are invited to make registration by sending an e-mail with his/her FULL Name, Mobile No. and E-mail to **Mr. P Y CHEUNG** (E-mail: [pycheung@mtr.com.hk](mailto:pycheung@mtr.com.hk)).

**Souvenir:** **Every participant registered in the forum before 20th September 2023 will be presented a souvenir.**

**Closing Date of Registration:** **20 September 2023 (Wednesday)**

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