

**LegCo Panel on Transport
Sub-committee on Matters relating to Railways
Meeting on 25 November 2003**

West Rail - Latest Update

Introduction

This paper provides an update of the progress of the West Rail project for Members' information.

Project Works Progress

Overview

2. All civil construction works for West Rail are complete with only some non-railway, external works outstanding. Trial operations started in June 2003, with trains running in accordance with the proposed West Rail timetable for public service. This has enabled the flushing out of problems and bugs within the various systems and the signalling system in particular.

3. Emphasis continues on completing the remaining activities required to satisfy final statutory certification, and to maintain system performance to the established punctuality and reliability targets during the ongoing trial operations.

Civil Works

4. The last round of statutory inspections has been completed for all stations which have been handed over to KCRC Operations. As for the public transport interchanges (PTIs), inspections by the Highways Department and Transport Department are complete with individual dates having been agreed for gazettal of all of the PTIs targeted to take place within November.

5. Close liaison is being maintained with the various Government Departments concerned to close out outstanding items and achieve final certification. Emphasis is also focussed on completing all outstanding reinstatement, re-provisioning of facilities and landscaping works, and to minimizing outstanding items of work.

Resolution of Signalling Problems

6. There have been two primary problems that have adversely affected the performance of trial operations, namely –

- (a) electromagnetic interference problems affecting the signalling system; and
- (b) residual signalling system faults, primarily hardware and software, affecting train performance.

7. These problems have been resolved, largely by –

- (a) replacing the surge arrestors by modified ones;
- (b) installing screens to the signalling equipment cabinets to provide extra safeguard against electromagnetic interference; and
- (c) introducing hardware and software fixes.

As a result, stability of the signalling system has improved, and train services have attained a very high level of reliability and punctuality over the past few weeks.

Resolution of Vibration Problems

8. Trial running has shown that the trains manifest an unusual level of vibration at certain speeds over certain parts of the West Rail alignment. Following detailed investigation, KCRC has found that this results from the EMU wheel/track interface. Although the unusual vibration has no safety implication, it is not acceptable because it would cause passenger discomfort. This problem can be solved by re-machining the train wheels, and tests have confirmed that

re-machining of the train wheels can reduce the level of vibration and enhance passenger comfort. All train wheels will be re-machined before West Rail opens for passenger operations.

Compliance with Environmental Impact Assessment Ordinance (EIAO) and Noise Control Ordinance (NCO)

9. All necessary submissions have been made to EPD to close out all environmental matters relating to the EIAO and NCO.

10. With respect to the complaints on noise from trains received from residents in Tuen Mun and Yuen Long areas since the commencement of the trial runs of West Rail, detailed investigation and noise data collection have been conducted by the Environmental Team to better understand the nature of the complaints and to identify measures for improvement.

11. The complaints have been dealt with to date by -

- (a) reducing to a minimum the extent of nighttime train trials;
- (b) rail head polishing to reduce wheel/track noise; and
- (c) noise suppression by the application of additional noise absorption/containment measures, especially at stations.

12. Our measurements show that at five locations where complaints on noise have been received, noise levels at two locations near Long Ping Station currently exceed legal limits by one or two decibels. Additional noise containment measures are being implemented and noise levels at these two locations will be brought down to a level which complies with the Noise Control Ordinance when West Rail opens.

Trial Operations

13. Simulated incidents and emergencies have been conducted in the past few months to test the effectiveness of the operating procedures and the

responsiveness of the operations and maintenance teams. Up to the end of October, some 1,800 drills and exercises using a wide range of scenarios related to train and station operations have been carried out. These have enhanced the skills of staff in handling both normal and abnormal situations which may arise in an operating railway. External parties such as the Fire Services Department, the Police and Hospital Authority have also taken part in some of these exercises. The railway rules and procedures including the contingency plans have been tested out. As a reiterative process, they will be reviewed from time to time to ensure that safe, efficient and reliable services are provided to passengers. In addition to these drills and exercises, all the railway systems have twice been subjected to extreme stress, with power being fed from only one power sub-station instead of two in normal circumstances. These tests show the railway systems to be able to withstand extreme stress.

14. The Corporation aims to achieve high standards of safety, train punctuality and service reliability. With stability of the signalling system having been achieved, train services have been operated during trial operations in accordance with train timetables. For the purposes of normal trial operations, KCRC has prescribed minimal punctuality and service delivery at 95% and 97.5% respectively. In practice, since mid-October, average daily train punctuality has exceeded 98%, and daily service delivery over 99%.

West Rail Commissioning

15. Opening West Rail by the end of the year remains KCRC's target.

16. A series of Station Open Days, Charity Ride and Public Trial Rides will be organized to familiarise the public with the services of West Rail prior to its opening.

Conclusion

17. The opening of West Rail for passenger operations is targeted for the end of this year, subject to satisfactory completion of trial operations, compliance with all statutory requirements, approval by the Hong Kong Railway Inspectorate and other relevant Government departments and consent by the KCRC Managing Board.

18. Members are invited to note the content of this paper.

Kowloon-Canton Railway Corporation
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