Technical Visit to LRT Depot Kelana Jaya Line, Petaling Jaya

ENGINEERING EDUCATION TECHNICAL DIVISION



reported by Mohd Yusof Rahmad Tulahan, Grad. IEM Committee Member, Engineering Education Technical Division (E2TD).

Mohd Yusof Rahmad Tulahan, is a graduate of Universiti Teknologi Malaysia (UTM) and currently a Construction Engineer with Opus International Berhad n 5 March, 2015, the Engineering Education Technical Division (E2TD) organised a technical visit to the Depot LRT Kelana Jaya Line, Petaling Jaya, for 36 members and engineers. The depot includes a maintenance workshop and the control centre.

The first stop was the rolling stock department where we were briefed on the functions of bogie drive. Each car has two bogies and an integrated mechanical, electrical and electronic system. The braking system is a crucial train system function. When the door closes, the train will increase speed up to 100 km/hr and decrease gradually as it approaches the next station.

Communication is one of the most important aspects of the railway system. It is pre-programmed to communicate between the control centre and the train crew and station as well as inter-train communication.

Signalling is the primary electronic sensor where data is transmitted to the Operational Control Centre (OCC) in Real Time for processing and feedback to the Automatic Train Control (ATC) system. Movements of trains are automatically controlled and, in the event of any incident or accident, the OCC



Ir. Arnizan (Rapid Rail, Prasarana - the presenter) explaining the emergency brake and power turned - off for trains.

will trigger the emergency response procedure in the system.

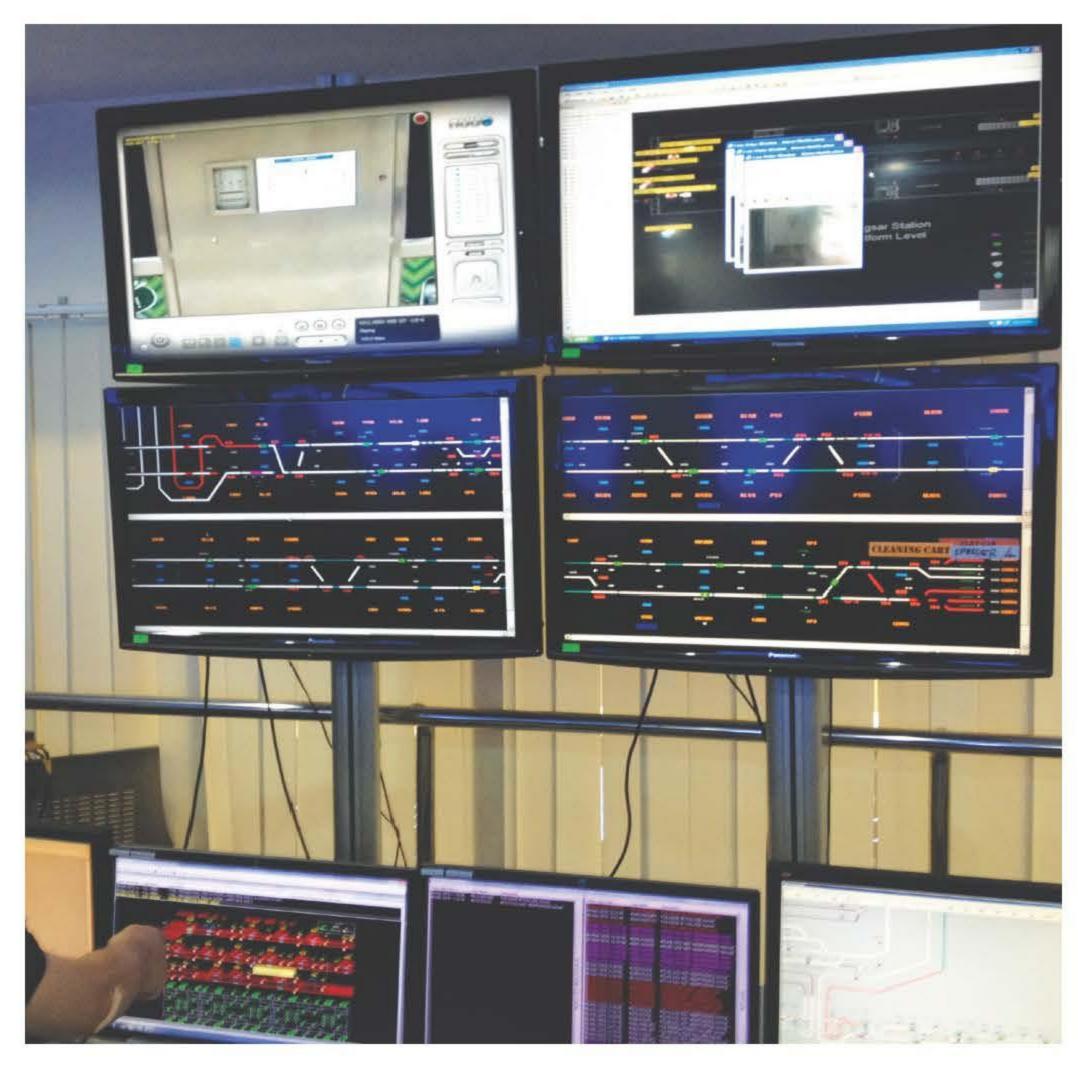
The primary functions of a signalling system are:

- To control and manage trains in a safe manner
- To meet line capacity
- To reach the destination in the shortest time
- To provide a comfort and efficient ride.

ATC comprises Automatic Train Protection, Automatic Train Operation and Automatic



Participants with Prasarana in front of Main Building Depot.



The circuit, trackway and trains movement within the depot.

Train Supervision. These are all pre-programmed and integrated to major components including the safety devices interlock, timing, speed and emergency response action. The OCC monitors all the systems components including the Central Management System, Depot Control System, Station Management System, etc. It also controls the Closed Circuit Television (CCTV) of the entire system,

including stations. The OCC is also able to control the operation of individual trains via emergency stop buttons.

IEM DIARY OF EVENTS

Title: Technical Visit to MMK Engineering Sdn. Bhd.

16 June 2016

Organised by : Mechanical Engineering Technical

Division

Time : 9.00 a.m. – 1.00 p.m.

CPD/PDP : 2

Title: Technical Visit to MMK Engineering Sdn. Bhd.

16 June 2016

Organised by : Mechanical Engineering Technical

Division

Time : 9.00 a.m. – 1.00 p.m.

CPD/PDP : 2

Title: Pre-GETD AGM: Talk on "Reinforced Soil Structures: Performance under Extreme Loading Conditions"

18 June 2016

Organised by : Geotechnical Engineering Technical

Division

Time : 9.00 a.m. – 10.30 a.m.

CPD/PDP : 2

Kindly note that the scheduled events below are subject to change. Please visit the IEM website at www.myiem.org.my for more information on the upcoming events.