

MMRCL to adopt auto-signalling system for safe train movement

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According to the monthly newsletter, 'METRO CUBE' issued by the Mumbai Metro Rail Corporation Limited (MMRCL), which is handling this project, the trains on the Colaba-Bandra-SEEPZ (Metro 3) line will be running on the Communication-Based Train Control (CBTC) system. This essentially means that the CBTC system with automatic signalling system will enable safe train movement. The characteristics of this system involve having fixed beacons for refining the train information. It will also have a secondary detection system for safety during the degraded mode of operations. Besides this,



the system will have a high-resolution train location determination, independent of track circuits. According to MMRCL newsletter, in conventional CBTC system, the trains

can regularly send their location report to a zone controller. In return, the controller will send a report for each train which enables to decide the train speed control curve. This

will further enable to operate trains at lesser time intervals thereby reducing headway when additional trains are introduced. Moreover, it will have a fixed block signalling system which will show the status of the upcoming block informing the driver how to proceed.

The CBTC system can read moving trains to obtain their location data. The location is combined with the train speed to provide train position and is then transmitted to the computerised dispatch system and is shared with the nearby trains. Interestingly in this system, the buffer will move with the train responding to the speed and surroundings, instead of remaining fixed.