



CMRL on track to procure 'driverless' trains

Floats Tender, Yet To Release The Technical Specifications

TIMES NEWS NETWORK

Chennai: After inviting bids for constructing the 118.9km phase-2 project, Chennai Metro Rail Limited (CMRL) is on track to procure trains, which will be driverless, by floating a tender notice. When operations begin in six years, CMRL plans to operate 138 three-car trains of which 42 are likely to be leased to save

AT A GLANCE		HOW ARE TRAINS OPERATED IN PHASE-1	
ABOUT DRIVERLESS TRAINS <ul style="list-style-type: none"> ➤ They can be operated automatically at all times ➤ Doors open and close on its own ➤ They can detect obstacles and emergency situations ➤ Onboard staff may only perform customer service ➤ Controls are, however, present in these trains to manually operate them if systems fail 		Two modes automatic train operation (ATO) and automatic train protection (ATP) <ul style="list-style-type: none"> ATP Traction, braking, opening and closing of doors are controlled by train operator ATO All operations except door opening and starting of train are automated ➤ During emergency, staff in operations control centre take control ➤ Earlier, CMRL was operating in ATP mode during non-peak hours 	
 SOME OF THE CITIES WITH DRIVERLESS TRAINS		 <ul style="list-style-type: none"> ➤ Line 14 of Paris Metro ➤ Line 9 of Barcelona Metro ➤ Sydney ➤ Copenhagen ➤ Japan ➤ Dubai 	

cost of procurement and operation. Construction of the three-corridor phase is likely to begin by mid-2021 and the section between Power House and Poona-mallee is to be taken up first.

According to the tender

notice, CMRL has called for design, manufacture, supply testing, commission of standard gauge metro rolling stock (electric multiple units) and training of personnel for phase-2 project. Though the notice does not

have technical specifications for the rolling stock, the detailed project report states that at some point, train operation may be driverless and that signalling system and rolling stock shall be procured accord-

ingly. "Signalling software required to operate a driverless train is different from the existing trains operated on phase-1. So, we cannot operate a train designed for phase-2 on phase-1 lines though the rolling stock may look the same," an official said earlier.

Officials had earlier said that 25-30% of the trains operated on phase-2 are likely to be on wet lease. CMRL will only monitor and not directly be involved in the daily operations of these trains, their maintenance or with the staff.

Driverless trains are likely to have smaller consoles, as all operations of a train will be automated. The operations control cen-

tre staff who monitor the movement of trains may take control of the operation in case of an emergency until a controller from the nearest station, who is trained to operate a train, reaches the spot.

In phase-1, trains are mostly operated in the automatic train operation (ATO) mode where operators manually stop and start the train at stations and open/close the train doors, while the rest are automated and controlled from OCC. They can also be operated in automatic Train Protection (ATP) mode where a train operator controls all operations including traction, braking, opening and closing of the train doors.