

Organised by: :Highway and Transportation Engineering Technical Division (HTETD)

## WEBINAR TALK ON SUSTAINABLE MOBILITY REVOLUTION: THE POTENTIAL OF AUTONOMOUS RAPID TRANSIT (ART) IN MALAYSIA

DATE: 28 MAY 2024 | TIME: 3:00 PM - 5:00PM

BEM Approved CDP: 2 Hours Ref. No.: IEM24/HQ/133/T (w)

## **Synopsis**

The Autonomous Rail Rapid Transit (ART) system, developed by CRRC Zhuzhou Institute Co Ltd, represents a revolutionary approach to urban passenger transport. Unveiled in Zhuzhou, China, in 2017, the ART system combines the flexibility of buses with the capacity and scalability of light rail, all at a fraction of the cost.

The ART vehicles, characterised by their articulated design and rubber tyres, can carry up to 307 passengers in a three-carriage configuration. With a length of approximately 31 meters, these bidirectional vehicles can travel at speeds of up to 70 km/h.

Unlike traditional light rail systems, the ART requires minimal infrastructure, eliminating the need for overhead catenaries and on-road steel tracks. This simplicity not only reduces costs but also allows for local assembly, further contributing to its affordability.

The ART system aligns with various governmental policies, including Malaysia's Industrial Revolution 4.0 (IR 4.0) initiative, National Transport Policy 2030, National Automotive Policy, and Sustainable Development Goals (SDG). By fostering highly skilled capital and embracing green technology, such as battery-powered operation, the ART system not only enhances transportation efficiency but also mitigates environmental impact by reducing greenhouse gas emissions.

In summary, the ART system represents a cost-effective, environmentally sustainable solution for urban transit, offering the capacity and flexibility needed to meet the growing demands of modern cities while aligning with key national and global development goals.

## <u>Speaker's Biodata</u>



Dr. Wan Mazlina Wan Mohamed

**Dr. Wan Mazlina Wan Mohamed** serves as the Director of MITRANS and is an Associate Professor at UiTM's Mechanical Engineering Centre. With over 25 years of academic experience, she began her career as an Aircraft Planning Engineer at Airod Sdn Bhd in 1989, progressing to the role of Technical Training Manager. Her academic journey includes positions at USM and UNITEN before joining UiTM in 2003. She actively contributes to aviation and land transport research and consultancies, and holds various advisory roles, including technical committee memberships for the Ministry of Transport, Technology Depository Agency, and Department of Standards Malaysia. Currently, she consults on projects such as the National Airport Strategic Planning and advises on traffic safety and congestion as a Cabinet Committee member in Malaysia.

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