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MTR

新聞稿

Press Release

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Two MTR's Innovative Solutions Receive Three Accolades at the Hong Kong ICT Awards 2026 Recognising Innovation and Technology Achievements in Smart Railway Development

MTR Corporation is committed to leveraging technology to serve Hong Kong. The efforts of MTR's Hong Kong Transport Services Business Unit in applying innovative technologies to develop a smart railway and enhance operational and maintenance efficiency have been widely recognised at the recent Hong Kong ICT Awards 2026. The Corporation's drone tunnel inspection system "NEX-T (Navigation for Engineering eXcellence – Tunnel)" and "Smart Light Rail 2.0" received the Gold Award and Silver Award respectively in the Smart Mobility (Smart Transport) category. NEX-T was also honoured with the Smart Mobility Grand Award, the highest accolade in the category.

Drone Tunnel Inspection System Pioneers a New Approach to Railway Tunnel Inspection

NEX-T is Hong Kong's only patented solution specifically designed for tunnel environments for conducting beyond visual line of sight (BVLOS) drone operations. The project was jointly developed by MTR and Traffic Control Technology (Hong Kong) Company Limited and was selected among the first batch of pilot projects under the HKSAR Government's "Low-altitude Economy Regulatory Sandbox".

At the end of 2025, the MTR team successfully trialed NEX-T on a designated tunnel section of the East Rail Line. During the trial, the drone automatically operated and followed a predefined route to deploy red flashing lights around the work area and inspect critical railway facilities. NEX-T enhances tunnel inspection efficiency while enabling more systematic monitoring and predictive analysis of asset conditions. Leveraging artificial intelligence technologies, the system can also analyse inspection data to support the formulation of more targeted maintenance strategies. The team is now exploring trials and wider application of NEX-T in other railway operating environments.

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"Smart Light Rail 2.0" Enhances Safety Protection

The "Smart Light Rail 2.0" solution integrates artificial intelligence and video analytics technologies with MTR's self-developed Integrated Speed and Position Supervision System (iSPS). Once the system detects potential hazards, such as obstacles on the track, passengers stepping beyond the yellow line on platforms, or vehicles improperly entering road junctions, real-time alerts are issued to the Light Rail Operations Control Centre, Light Rail train captains and passengers, enabling prompt intervention to help mitigate accident risks. The solution has been deployed at more than 30 Light Rail stop platforms and over 10 busy road junctions across the Light Rail network, further enhancing safety for passengers and the wider community.

Mr Wilson Kwong, Hong Kong Transport Services Director of MTR Corporation, said, "MTR is dedicated to applying innovative technologies while fostering collaboration within the 'industry, academia, research and application' framework to incubate and bring innovative ideas to fruition, with a view to continuously delivering quality railway services for our passengers. This is the second time in three years that our innovation project has been honoured with the Smart Mobility Grand Award. This recognition is a strong affirmation of MTR's continued investment in innovation and technology and our efforts to advance smart railway development. We will continue to strive for excellence as we uphold our vision of 'Keeping Cities Moving'."

MTR will continue to explore, develop and apply innovative technologies to advance smart railway development and contribute to Hong Kong's smart city development.

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About MTR Corporation

To Keep Cities Moving, MTR makes encounters happen and rendezvous for a more connected tomorrow. As a recognised world-class operator of sustainable rail transport services, we are a leader in safety, reliability, customer service and efficiency.

MTR has extensive end-to-end railway expertise with over 45 years of railway projects experience from design to planning and construction through to commissioning, maintenance and operations. Going beyond railway delivery and operation, MTR also creates and manages dynamic communities around its network through seamless integration of rail, commercial and property development.

With more than 46,000 dedicated staff*, MTR carries over 13 million passenger journeys worldwide every weekday in Hong Kong, Chinese Mainland and beyond. Together, we Go Smart and Go Beyond.

For more information about MTR Corporation, please visit www.mtr.com.hk.

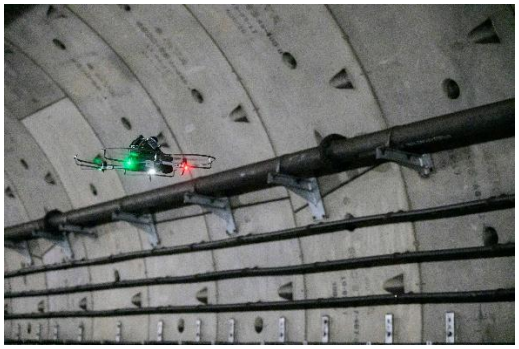
*includes our subsidiaries, associates and joint ventures in Hong Kong and worldwide

Photo Caption

1. The drone tunnel inspection system, NEX-T, developed by the MTR team, received both the Smart Mobility Grand Award and the Smart Mobility (Smart Transport) Gold Award at the Hong Kong ICT Awards 2026, in recognition of the team's outstanding efforts and achievements.









2. The "Smart Light Rail 2.0", integrating AI and video analytics technologies, received the Smart Mobility (Smart Transport) Silver Award. Through intelligent real-time monitoring and risk detection, the solution further enhances safety protection for Light Rail passengers and the wider community.





3. Leveraging AI and video analytics technologies, “Smart Light Rail 2.0” can detect potential hazards, including obstacles on the track, passengers stepping beyond the yellow line on platforms and vehicles improperly entering road junctions, enabling prompt intervention to help mitigate accident risks.

