

HyD wins Gold Award of Hong Kong ICT Awards 2019 – Smart Mobility Award (Smart Transportation Stream) (with photos)

The intelligent robotic system, the development of which was initiated by the Highways Department (HyD) and which was co-invented and successfully built by the HyD and the Hong Kong Productivity Council (HKPC), won the Gold Award of the Hong Kong ICT Awards 2019 – Smart Mobility Award (Smart Transportation Stream) today (April 4). The intelligent robotic system possesses full cognitive abilities to understand its surroundings and uses automated robot arms to place and collect traffic cones and lanterns on public roads. The Hong Kong ICT Awards aim at recognising and promoting outstanding information and communications technology (ICT) inventions and applications, thereby encouraging innovation and excellence among Hong Kong's ICT talents and enterprises to meet social needs.

The HyD always attaches great importance to safety in road works, accords first priority to the safety of engineering site staff and has been striving to enhance safety protection for carrying out road works on public roads. Given that the engineering site staff may face higher risk when setting up and collecting traffic cones and lanterns on public roads late at night, the HyD has therefore been striving to study the use of advanced technology to adopt an automated approach to replace the engineering site staff in carrying out relevant works under more dangerous situations in order to protect their safety. To this end, the HyD and the HKPC have co-invented the automated intelligent robotic system suitable for use under the road conditions in Hong Kong.

The HyD and the HKPC have successfully verified the concept, and designed and built the intelligent robotic system, fitted with cameras, sensors and robotic arms, with full cognitive abilities to understand its surroundings to place and collect traffic cones and lanterns on public roads. The system is the first of its kind in the world. The HyD and the HKPC are currently carrying out detailed design for the formal application of the intelligent robotic system in road works. Upon completion of design and assembly, site trials will be carried out with a view to commencing its use on public roads in the near future.

