The LSCM R&D Centre is fully devoted to the development of industry-oriented research projects, and promotes the adoption of our research deliverables by the industry in order to enhance the overall operational efficiency of logistics industry and supply chain management. The two new projects which currently engaged are indoor location-based services and product authentication of pearl industry.

- **Indoor Localisation, Tracking and Navigation**

Global Positioning System (GPS) provides accurate outdoor positioning and navigation, but the satellite signals cannot penetrate indoors to provide service. In view of infancy and commercial potential of indoor location-based services, the LSCM R&D Centre has teamed up with the Hong Kong University of Science and Technology to develop an interactive indoor positioning system with advanced techniques to enhance the localisation accuracy. The platform project is now under trial run in the Hong Kong International Airport and will complete in the end of 2014.

The system is based on Wi-Fi fingerprinting and is non-intrusive to existing Wi-Fi infrastructure, which also has no impact on WLAN performance. Its highly precise positioning algorithm and low computation latency make it readily deployable in mobile devices. This project is aimed to gain substantial insights to enable various wireless applications in logistics and supply chain processes including container terminals and aviation operations.

The indoor localisation technology provides real-time positioning, navigation and location-based targeted services on smartphones.