

(Immediate Release)

**LSCM Roadshow 2014 Showcases ‘Your Ideal Smart City’**  
**“Authen✓Tick™” and other Advanced Technologies**  
**Lead to a Modernized City**

(Hong Kong, 19<sup>th</sup> February, 2014) The Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies (LSCM R&D Centre), unveiled the “LSCM Roadshow 2014” at Olympian City today with its co-organizer, the Construction Industry Council.

Entitled “Your Ideal Smart City”, the roadshow will introduce the latest enabling technologies in a lively and interactive way and last until tomorrow. Among the many attractions, the center piece is the 50-square feet simulated construction site which allows the public to put on specially made helmets and harness to experience the brand new construction safety technology. Besides, the world’s first ever RFID tagged pearl nucleus for the cultivated pearl industry is showcased in the form of pearl accessories at the exhibition as well. A Radio Frequency Identification Tag (RFID tag) is embedded inside a pearl nucleus, which is the seed for cultivated pearls. After harvest, each pearl can be uniquely identified with a RFID reader.

**Miss Janet WONG, JP**, the Commissioner for Innovation and Technology, said at the kick-off ceremony, “The LSCM R&D Centre not only promotes the research and technological development in the logistics and supply chain industries, but also enlarges its scope of research to other industries, such as construction, retail and so on. The LSCM R&D Centre also encourages the industries to take advantage of the enabling technologies to improve their efficiency and overall competitiveness.”

**Technology applied in Construction Industry: Create a Safety Work Site**

According to the statistics, there are around 320,000 registered construction workers in Hong Kong. In 2012, there were around 3,200 cases of construction-related accidents causing injuries and deaths. Thus, the LSCM R&D Centre has developed the Pro-active Construction Management System (PCMS) by making use of the Radio Frequency Identification (RFID) technology to raise the workers’ awareness towards any potential danger. **Mr Simon WONG**, Chief Executive Officer of the LSCM R&D Centre said, “This technology has already been put on a test run at the construction

site. Whenever there is any risk in the workplace, for example, when a hanging iron is crumbling and showing signs of falling down, or when a worker has not fastened the safety harness properly while working at the high-altitude, the system will immediately send warning signals to alert the workers, in order to avoid any industrial accidents.”

**Mr Charles WONG**, Director - Training & Development of the Construction Industry Council, said, “The LSCM R&D Centre has also developed an intelligent system attached to the steel buckle of the harness. It reminds the workers to fasten the steel buckle to the safety rope. If the worker has not fastened the safety rope, information will be sent to the contractor for immediate correction so as to uphold the commitment of zero accident.”

### **Technology applied in Retail Industry” First ever authenticable pearl with RFID technology**

Retail industry has become more concerned with product authentication. The LSCM R&D Centre collaborated earlier with several partners to launch the “Authen✓Tick™” projects to check the authenticity of Chinese patent herbal medicines. Recently, the LSCM R&D Centre has developed an app installed in a smart phone to facilitate product authentication. Besides, the LSCM R&D Centre is collaborating with Fukui Shell Nucleus Factory, a local pearl nuclei manufacturing company, to combine pearl cultivation and RFID technology, in launching the world’s first ever RFID tagged pearl nucleus for the cultivated pearl industry. A Radio Frequency Identification Tag (RFID tag) is embedded inside a pearl nucleus which could be as small as 6mm in diameter. Information such as the place of origins and the cultivation period can be recorded in this RFID tag, the location of the pearl can be traced as well. It protects both the reputation of pearl industry and the consumers’ interests. Fukui Shell Nucleus Factory has already planned to cultivate pearls with embedded RFID pearl nucleus in Hong Kong in one to two months’ time. Hong Kong would become the world’s first pilot place to combine RFID technology and pearl cultivation as an impetus to promote the technological development in the pearl industry. After harvest in December or early next year, Fukui Shell Nucleus Factory will introduce in its own jewelry shops a series of pearl products applying this technology.

## **Technology applied in Logistics and Retail Industries: Cheaper and better RFID Reader Chip**

The LSCM R&D Centre has also launched the Greater China's first UHF RFID Reader Chip. Its retailing price is significantly reduced but functions are highly enhanced. It would become an excellent aid for product authentication and stock taking. At present, the UHF RFID Reader Chips sold in the market are produced only in Europe, America and Korea. However, the handheld readers of such kind are so expensive, selling at around HK\$10,000 – 18,000 each. That's why it is not so popular. However, the UHF RFID Reader Chip launched by the LSCM R&D Centre can be operated within 1 meter. A handheld UHF RFID reader costs only around HK\$500 and the chip costs HK\$0.7 only. The operation cost would be significantly reduced. Since the cost is lower and the size of the reader is smaller, enterprises can arrange every staff to have their own reader for product authentication, construction site checking or stock taking.

### **Technology applied in Logistics sector:**

#### **Advance Arrival Info Infrastructure shortened 1 hour's waiting time**

Hong Kong International Airport is one of the busiest cargo gateways, with cargo volume reached 4.1 million tonnes in 2013. In order to strengthen Hong Kong's status as an international air hub, the LSCM R&D Centre collaborates with the Hong Kong air freight industry to develop the Advance Arrival Info Infrastructure with RFID technology combined with a specially designed RFID tag. The system will inform the air cargo terminal 30 minutes in advance before the truck arrives so that air cargo terminal can make relevant preparations based on the estimated arrival time to shorten the truck's waiting time, from on average 2 hours at present to within 60 minutes. This advance info system also allows the air cargo terminal and logistics companies to allocate their manpower and resources more flexibly, as a result to enhance working efficiency.

This project was designed and researched in December 2013 and will be under test run in the second half of 2014. This technology is solely developed by the LSCM R&D Centre, and supported by several airport cargo terminals, shipping agencies and transportation companies.

## **Technology applied in Logistics Industry: SME-plug**

There are around 3,500 shipping agencies in Hong Kong and among 95% of these are classified as SME. Any shipping agency asking for freight commission from sizable air or ocean freight company has to make the voyage appointment and submit relevant e-documents through the e-Logistics Service Platforms. However, before access to the platform, the shipping agencies have to build up a electrified connection system to link with the e-Logistics Service Platforms, which costs over HK\$100,000.

Hence, the LSCM R&D Centre has developed the “SME-plug”, which is highly compatible. The set up cost of this system is just tens of thousands HK dollars. It provides a cheaper and more flexible solution for the SME to connect the e-platform for any logistics activities.

### **About LSCM R&D Centre**

The Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies (LSCM R&D Centre) was founded in 2006, with funding from the Innovation and Technology Fund of the HKSAR Government, and co-hosted by The University of Hong Kong, the Chinese University of Hong Kong and the Hong Kong University of Science and Technology. It aims to strengthen the local logistics industry by providing a one-stop shop for technology transfer and commercialization, and reinforce the cooperation between the industry and research institutes, to bring about meaningful and significant benefits to the community.

For media enquiries, please contact:

<b>Media Enquiry</b>	
<b>Impact Communications Company</b> Carmen Poon Tel : 9077 2790 / 3590 4775 Fax : 3590 4630 Email: <a href="mailto:carmen@impact-cc.com">carmen@impact-cc.com</a>	Keith Kot Tel : 6128 4455 / 3590 5846 Fax : 3590 4630 Email: <a href="mailto:keith@impact-cc.com">keith@impact-cc.com</a>
<b>LSCM R&amp;D Centre</b> Eliza Cheng Tel: 2299 0116 Fax: 2299 0552 Email: <a href="mailto:echeng@lscm.hk">echeng@lscm.hk</a>	Pansy Tang Tel: 2299 0595 Fax: 2299 0552 Email: <a href="mailto:ptang@lscm.hk">ptang@lscm.hk</a>