

GRIFS/CASAGRAS Workshop
Building the global RFID Standards Forum
4 December 2008

Mr. Gordon Leung
Deputy Commissioner for Innovation and Technology

RFID- The Hong Kong Journey

Mr. Pique¹, Ladies and gentleman,

Good morning. It gives me great pleasure to join all of you this morning to explore the way forward in the development of global RFID standards. First of all, I would like to extend a warm welcome to participants who have flown all the way from various parts of the world² to join this workshop. I hope you will have a very enjoyable and fruitful stay in Hong Kong.

There is no need for me to highlight the importance of RFID in this occasion as we all are convinced of the immense contributions that the track-and-trace function of this technology has brought to our daily life, to the manufacturing sector as well as to the commercial world. We all share the same goal: in what ways we can further utilize the technology for the economic and social benefit of the community, so that we can better enjoy our life and further enhance the efficiency of the business activities.

¹ Mr Stephane Pique, European Director, EPC/RFID, GRIFS Project

² The workshop has about 30 attendees and roughly half of them come from overseas.

The HKSAR Government has always been an active and staunch supporter in the development of RFID technology and to facilitate its adoption in local industries. It is our goal to make Hong Kong a RFID centre and a RFID trendsetter in the Asia Pacific Region.

To this end, the Government has, through the Innovation and Technology Fund, established the Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies in 2006 to foster the development of core competencies in applied R & D in logistics and supply chain related technologies. Since its establishment, it has kick-started and managed over 20 research projects, amounting to over \$100 million, to facilitate core RFID technology developments in various aspects. Six foundation projects have already been completed and a range of enabling technologies have been developed³.

In addition, the Innovation and Technology Fund has supported a total of 17 RFID projects from 2004 to 2007, with a total amount of HK\$ 108 million. For the Guangdong - Hong Kong Technology Cooperation Funding Scheme, RFID has always been the theme of projects that both governments solicited.

³ The six foundation projects are:

1. The Development of RFID-based Business Solutions for Counterfeit Prevention, Physical Asset Management (PAM) and Commercial Applications by PolyU
2. Enabling Technologies for Single-Chip Passive UHF RFID Tags and Readers by HKUST
3. Establishing an EPC Network Infrastructure to Enable End-to-End Supply Chain Visibility by GS1 HK
4. RFID Enablement Middleware for Enterprise Applications by HKU
5. Development of RFID Reader by CityU.
6. RFID Tag and Reader Technologies at UHF Band for Logistics Management by CUHK

Hong Kong has always been a forerunner in the development of RFID technology and its applications. For example, the Hong Kong International Airport is the world's first airport to fully utilize this technology to ensure the efficient flow of passengers and cargo. With built-in silicon chips, the RFID tags attached to the luggage allow access to information more easily and quickly than traditional luggage barcode tags. Since adopting the new integrated RFID system, the speed of baggage handling at the Hong Kong International Airport has increased but, more importantly, there has been a dramatic fall in the number of lost bags as the system has seen dramatic improvements in accuracy. The read rate of the airport's luggage handling system has gone from 70% to 96%.

Another excellent example of our innovative use of RFID is the Octopus card. It is one of the world's earliest RFID-enabled payment solutions. It started off as an automatic, contactless fare collection system, designed to ease congestion in transport throughput and reduce the handling of spare change. Later it developed into a popular electronic cash system, and its application has been extended to property management, school administration, and even the implementation of joint loyalty programs. Today, over 17 million Octopus cards are in circulation in Hong Kong. The system has won the Chairman's Award of the World Information Technology and Services Alliance's Global IT Excellence Award in 2006. Equally exciting is the fact that this approach has been emulated in the Oyster card in London, Japan and elsewhere.

In early October, the Hong Kong RFID Centre was launched at Hong Kong Science Park. The new centre, which is the largest of its type in the Asia Pacific Region, serves two purposes: first of all, it is intended to

encourage more commercial applications of this technology. Secondly, it also targets at the general community, with a specific focus on youth. It is hoped that through the interactive displays and demonstrations, the centre can enhance awareness and understanding of the next generation of the RFID technology --- its applications, benefits and significances to the future development of Hong Kong. We are now lining up secondary school students to visit the centre and the response has been very good. With the support of the centre, we have also made RFID a special theme of the Hong Kong Student Science Project Competition 2009, one of the most popular science and technology competitions for students in Hong Kong, with a view to encouraging more students to explore this very important technology. I sincerely invite you to squeeze some time out of your hectic schedule and take a look there.

The world is getting flatter and smaller. Localized RFID applications will not be able to survive the challenges brought about by the new era of the so-called 'Internet of things.' Standards are critical to the future development of RFID. We therefore share the same view with your Forum⁴ that we need to improve co-ordination among key global standard organizations active in RFID and maximize the global interoperability of RFID standards, if we are to better utilize the technology for the economic and social benefit of the community.

We are heading the same direction in Hong Kong. We, as a trading and services economy with an international clientele, recognize the need to accept different standards to facilitate RFID hardware deployment,

⁴ The Global RFID Interoperability Forum for Standards (GRIFS) is a Support Action Project funded by the European Commission with the aim to improve collaboration and thereby to maximise the global interoperability of RFID standards

cargo tracking and product tracing in different places around the world. We also see the importance of having certain global standards, such that all RFID tags and associated sensors can inter-operate wherever they are. We therefore are interested in projects that target at global standardization. On the home front, we are liaising with the Ministry of Industry and Information Technology with a view to encouraging and facilitating enterprises, research institutes and experts from Hong Kong to participate in the formulation of national standards.

I believe the GRIFS project will provide a platform for dealing effectively with various issues involved in RFID standardization and facilitate the co-ordination of standardization initiatives coming from organizations all over the world. I wish you a very fruitful discussion today and look forward to sharing your achievements. Thank you.