Panel on Commerce and Industry

HKSAR'S Participation in the World Exposition 2010 Shanghai China

Purpose

At the meeting of the Panel on Commerce and Industry held on 15 April 2008, the Administration reported to the Panel the latest progress on HKSAR's participation in the World Exposition 2010 Shanghai China (Shanghai Expo). At Members' request, the Administration undertook to provide the Panel a detailed description of HKSAR's proposal for participation in the Urban Best Practices Area (UBPA) Exhibition, with particular reference to the smartcard systems implemented/to be implemented in Hong Kong which would be showcased to audiences during the Shanghai Expo. This note provides the information as requested.

Background

- 2. The Shanghai Expo will be held in Shanghai from 1 May to 31 October 2010. As at 11 April 2008, 171 countries and 31 international organisations have confirmed their participation in the event, which is expected to attract more than 70 million visitors. It will provide an excellent opportunity for us to publicise Hong Kong as a city of quality living and creativity.
- 3. Apart from our participation in the Hong Kong Pavilion exhibition at Zone A of the Shanghai Expo (which will form part of the China Pavilion), we also plan to participate in the UBPA Exhibition at Zone E of the Shanghai Expo in collaboration with our creative industry, non-government organisations and other relevant bodies and enterprises in the private sector. The UBPA exhibition is set up with the aim to exemplify the main theme of Shanghai Expo by demonstrating best practice cases in the world which are worth studying and for other cities to model on. Participants are mainly cities, and applications are invited based on real life cases and chosen through a highly competitive selection process, having regard to the public recognition in the international community, and the creativity and reference value of the cases submitted. The Shanghai Expo is the first ever Expo to introduce the UBPA Exhibition, which is set to become one of the highlights of the Shanghai Expo in 2010.

4. Taking into account views from the local creative industry we have obtained in drawing up our proposed theme for the exhibition, we submitted an application titled "Smart Card, Smart City, Smart Life" to the Organiser in January this year. The Organiser received a total of 106 applications from 87 cities all over the world for the UBPA Exhibition. All applications were scrutinized and examined by an international selection committee comprising representatives from relevant agencies from the United Nations, international organisations and Mainland authorities, as well as urban administrators and researchers. The Organiser announced on 2 April 2008 that HKSAR's application had been selected. For each selected application, the Organiser would provide an exhibition area of around 800 m² in a restored building at the UBPA Exhibition Area for the successful candidate to exhibit its case.

Detailed Proposal

- 5. Under the theme "Smart Card, Smart City, Smart Life", we propose to showcase in the UBPA Exhibition the "connectivity" of Hong Kong and our vision to develop the city as a model of urban sustainable development through citizen-centric and technology-enabled social innovation.
- 6. We aim to showcase our innovative ways to improve efficiency in everyday city life and the standard of living through the extensive use of smartcards. As in many densely populated cities in the world, we face the same problem that our citizens may have to wait in long queues everyday for taking public transport services or making retail payment, or at immigration checkpoints when leaving or entering the territory. This greatly affects the city efficiency and productivity and the everyday life of the community. It is against this background that Hong Kong has successfully developed and introduced various extensively utilised smartcard systems which have promoted the connectivity within the city and with other parts of the world. The wide adoption of these smartcard systems in the community has successfully achieved our goal of enhancing the efficiency and living standard of the city, thus meeting the objective of the Shanghai Expo: "Better City, Better Life".

Smart Card Systems

7. We propose to cover in our exhibition advanced smart card applications we have developed in both the public and private sectors including the use of Octopus Card in extensive payment transactions and how it branches into a wide variety of non-payment activities to provide different value-added services, the issue of Smart ID cards and the development of

e-Channel application for automated passenger and vehicle clearance at immigration control points, etc. These applications have won various prestigious awards for Hong Kong and have received wide recognition in the international arena. We propose to present these applications in the context of Hong Kong's development as a wireless city with one of the highest mobile and broadband penetration in the world as well as extensive coverage of Wi-Fi service in the territory. We will further identify other successfully implemented smartcard systems implemented in both the public and private sectors for incorporation in the exhibition. We will work closely with our creative industry and seek their views and advice in the process. Two of the smartcard systems which we will highlight are set out in the ensuing paragraphs.

Octopus Card

- 8. After ten years of development, the Octopus Card system has become a best practice of Hong Kong for other cities to model on. It has inspired other smartcard applications for commercial and public use, including the Oyster Card system of London.
- 9. The Octopus Card system is now the world's leading and most extensive smartcard payment system. The contactless smartcard acts as electronic currency and allows the cardholder to complete a payment transaction expeditiously.
- 10. The system has also been expanding its non-payment applications over the years. Octopus Card is now used as access cards for entering residential estates and commercial offices. It has also been extended to education services. Students can use the Octopus Card to mark attendance or as library or access cards in schools. They can also sign up for school activities by using the card. The Octopus Card is also diversifying its physical form and integrating into other items the public may use everyday. It can now be in the form of a watch, key chain as well as mobile phone.
- In 2003, Octopus Card successfully exported its unique technology and experience to the Netherlands, providing operational expertise to help the country implement a nationwide automatic fare collection system. The system will be gradually rolled out to the whole country by 2009. In 2007, Octopus Card was commissioned to develop and implement a contactless smartcard payment system for the Road and Transport Authority in Dubai. The new system will be a common payment platform for multiple public transport services in Dubai.

- 12. The usage of Octopus Card has also been expanded beyond the border of Hong Kong. The card is now also accepted for making payment in retail outlets in Shenzhen and Macau.
- 13. The Octopus Card has won the World Information Technology and Services Alliance Global IT Excellence Award and has been recognized by the UK Design Council Magazine as one of the thirteen small steps to a significantly better world.

Smart ID Card

- 14. The Smart ID Card project of the Government is a forerunner among countries and cities in the world on the extensive and innovative application of information stored within a smart card. We started issuing the new generation of identity cards to our citizens since 2003.
- 15. In addition to the storage of personal information in the card, the spare memory capacity of the Smart ID Card enables the storage of personal digital certificate, which enables the holder to perform electronic transactions securely. The cardholder can also use the Smart ID Card as library card at public libraries.
- 16. The information stored in the card has enabled the introduction of additional applications to the benefit of the cardholders. One key example is the introduction of the Automated Passenger Clearance and Automated Vehicle Clearance Systems (the e-Channel) at control points. The e-Channel efficient solution provides automated and at immigration checkpoints which has enabled citizens' passage of immigration checkpoints expeditiously, and has substantially reduced waiting time. Other applications include access to e-Passport kiosks and obtaining pre-printed passport application form which save time for applicants and improve accuracy.
- 17. The Smart ID Card has won the Asia Pacific Information and Communications Technology Awards and is a key element for Hong Kong to secure high ranking in the Economist Intelligence Unit world e-readiness study (Hong Kong currently ranks second in the world and first in Asia).

Looking Ahead

18. However, the Shanghai Expo will be held in 2010 and we cannot stand still with what we have developed today. We have to move forward with both social and technological development. We therefore plan to explore the further use of smartcard applications in various new community areas such as

education, medical care and conservation of environment, etc. in the coming period so that they could become best practices for showcasing in the UBPA Exhibition in 2010. Possible applications of smartcard technology that we are looking into include, for example, the use of smartcards for students to access museums, concerts, exhibitions etc. and encouraging their active participation in activities held in these facilities so as to better connect their learning in schools to their daily life activities, using smartcard for timely and reliable access to electronic health records of patients for continuity of care and accurate treatment, as well as using the smartcard to encourage green behaviour. We will aim to achieve results in these new applications and feature them in the UBPA Exhibition to demonstrate Hong Kong's commitment to pioneer social innovation in our community with the use of technology for the provision of creative and citizen-centric services, and for crafting a better and sustainable future.

Exhibition Design Concepts

19. We intend that our presentation in the UBPA exhibition would be innovative, participatory and forward-looking. Simulation devices, multi-media technology, animation, video, etc would be used to enhance the appeal of the exhibition to the visitors, and to showcase the achievements of our creative industry. The proposed exhibition will be highly interactive, and visitors can participate and become a part of the exhibition itself which makes the visit an impactful and memorable experience.

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