

smart 智城

# VISION

SCC

智慧城市聯盟  
Smart City Consortium

ISSUE

4

Mar/2018

3月號季刊

HKD\$65

ISSN 2523-0735



9 772523 073021



## Keynote Speech - MRS. CARRIE LAM CHENG YUET-NGOR

The Chief Executive of HKSAR

主題演講—林鄭月娥女士

香港特別行政區行政長官

## Welcoming Remarks - DR. ELIZABETH QUAT

Founder and Honorary President of SCC

歡迎致辭—葛珮帆議員  
智慧城市聯盟創辦人及榮譽主席

## Exclusive Interview - MR. SEAN SHEN

President of TUS International

專訪啟迪國際總裁沈霄

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The Smart City Consortium (SCC) comprises a group of professionals from different corporations and organizations with the aim to provide opinions and suggestions to the Government for formulating related policies and standards in the development of Hong Kong as a world-class smart city. We encourage worldwide collaboration with different stakeholders to create the right ecosystem, which fosters innovation and sustainable economic growth for Hong Kong.

### 關於智慧城市聯盟 (SCC)

智慧城市聯盟 (SCC) 匯聚一群來自不同公司和機構的專業人士，為香港發展成為一個世界級的智慧城市，在政策和標準層面提供專業意見和建議。我們鼓勵與全世界不同的持份者合作以創造合適的生態系統，促進香港創新及經濟的可持續增長。

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## Acknowledgement 鳴謝

The Hon. Mrs. Carrie LAM  
CHENG Yuet-ngor, GBM, GBS  
林鄭月娥女士，  
大紫荊勳賢，金紫荊星章

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## Production 製作

Techure Limited  
科暉有限公司



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出版：智慧城市聯盟有限公司



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**S** **M A R T E R**  
**C** **I T Y**  
**S** **M A R T E R**  
**H** **O N G K O N G**

The Smart City Blueprint Luncheon hosted by Smart City Consortium (SCC) on 7<sup>th</sup> February was a great success. About 400 guests from the Government, political and commercial sector as well as information technology profession attended to witness this remarkable moment of smart city development in Hong Kong. I would like to sincerely thank Mrs. Carrie Lam Cheng Yuet-ngor, The Chief Executive of the Hong Kong Special Administrative Region for joining us in person to share the Government's smart city vision with the latest update of the progress, and to extend my highest gratitude to everyone for their presence and support.

On smart city development, the Government's *Smart City Blueprint for Hong Kong* which was published on 15<sup>th</sup> December last year is undoubtedly notable. A long-term and all-rounded platform for smart city development was missing until the release of the *Blueprint*. It has responded to the long-awaited demands from the industry and delighted our veterans with the highlights on smart city infrastructure such as the open data hub - data.gov.hk, smart lampposts and electronic identification (eID). Apart from the leadership of the Government, the participation of the private sector and the general public is equally important in the smart city development. SCC will continue to be the platform to foster communication and cooperation among everyone so as to realise the "Smart City 3.0" vision.

SCC will also participate in the International ICT Expo hosted by the Hong Kong Trade Development Council in upcoming April and set up a pavilion with the funding by Innovation and Technology Commission to showcase our local applications of eID. This echoes our Government's initiatives in building a standardised eID. Through this international expo, we hope to deliver to the industry and to the public the importance of eID and cross-border authentication not only in the smart city development but also in the Great Bay Area Initiative, so as to attract more companies to join us to develop more related smart products and applications.

As The Chief Executive said at the luncheon: the *Smart City Blueprint* is just the beginning. We hope that everyone of the society will work hand in hand to co-create our smart city.



**Mr. Eric YEUNG**  
楊全盛先生  
President  
主席

智慧城市聯盟主辦的智慧城市發展藍圖午宴已於2月7日完滿舉行，近400名資訊科技業界代表及政商界人士應邀出席，見證這項推動香港智慧城市發展的盛事。我謹代表智慧城市聯盟感謝各位蒞臨，更衷心感激行政長官林鄭月娥女士親自到場，為我們講解政府發展智慧城市的理念和最新進展。

談及智慧城市發展，不得不提政府於去年12月15日公布的《香港智慧城市藍圖》。香港的智慧城市發展一直欠缺長遠且全面的政策方針，這份藍圖正好回應了業界人士長久以來的訴求，其中就政府開放「資料一線通」數據庫、智慧燈柱以及數碼個人身分等智慧城市基礎設施的着墨，更令業界感到相當鼓舞。智慧城市發展除了需要政府帶領，業界及市民由下而上的參與亦同樣重要。聯盟肩負溝通橋樑的角色，期望能促進各界人士合作，共同實現「智慧城市3.0」的願景。

智慧城市聯盟將於4月參與由香港貿易發展局主辦的「國際資訊科技博覽」，並有幸獲創新科技署資助設立展區，展示本地研發的數碼個人身分應用，以回應政府發展統一數碼個人身分認證的倡議。我們希望透過這個國際博覽，向業界及公眾展示數碼個人身分及跨境身分互認系統，於智慧城市發展及大灣區規劃中的重要性，藉此吸引本地企業投入研發更多相關應用。

正如行政長官在午宴所說：「香港智慧城市藍圖只是第一步」，我們希望各界繼續攜手合作，共同創造屬於我們的智慧城市。



## Smart City Blueprint Luncheon: A Communication Platform for Public-Private-People Partnership

智慧城市發展藍圖午宴：  
促進官商民合作 建構交流平台



The Smart City Blueprint Luncheon, organised by the Smart City Consortium (SCC), was held on 7<sup>th</sup> February, 2018 for candid exchange of views on smart city development among stakeholders from different sectors.

為凝聚各界人士就創科發展互動交流，共同實現智慧城市願景，智慧城市聯盟於2018年2月7日舉辦智慧城市發展藍圖午宴。



#### Joint Efforts from Different Sectors on Smart City Initiative

Government officials, smart city experts, representatives from I&T sectors, as well as business and community leaders were invited to attend the luncheon. SCC was honoured to have the presence of The Hon. Mrs. Carrie Lam Cheng Yuet-ngor, The Chief Executive of the Hong Kong Special Administrative Region; Mr. Chen Dong, Deputy Director of the Liaison Office of the Central People's Government in the Hong Kong Special Administrative Region; Mr. Nicholas Yang, Secretary for Innovation and Technology; Ir Allen Yeung, Government Chief Information Officer; and Ms. Zheng Mingmei, Secretary General of Smart City Development Alliance and Director of Division of Smart and Low-carbon Cities of China Center for Urban Development.

In her welcoming remarks, Dr. Hon. Elizabeth Quat, Founder and Honorary President of SCC, underlined the major accomplishments which SCC has achieved over the past two years. She recalled that SCC organised and supported more than 250 events, in addition to signing 23 memorandums of understanding (MoU) with different organisations across 12 countries and regions since the establishment.

Dr. Quat also highlighted the recent activities of SCC, including the publication of *Smart City 3.0*, which details various concepts of smart city initiatives, the submission of the consultancy report on smart city development in Hong Kong to the Government, the release of the survey - *Connecting Hong Kong* - in association with KPMG, CLP Holdings, JOS, Siemens, and the official launch of LinkedSmart, a brand-new international business matching platform jointly developed by SCC, Smart City Development Alliance in China and Guangdong-Hong Kong-Macao-Bay Area Economic and Trade Association, aiming to provide a unique and sustainable ecosystem for startups in the region.

#### Breaking Down Barriers Progressing Towards A Fully Smart City

As the keynote speaker of the luncheon and the head of Hong Kong Government, Mrs. Carrie Lam reiterated the Government's commitment to build a smart city for the people of Hong Kong.

#### 雲集各界代表 推動智慧城市發展

午宴雲集一眾智慧城市專家、創科行業代表、政商界人士及社會賢達，更邀請到香港特別行政區行政長官林鄭月娥女士、中央人民政府駐香港特別行政區聯絡辦公室副主任陳冬先生、創新及科技局局長楊偉雄先生、政府資訊科技總監楊德斌工程師，以及中國城市和小城鎮改革發展中心智慧低碳城市處處長兼智慧城市發展聯盟秘書長鄭明媚女士作為嘉賓。

智慧城市聯盟創辦人及榮譽主席葛珮帆議員於歡迎致辭中，指出智慧城市聯盟自成立以來，舉辦並支持了超過250個活動，更與來自12個不同地區及國家的組織，簽訂共23份諒解備忘錄。

葛議員亦分享了智慧城市聯盟近期的工作，包括出版講解智慧城市概念的書籍《智慧城市3.0》、向政府提交諮詢報告，又與畢馬威、中電集團、怡和科技及西門子共同發布就香港智慧城市發展的研究報告，以及推出「領智網」平台。當中的「領智網」是智慧城市聯盟與中國智慧城市發展聯盟及粵港澳大灣區經貿協會，聯手推出的全新國際商業配對平台，旨在為初創企業的健康發展，創造獨特和可持續的生態系統。

#### 多管齊下 為智慧城市發展拆牆鬆綁

行政長官林鄭月娥女士作為午宴主講嘉賓，談及香港政府發展智慧城市的決心。她將親自領導跨部門的「創新及科技督導委員會」，檢討現行法規，推動政策創新，同時廢除窒礙創科發展的過時條文。





She will preside over the Steering Committee on Innovation and Technology and review the legal and regulatory framework to abolish any obsolete regulations hindering I&T development so as to promote innovations at policy level.

Mrs. Lam also mentioned the upcoming plans to establish the infrastructure required for smart city development, such as the opening up of Government data, trial installation of smart lampposts to provide 5G network, provision of digital identity for Hong Kong residents, and to speed up the project of Hong Kong-Shenzhen Innovation and Technology Park. Moreover, she reaffirmed the pledges to create a more diverse talent pool to pursue the smart city initiatives by enhancing science, technology, engineering and mathematics (STEM) education in primary and secondary schools and through training and admission of technology talents.

Mrs. Lam ended her speech by highlighting the rising amount of local venture capital funding and the increasing number of made-in-Hong Kong startups to spur innovation and entrepreneurship. "The *Smart City Blueprint* is just the beginning. It is a living document driving a multifaceted policy agenda. We will continue to update and upgrade them for the benefit of the people of Hong Kong," concluded Mrs. Lam.

### Global Partnership among Public, Private and People for Smart City Development

Public-Private-People Partnership is fundamental to smart city development. Accordingly, SCC invited Mr. Karl Ma Chi-kong Executive Director and Chairman of TUS International Limited; Mr. Sean Lee, Director & Chief Executive Officer of China Mobile Hong Kong; Mr. Peter Lam, Managing Director, Engineering of HKT; and Mr. William Gee, Partner of PwC and Vice-Chairman of Asia PKI Consortium to the sharing session at the luncheon to discuss the key projects of smart city. Mr. Eric Yeung, President of SCC, was the moderator of the session.

除政策框架外，行政長官亦提及政府將從基礎設施着手，推動智慧城市發展，當中包括開放政府數據、試行以智慧燈柱支援5G流動通訊網絡、為香港居民提供「數碼個人身分」以及加快發展「港深創新及科技園」，同時亦會繼續加強中小學的科學、科技、工程和數學（STEM）教育，並將推出數項人才培訓及輸入專才計劃，為智慧城市發展提供更充裕的科技人才。

最後行政長官指出，近年香港的創業投資基金資本屢創新高，本地初創企業數字亦不斷增加，它們將為智慧城市發展帶來龐大動力。她總結道：「《香港智慧城市藍圖》只是第一步，它會持續演進，並驅動不同層面政策的討論。我們會繼續努力不懈，與時並進，為香港市民創造更美好的生活。」

### 全球官商民合作 共同構建智慧城市

智慧城市發展需要政府、私人機構及市民共同參與，缺一不可。智慧城市聯盟因此邀請了啟迪國際有限公司主席及執行董事馬志剛先生、中國移動香港董事兼行政總裁李帆風先生、香港電訊工程部董事總經理林榮執先生、普華永道合夥人及亞洲公匙基建聯盟副主席季瑞華先生等業界代表，與楊德斌工程師對談，討論香港智慧城市發展的重點項目。對談由智慧城市聯盟主席楊全盛先生擔任主持。

同時，為進一步擴大合作基礎，智慧城市聯盟創辦人及榮譽主席鄧淑明博士於午宴尾聲，與智慧城市發展聯盟秘書長鄭明媚女士簽署合作備忘錄，宣布成立全球智慧城市聯盟，旨在與全球夥伴攜手推動智慧城市發展。



At the end of the luncheon, Dr. Winnie Tang, Founder and Honorary President of SCC signed a memorandum of understanding with Ms. Zheng Mingmei, Secretary General of Smart City Development Alliance, to establish the Global Smart City Consortium for deepening the collaboration with global partners.

Following the luncheon was the press conference jointly held by Dr. Tang, Ms. Zheng, Mr. Zhang Jing, Bairui International Conference & Exhibition Group Co., Ltd and Mr. Wayne Wu, Chief Operation Officer of Ping An Technology (Shenzhen) Co., Ltd. They announced the details of LinkedSmart platform, the Global Smart City Consortium and the Fourth China Smart City International Expo to be held in Shenzhen this year.

The luncheon served as an interactive communication channel to seek a better model for smart city development in Hong Kong. In future, SCC will continue to promote Public-Private-People Partnership and collaborate with different sectors to support smart city development in Hong Kong.

午宴過後，鄧淑明博士亦代表智慧城市聯盟，與鄭明媚女士、百瑞國際會展集團有限公司總裁張靖先生以及平安集團智慧城市辦公室主任及平安科技（深圳）有限公司首席運營官胡瑋先生，一同舉辦記者招待會，向傳媒發布有關「領智網」商業配對平台、全球智慧城市聯盟成立以及即將在深圳舉行的2018（第四屆）中國智慧城市國際博覽會的細節。

是次午宴，為香港智慧城市發展提供良好的平台，讓各界互動交流，共同尋找適合香港的發展模式。未來，智慧城市聯盟將繼續努力，促進官商民合作，推動各界支持香港智慧城市的發展。

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**Speech by**  
**Dr. Hon. Elizabeth Quat,**  
**BBS, JP, Founder and Honorary President**  
**of Smart City Consortium,**  
**at the Smart City Blueprint Luncheon**

智慧城市聯盟創辦人及榮譽主席

**葛珮帆議員, BBS, JP**

於智慧城市發展藍圖午宴上發表的演講



The Hon. Mrs. Carrie Lam Cheng Yuet-ngor, The Chief Executive of the Hong Kong Special Administrative Region; Mr. Chen Dong, Deputy Director of the Liaison Office of the Central People's Government in the Hong Kong Special Administrative Region; Mr. Nicholas Yang, Secretary for Innovation and Technology; Ir. Allen Yeung, Government Chief Information Officer; Ms. Zheng Mingmei, Secretary General of Smart City Development Alliance and Director of Division of Smart and Low-carbon Cities of China Center for Urban Development; Distinguished Guests, Ladies and Gentlemen,

Good afternoon. It is my great honour to welcome you all to the Smart City Blueprint Luncheon of the Smart City Consortium (SCC).

Before we founded SCC, it actually came from a Smart City Expert Group comprised of just 20 members. A year later, when SCC was formally established, over 200 corporate and individual members and different organisations have passionately come to support us. The development of SCC is really amazing so far!

Over the past 23 months, with the continuous effort of our partners, key members and friends, SCC has successfully signed 23 MoUs with 12 countries and regions to establish a platform for collaboration and idea exchange in relation to Smart City. Today, we are honoured to

香港特別行政區行政長官林鄭月娥女士、中央人民政府駐香港特別行政區聯絡辦公室副主任陳冬先生、創新及科技局局長楊偉雄先生、政府資訊科技總監楊德斌工程師、中國城市和小城鎮改革發展中心智慧低碳城市處處長兼智慧城市發展聯盟秘書長鄭明媚女士、各位嘉賓、各位朋友：

大家好！我謹代表智慧城市聯盟，熱烈歡迎各位蒞臨智慧城市發展藍圖午宴。

智慧城市聯盟的前身為僅20人的「智慧城市專家小組」。一年後，在我們正式成立「智慧城市聯盟」之時，卻獲得了超過200個企業和個人會員以及各界人士的踴躍參與及支持，這樣的發展實在令人鼓舞！

在夥伴及好友的支持下，聯盟在短短23個月內已經與12個國家及地區，簽訂了共23份諒解備忘錄，為智慧城市發展搭建了廣闊的合作平台。我們更將於今天午宴稍後時間，在各位的見證下簽署另一份合作備忘錄，推動全球智慧城市聯盟的成立。

# 歡迎致辭

## Welcoming Remarks

have all of you here to witness another MoU ceremony to be held later in this luncheon for the establishment of the Global Smart City Consortium.

SCC has also organised and supported over 250 events and activities for professionals from different industries to actively exchange their views and opinions on building smart cities.

To realise our vision and mission, SCC has engaged thousands of professionals from all trades to provide ideas and suggestions to the Government. We have met with Government Bureaux and departments, including, Innovation & Technology, Development, Education, Environment, Transport and Housing, Financial Services, Civil Services, Hong Kong Monetary Authority, and EKEO, and submitted reports and proposals. Many of our suggestions are now parts of the Government's *Smart City Blueprint*.

We always encourage worldwide collaboration with different stakeholders to create the right ecosystem which fosters innovation and sustainable economic growth for Hong Kong. To achieve this, a brand-new business matching platform, called LinkedSmart was just launched a week ago. LinkedSmart is a platform jointly developed by Smart City Development Alliance of China and the Investment Committee of SCC to connect investors and startups in Mainland China, Hong Kong and the rest of the world for fund raising activities to support different smart city initiatives further. Currently, more than 30 international investment organisations and almost 300 startups are ready to join the platform. With this new matching platform and the continuing effort of SCC and our partners, we hope that we can greatly assist the development of innovation and technology of Hong Kong.

Last month, we were delighted to have collaborated with KPMG, CLP, JOS and Siemens to conduct a territory-wide survey for the understanding of the overall perceptions of Hong Kong's smart city strengths and weaknesses. The results had shown that our technology and innovation culture is the most pressing area for further development. Overcoming this requires the reforming of Hong Kong's education system, and provide I&T training to different trades & industries, as well as to civil servants at all levels, to make it better able to cultivate the mindset and skills needed to thrive in the fast evolving market environment.



智慧城市聯盟亦分別舉辦和支持了超過250個活動，讓各界專業人士就智慧城市發展集思廣益。

為實現智慧城市願景，我們邀請了界上千個精英向政府提供專業意見，同時與多個政府部門保持緊密聯繫，包括創新及科技局、發展局、教育局、環境局、運輸及房屋局、財經事務及庫務局、公務員事務局、香港金融管理局及起動九龍東辦事處。聯盟也就智慧城市發展向政府提交報告和政策建議，當中更有不少建議被政府採納，成為《香港智慧城市藍圖》的一部分。

我們又一直鼓勵與全世界不同的持份者合作，創造合適的生態系統，促進香港創新及經濟的可持續發展，因此於上周推出名為「領智網」(LinkedSmart)的嶄新商業配對平台。「領智網」由香港智慧城市聯盟投資委員會和中國智慧城市發展聯盟共同開發，旨在連繫中港兩地及海外的投資者和初創企業，為智慧城市項目提供集資平台，現時已有超過30間跨國投資機構及約300間初創企業有意加入。透過「領智網」平台以及與其他夥伴繼續合作，我們希望能大力促進本地的創科發展。

此外，我們很高興與畢馬威、中電、怡和科技和西門子合作，進行全港調查，就香港智慧城市發展的優勢與不足，搜集市民的看法。於上月公布的結果，顯示創科文化的發展是最受市民關注的事項。因此我們期望政府能盡快改革香港的教育制度，並向整個公務員團隊及各界人士提供創科培訓，讓他們在不斷改變的環球市場中保持競爭力。

We, SCC people believe that technology is For the People, therefore citizen engagement is fundamental in building our Smart City. Actually, to find better ways of gathering the views of citizens and to convert the views into actions that will significantly improve the city's livability, it is indeed the essence of the "Smart City 3.0" vision.

To help engage Smart Citizens to achieve our "Smart City 3.0" vision, SCC has published a book named *Smart City 3.0* in both Chinese and English, online and offline version for the public to learn more about the meaning behind the title.

To build Hong Kong into a leading Smart City, we need a Smart Government led by a Smart Leader. We truly believe that with the Steering Committee on Innovation and Technology led by our Chief Executive, The Hon. Mrs. Carrie Lam, inter-departmental obstacles can be resolved, target set in the *Smart City Blueprint* will be achieved.

Ladies and Gentlemen, with your support, I am sure that SCC will continue to be an excellent platform for all to share, to inspire, to advocate, to learn, to collaborate, to dream, to create, and to make a difference, for a better and smarter world for us, and for our future generations.

May I take this opportunity to express my sincere thanks to The Hon. Mrs. Carrie Lam, and the Government officials joining this luncheon with us. And of course, to all our SCC Board Members, members from Committees and Special Interest Groups and the Secretariat staff for their support and contributions towards the Consortium's work.

I would like to especially thank all the sponsors that have generously supported this luncheon and participate in our sharing session. Thank you everyone for joining us today, and I wish you all a very enjoyable afternoon.

Let's co-create our Smart City together! Thank you!

智慧城市聯盟一直相信科技發展應以人為本，因此市民的積極參與對智慧城市發展至關重要。「智慧城市3.0」強調的是，要尋找更佳方法徵集市民的想法，並將之轉化為實際行動，以改善整體生活質素。

因此，我們出版了《智慧城市3.0》，以實體書及網上版形式提供中英雙語版本，讓大眾認識「智慧城市3.0」的理念。

發展智慧城市需要有遠見、有智慧的領袖帶領智慧政府。我們相信在行政長官林鄭月娥女士親自領導下，「創新及科技督導委員會」將克服障礙，有效推動跨部門合作，落實《香港智慧城市藍圖》的目標。

有各位的支持，聯盟將繼續擔當溝通橋樑的角色，促進各界分享交流、承先啟後、發聲倡議、持續學習、合作協同實現夢想、勇於創新、敢於變革，為我們和下一代創造更美好、更有智慧的生活環境。

我希望藉此感謝行政長官林鄭月娥女士和各位官員撥冗蒞臨今天的午宴，亦衷心感激各位智慧城市聯盟董事、委員會和工作小組成員及秘書處職員一直以來的貢獻及支持。

同時更感謝各位贊助人對是次午宴的慷慨支持，並參與我們的分享環節。最後再一次多謝在座各位抽空出席今天的午宴，祝各位有個愉快的下午。

讓我們繼續努力，攜手共建理想的智慧城市！多謝各位。



Speech by  
**The Hon. Mrs. Carrie Lam  
Cheng Yuet-ngor,**  
GBM, GBS, The Chief Executive of the  
Hong Kong Special Administrative Region,  
at the Smart City Blueprint Luncheon

香港特別行政區行政長官

**林鄭月娥女士，  
大紫荊勳賢，GBS**

於智慧城市發展藍圖午宴上的致辭全文



Elizabeth (Founder and Honorary President of the Smart City Consortium, Dr. Elizabeth Quat), Winnie (Founder and Honorary President of the Smart City Consortium, Dr. Winnie Tang), Eric (President of the Smart City Consortium, Mr. Eric Yeung), Deputy Director Chen Dong (Deputy Director of the Liaison Office of the Central People's Government in the Hong Kong Special Administrative Region, Mr. Chen Dong), ladies and gentlemen,

Good afternoon. I'm pleased to join you for today's Smart City Blueprint Luncheon. My thanks to the Smart City Consortium for organising this afternoon's event. My thanks, as well, for your valuable input into the *Hong Kong Smart City Blueprint*, which was unveiled by the Secretary for Innovation and Technology in the middle of December.

My Government's smart city vision is as clear and compelling as the benefits it promises. We have embraced the smart city, and the innovation and technology (I&T) that will power it, to ensure that our economy remains strong and diverse, deep into this 21<sup>st</sup> century. No less important, we see the smart city as a critical means to providing the people of Hong Kong with a high quality of life.

That said, we have no time to waste - not if we want to turn Hong Kong into one of the world's smart cities. Which is why, in my October *Policy Address*, I announced that we would advance the timetable for the publication of the *Smart City Blueprint*, and invest initially \$700 million to push ahead with key infrastructure projects for smart city development. This is also why I personally chair the Steering Committee on Innovation and Technology, with membership comprising the Chief Secretary for Administration, the Financial Secretary and 10 bureau secretaries, to oversee the implementation of the initiatives. I am glad to tell you that we are making some progress, with the *Smart City Blueprint* published in December last year.

智慧城市聯盟創辦人及榮譽主席葛珮帆議員和鄧淑明博士、智慧城市聯盟主席楊全盛先生、中央人民政府駐香港特別行政區聯絡辦公室副主任陳冬先生、各位朋友：

午安！今天我很高興能與各位一同參與智慧城市發展藍圖午宴。除了要多謝智慧城市聯盟籌辦今次午宴，也要感謝各位對創新及科技局局長去年十二月中公布的《香港智慧城市藍圖》，提供了許多寶貴意見。

21世紀是資訊科技高速發展的年代。我和團隊已洞悉到創新科技的巨大潛力，並決意創建智慧城市。我們會繼續努力推動創科發展，以鞏固香港經濟固有的強勢和多元，並改善市民的生活。

今天我們要坐言起行，將香港打造成世界一流的智慧城市。所以在去年10月發表《施政報告》時，我已承諾提前公布《香港智慧城市藍圖》，並向首階段的智慧城市主要建設投放七億撥款，以加快發展步伐。此外我會親自領導「創新及科技督導委員會」，聯同政務司司長、財政司司長和十位局長，一同監督各個智慧城市項目的推行。可喜的是，自去年12月公布《智慧城市藍圖》至今，我們已取得一定進展。

這個《藍圖》只是一個起步點。要充分發揮智慧城市的潛力，我們必須多管齊下，謹慎和智慧地處理某些重點範疇。當中包括開放數據予初創企業和公眾使用。





The *Blueprint* is only a start. Delivering the smart city is a multifaceted task, and we will need to work particularly smart in a number of strategic areas, if we are to realise its full benefits. They include opening up data for free use by startups and the public.

As you know, open data can only promote social innovation. Opening health-related data, for example, will help us better monitor infectious disease trends, promote research and development (R&D), and drive innovation in health-related products and applications. In this respect, I am happy to note that the Hospital Authority is developing big data analytics to encourage the sharing of anonymous patient data. Within Government, we have recently revamped data.gov.hk to provide geospatial data, which in turn will promote the development of innovative applications and solutions. More geo-tagged data sets will be made available for public use. Looking ahead, we will expand the opening up of free Government data, focusing on transport, health, education and sensor data. In these areas, we trail our competitors.

Of course, much data is controlled by the private sector. Our public transport operators, for example, are private companies. And they are generally reluctant to share, at no cost, data generated from their operations. That includes the real-time location of their fleet and passenger volume. We will continue our efforts to convince them of the benefits that everyone gains in a system where the data is freely available. I am sure the Smart City Consortium will help us to give this a real push. Using the data of other operators can only help enhance the business models of all operators.

開放數據能推動社會創新。例如開放健康醫療數據不但有助監察傳染病的最新發展，也能推動科研創新，促使科研人員開發更多醫護產品和應用。有見及此，我很高興醫院管理局正設立大數據分析平台，鼓勵分享匿名病歷資訊。政府資訊科技總監辦公室早前亦推出版「資料一線通」網站，為公眾提供更多地理空間數據，以協助業界研發創新應用及解決方案。未來香港會有更多地理位置數據集讓公眾人士使用。長遠來說，政府將免費開放更多數據，特別是有關交通運輸、醫療、教育和各種監測系統的數據。我們會繼續努力，在這些領域中保持領先地位。

事實上，私營企業亦掌握大量數據，公共運輸機構就是其中一個好例子。一般情況下，他們不會無條件公開車隊實時位置、客運量等營運數據。但我們將持續向私營機構推廣共享數據的好處，讓他們明白開放數據有助改善整個行業的運作模式。我相信智慧城市聯盟亦會參與其中，協助推動。

構建完善的科技基建也是重要一環。香港金融管理局即將推出「快速支付系統」，讓市民隨時隨地使用手機支付；我們正提升網絡基建和通訊配套，以配合第五代（5G）流動通訊服務於2020年全面商用化的步伐。我們亦將為



Building essential technology infrastructure is another critically important strategic area. In this regard, the Hong Kong Monetary Authority is developing a Faster Payment System. It will allow residents to use their mobile phones for payment - anytime, anywhere. We are also gearing up for the 2020 commercial launch of 5G mobile services and applications. We will, as well, provide a universal eID - a single digital identity and authentication allowing the people of Hong Kong to access Government and commercial services online.

Within Government, we are building a new big-data analytics system to support cloud services. It will also enhance efficiency and cyber security through resource sharing and artificial intelligence.

Next year, we expect that the first smart lampposts will take to the streets of Hong Kong. They will collect a wide variety of city data, from weather and air quality to traffic. And that can only help us enhance the good management of Hong Kong. The Highways Department and the Office of the Government Chief Information Officer will roll out a pilot scheme in four districts. These smart lampposts will offer Wi-Fi, 5G networks and district information for road users. Still on infrastructure, the Hong Kong-Shenzhen Innovation and Technology Park may well be our most anticipated I&T infrastructure project. Occupying a site of 87 hectares and a gross floor area of 1.2 million square metres, it will be the largest I&T development in Hong Kong upon completion. I can tell



所有香港居民提供「數碼個人身分」，讓大家能以單一數碼身分和認證使用政府和商業的網上服務。

政府內部正在設立一個大數據分析平台，以協調各部門之間的雲端系統。這個分析平台將透過訊息共享和人工智能技術，提升政府的運作效率和網絡安全。

我們期望於明年開始在街道安裝首批智慧燈柱。智慧燈柱能幫助收集天氣、空氣質素、交通等城市數據，以改善城市管理。路政署和政府資訊科技總監辦公室亦將在本港四個地區推行試驗計劃，利用智慧燈柱為道路使用者提供無線上網服務、5G網絡以及地區資訊。「港深創新及科技園」是另一項重點創科基建。此科技園佔地87公頃，總樓面面積達120萬平方米，落成後將成為香港歷來最大的創科園地。我們正全速推行相關工作，並剛在上星期完成法定規劃程序。只要立法會通過撥款，這項基建工程便會立即展開。

香港也是高端數據中心的集中地。亞馬遜網路服務公司 (Amazon Web Services) 於去年6月宣布將在香港設立數據中心，Google也會在今年稍後時間於香港開設Google雲端平台，這類發展項目突顯了世界創科巨擘對香港未來發展成數據中心樞紐和智慧城市的信心。





you we are working at full speed to implement it. The statutory planning procedure has been completed just last week and the infrastructural work will start immediately once funding has been approved by the Legislative Council.

Hong Kong is also home to high-tier data centres. Last June, Amazon Web Services announced it would establish a data centre hub in Hong Kong while Google will open a Google Cloud Platform in Hong Kong later this year. These, and other developments, underline the confidence global I&T leaders have in the future of Hong Kong as a data hub and smart city.

Talent is essential to that future. Simply put, we need all the smart, tech-savvy people we can get if we are to create a smart city for the world. At last count, we had about 50,000 students in science, technology, engineering and mathematics (STEM) studies. That number has to grow. To that end, we will provide scholarships worth HK\$3 billion to encourage local students to take part in research postgraduate programs. And we will continue to promote STEM education at the primary and secondary school levels, as well as the community at large.

We are also looking for talent beyond Hong Kong. We will soon launch a pilot fast-track scheme to admit technology talents from overseas and the Mainland. In the coming months, we will launch a HK\$500 million Technology Talent Scheme, which will include a Postdoctoral Hub. The Hub initiative provides funding support for companies looking to recruit postdoctoral talent for scientific research and product development. In addition, we will continue to invite acclaimed universities, R&D institutes and technology enterprises to set up here, to collaborate with local partners and to develop research projects with social benefits for Hong Kong.

打造智慧城市需要「智慧」人才，因此我們要吸納和培育更多精通科技的專才。目前為止，已有約50,000名學生修讀科學、科技、工程和數學（STEM）課程。為了讓人數繼續增長，我們將撥出約30億元的獎學金，以鼓勵本地學生報讀研究院課程。我們亦會繼續在中小學及社區推動STEM教育。

同時，我們積極吸納外地科研專才。一方面，我們將推出「創科優秀人才特快入境計劃」，以吸引更多來自內地和海外的科技專才來港工作。我們亦會在數個月內啟動涉及五億撥款的「科技專才培育計劃」，當中包括設立「博士專才庫」，以資助企業聘用創科博士後專才，從事科研及產品開發等工作。此外，我們會繼續邀請知名大學、研發中心和科技企業進駐香港，與本地企業合作，進行惠及社會的研究項目。

就法例方面，在《施政報告》中，我已提出檢討現行法規，並廢除任何窒礙創科發展的過時條文。只要立法會通過有關建議，我們便會成立「政策創新與統籌辦事處」，由我親自督導着手處理這些事項。

政府的政策及計劃以外，全新的配對私人風險投資基金亦已在香港推出。在2017年首9個月，我們已累積多達7.7億美元的創業資金，是2012年的九倍。在2014年，香港只有千餘

Then there's a question of legislation. In my *Policy Address*, I pledged to review existing legislation and regulations, and to remove any outdated provisions that may impede our I&T development. The Policy Innovation and Co-ordination Unit will soon be set up, again subject to the approval of the Legislative Council, working directly under me to spearhead that effort.

Beyond Government policies and plans, I'm pleased to note that venture capitalists are already sold on Hong Kong. In the first nine months of 2017, venture capital in Hong Kong reached US\$770 million. That, ladies and gentlemen, is nine times more than was invested in Hong Kong in 2012. As for startups, there were just over 1,000 in Hong Kong in 2014. Last year, that number more than doubled, to over 2,200. At last count, at least two of our made-in-Hong Kong startups have hit that starriest of capital heights: unicorn status.

In short, we're on our way. It's an evolving journey and support from the private sector is essential. When I said support, that doesn't mean that you should tell us what we are doing well. I want you to tell us what we are not doing well enough so that we could improve and respond to the industry's needs. As I said, the *Smart City Blueprint* is just the beginning. It's a living document driving a multifaceted policy agenda. We will continue to update and upgrade them for the benefit of the people of Hong Kong.

I wish you all an enjoyable lunch, and like Elizabeth, I wish you a very prosperous Chinese New Year ahead. Thank you very much.



間初創企業；三年間，這個數字上升至2,200間，升幅超過一倍。當中更有至少兩間成為「獨角獸企業」。

雖然我們已經穩步向前，不過發展智慧城市是一項具挑戰性的工作，其中私營機構的支持十分關鍵。我所謂的支持，並非要求讚美之聲，而是希望各界就我們不足的地方作出提醒，讓我們充分了解業界需要，做到最好。正如我一開始所說，《香港智慧城市藍圖》只是第一步，它會持續演進，並驅動不同層面政策的討論。我們會繼續努力不懈，與時並進，為香港市民創造更美好的生活。

希望大家享用今天的午宴，我和葛議員一起預祝大家新年快樂。多謝各位！

7<sup>th</sup>

Dec, 2017

### Signing MoU with Siemens 與西門子簽署諒解備忘錄

On 7<sup>th</sup> December, 2017, members of the Smart City Consortium (SCC) joined the Grand Opening of the Hong Kong's first-ever Smart City Digital Hub co-established by Hong Kong Science and Technology Parks Corporation and Siemens. After the opening, Mr. Eric Yeung, President of SCC, signed a MoU with Siemens to join hands in building Hong Kong as a world-class smart city.

智慧城市聯盟一眾成員於2017年12月7日，出席由香港科技園及西門子聯手打造的全港首個智慧城市數碼中心的開幕儀式。聯盟主席楊全盛更於開幕儀式後，與西門子簽署諒解備忘錄，共同打造香港成為國際級的智慧城市。



16<sup>th</sup>

Jan, 2018

### Signing MoU with Dublin Chamber of Commerce 與都柏林總商會簽署諒解備忘錄



On 16<sup>th</sup> January, 2018, SCC signed a MoU with the delegation of Dublin Chamber of Commerce from Ireland during their visit to Hong Kong. Both parties will cooperate to foster smart city development in Ireland and Hong Kong.

智慧城市聯盟於2018年1月16日，在愛爾蘭都柏林總商會代表團訪港期間，與他們簽署諒解備忘錄，雙方將攜手合作，推動兩地智慧城市發展。



24<sup>th</sup>

Jan, 2018

**Formation of CSI Alliance with Cyberport and IBM China/Hong Kong Ltd**  
與數碼港及國際商業機器中國香港有限公司  
組成CSI聯盟

Cyberport, SCC and IBM China/Hong Kong Ltd announced the establishment of CSI Alliance on 24<sup>th</sup> January, 2018. The Alliance will collaborate with professionals, academics and commercial stakeholders to co-create a sustainable ecosystem to support the development of FinTech startups.

數碼港（Cyberport）、智慧城市聯盟（SCC）及國際商業機器中國香港有限公司（IBM），於2018年1月24日宣布組成CSI聯盟，共同推動學界、商界及專業人士合作，為金融科技初創發展打造可持續的生態環境。



7<sup>th</sup>

Feb, 2018

**Smart City Blueprint Luncheon cum Signing Ceremony of MoU for Establishment of Global Smart City Consortium**  
智慧城市發展藍圖午宴暨  
全球智慧城市聯盟合作備忘錄簽署儀式



Smart City Blueprint Luncheon hosted by SCC was successfully held on 7<sup>th</sup> February, 2018. About 400 smart city experts and representatives from the innovation and technology, business and political sectors crowded the venue to share ideas of smart city development in Hong Kong. At the luncheon, SCC also signed a MoU with Smart City Development Alliance of China for the establishment of Global Smart City Consortium.

智慧城市聯盟於2018年2月7日舉辦智慧城市發展藍圖午宴，近400名創新科技界代表、智慧城市專家及政商界人士參與活動，就香港智慧城市發展進行交流。智慧城市聯盟更在午宴期間與中國智慧城市發展聯盟簽署合作備忘錄，宣布共同成立全球智慧城市聯盟。

7<sup>th</sup>

Feb, 2018

Press Conference on The Fourth China Smart City International Expo 2018 cum The Establishment of Global Smart City Consortium  
2018（第四屆）中國智慧城市國際博覽會暨成立全球智慧城市聯盟新聞發布會

On 7<sup>th</sup> February, 2018, SCC and the China Center for Urban Development co-organised the Press Conference on The Fourth China Smart City International Expo 2018 cum The Establishment of Global Smart City Consortium.

The Smart City Expo to be held in Shenzhen in this August will cover four key aspects: progress of smart city development, international corporations and cities, the latest solutions developed and deployed by mainland cities, emerging industries and technologies. The Expo has been successfully held thrice with the total number of exhibitors reaching over 500 and visitors over 300,000.

The establishment of the Global Smart City Consortium, an important accomplishment from cooperation among SCC, Smart City Development Alliance in China and smart city organisations from across the world, provides an innovation platform to encourage countries in introducing their smart city-related industries, technologies and standards. At the same time, through the transfer of technological knowledge and cooperation in innovation, smart city technology will be promoted through internationalisation and commercialisation.

智慧城市聯盟與中國城市和小城鎮改革發展中心，於2018年2月7日合辦2018（第四屆）中國智慧城市國際博覽會暨成立全球智慧城市聯盟新聞發布會，和傳媒分享項目詳情。

將於2018年8月在深圳舉辦的智慧城市博覽會，會圍繞四大核心內容：智慧城市建設成果、國際企業及城市、國內智慧城市最新解決方案及研究成果、新興產業與新技術。該博覽會已成功舉辦過三屆，累計參展單位500多家、參觀人數共30多萬人次。

而「全球智慧城市聯盟」由香港智慧城市聯盟、中國智慧城市發展聯盟聯合多國智慧城市相關機構共同發起，旨在鼓勵各國協助引入與智慧城市相關產業、技術和標準；同時透過知識技術轉移和創新合作，促進智慧城市技術邁向國際化和商業化的發展。



8<sup>th</sup>

Feb, 2018

## Signing MoU with Microsoft Hong Kong 與微軟香港簽署諒解備忘錄

SCC signed a MoU with Microsoft Hong Kong on 8<sup>th</sup> February, 2018 to work hand in hand for building Hong Kong as a smarter and more livable international city.

智慧城市聯盟於2018年2月8日與微軟香港簽署諒解備忘錄，雙方將聯手打造香港成為更聰明、更宜居的國際城市。



9<sup>th</sup>

Feb, 2018

## Training Seminar for Training Institute of Civil Service Bureau 公務員培訓處培訓講座



SCC completed the first training seminar for the Civil Service Training and Development Institute on 9<sup>th</sup> February, 2018. Featuring topics to enhance the awareness of smart environment, the seminar attracted the participation of over 80 senior managers across all Government bureaux and departments.

智慧城市聯盟於2018年2月9日為公務員培訓處舉辦了首次講座。是次講座以智慧環境為題，共有超過80名來自不同政策局及政府部門的高級管理人員出席。

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# 啟迪國際

## TUS INTERNATIONAL

Assist Hong Kong to Innovate:

# Vision of TUS International in Smart Mobility

協力香港 引領創新——

## 啟迪國際推動智慧出行

TUS International - being injected with capital by TUS-Holdings in June 2015 and becomes a Hong Kong based key listing platform of the holding company. TUS-Holdings was set up in July 2000 and is the former Tsinghua University Science Park (TusPark) Development Center. TUS-Holdings is a large integrated enterprise established in reliance on Tsinghua University, and takes full responsibility for developing, constructing, operating and managing TusPark, and is one of the first National Demonstration Enterprises in modern service industry.

啟迪國際 (TUS International Limited) 在2015年6月獲啟迪控股 (Tus-Holdings) 注資，成為啟迪控股面向國際的核心上市平台。啟迪控股在2000年成立，前身是清華科技園發展中心，公司名稱中的「Tus」即清華大學科技園 (Tsinghua University Science Park) 的縮寫。啟迪控股是清華大學設立的綜合性大型企業，是清華科技園開發建設與運營管理單位，也是首批國家現代服務業示範單位。

TUS International has started developing intelligent and connected vehicles (ICV) and smart mobility technologies from June 2016, by employing the technologies and talents from Tsinghua University. It has now become a nation-wide leading tier one provider of advanced driving-assistance systems (ADAS) solutions and has also expanded their business to autonomous driving cloud control solution. The company has been upgrading itself continuously with the aim of providing L5<sup>(1)</sup> full-stack autonomous driving solution so as to develop smart mobility in China, including Hong Kong and Macau regions.

In this Issue, we are glad to have invited Mr. Sean Shen, President and Executive Director of TUS International, to share the vision of TUS International in autonomous driving and their participation in promoting smart mobility in China as well as in Hong Kong.

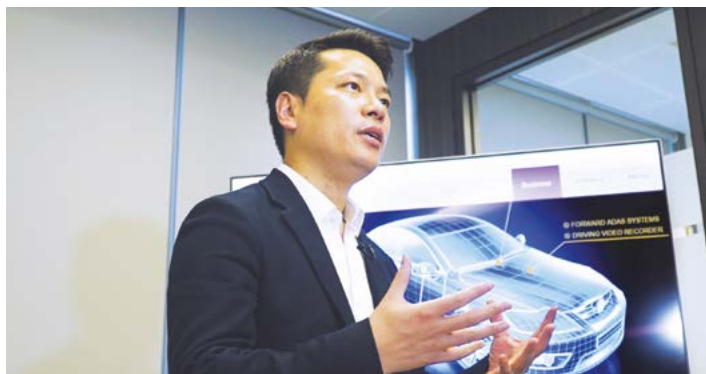
*(1) SAE International has set up a standard for different levels of driving automation for on-road vehicles. L5, the highest level, represents an automated driving system which can operate without the management supervision of human driver even in handling non-routine and dynamic tasks.*

### Dream High to Contribute to National Strategy

“Holding the brand of Tsinghua University, TUS International has a mission to underpin the national development strategy of developing ICV, and contribute to the society wholeheartedly,” Sean said.

To accelerate the national strategy, the China intelligent vehicles industry is establishing two ICV innovation platforms at national level, with the support of China's Ministry of Industry and Information Technology (MIIT) and the National Development and Reform Commission (NDRC). They are the National Innovation Centre for the Intelligent and Connected Vehicles and the National Intelligent Vehicle Innovation & Development Platform respectively. The former develops and promotes forward-looking and compatible technologies, while the latter focuses on the holistic top-down design and collaboration at industry level.

TUS International actively participated in the establishment of both the MIIT's Innovation Centre and NDRC's Innovation Platform. Also, the company has been working closely with various industry leaders and research institutes to speed up the development, standardisation, and commercialisation of ICV technology.



憑着清華大學在技術和人才資源的強大支持，啟迪國際自2016年6月起開始全力推動「智能網聯汽車」科技和智慧出行業務，現已成為中國領先的智能輔助駕駛系統供應商；同時，它開拓汽車雲控技術業務，驅動智慧出行生態，並致力邁向無人駕駛最高級別的第五級（L5）<sup>(1)</sup>的整體解決方案，為包括港澳地區的全國智慧出行發展提供核心技術支援。

今期我們邀請到啟迪國際總裁及執行董事沈霄先生接受訪問，暢談該公司在智能駕駛技術的願景、對中國智慧出行發展的參與和探討如何在香港推動有關業務。

*(1) 國際自動機工程師學會 (SAE International) 就自動駕駛技術訂下不同階段的技術水平，當中最高級別，即第五級 (L5) 代表自動駕駛系統能在各種情況下，包括充滿變數的環境及完全毋須人為參與的情況下自動運作。*

### 立大志 參與國家戰略部署

沈霄指出：「背負清華品牌，啟迪國際立下了大志，要深度參與國家於智能網聯汽車的發展戰略，貢獻社會。」

為推動國家智能網聯汽車的戰略部署，中國智能汽車業界在國家工信部及發改委的支持下，已成立兩個國家級智能網聯汽車創新平台——即工信部推動的「國家智能網聯汽車創新中心」，以及發改委推動的「國家智能汽車創新平台」，前者側重前瞻、兼容性技術的開發和推廣，後者側重產業整體的頂層設計和協作。

啟迪國際既參與了工信部創新中心的成立，亦積極協助發改委創新平台的籌備工作；此外，該公司與一眾業界領袖及研究機構合作，推動研發，同時積極推動制定相關技術的標準，並促進產業化。

### 人工智能 智能汽車的中央大腦

智能汽車可分為三個層面：外在環境感知、智能決策和控制執行。

現時，實際產業化的智能技術均屬智能駕駛輔助系統<sup>(2)</sup>，作用是幫助駕駛者安全駕駛，減低交通意外風險。沈霄指出，智能駕駛輔助系統和無人駕駛的最大分別，在於後者需要一個具完整人工智能功能的車載智能駕駛系統。「我們積極研發智能汽車的『中央大腦』，它要能夠綜合傳感器的各種數據和懂得深度學習，方能讓汽車擁有全面自動駕駛的功能。」

*(2) 智能駕駛輔助系統功能包括車道偏離和前撞預警、行人探測、夜視輔助、盲區探測及疲勞監測、自動泊車等。*

## AI - the Brain of ICV

There are three levels of ICV technology: perception of the surroundings, decision making, and executing the decision.

So far, the commercialised technologies of smart vehicles are confined to advanced driving-assistance systems (ADAS)<sup>(2)</sup> which is to enhance driving safety and reduce the risk of car accidents. Sean pointed out that current ADAS is just an accessory of ICV. To achieve a truly autonomous driving system, a complete in-vehicle advanced driving system with artificial intelligence (AI) is necessary. “We are developing the ‘central brain’ which assembles the power of data fusion and reinforced learning of smart vehicles. This equips cars with complete autonomous driving ability.”

*(2) The applications of ADAS include Lane Departure Warning, Forward Collision Warning, Pedestrian Detection, Night Vision, Driver Fatigue Monitoring, and Auto-parking.*

## ICV Could Break Automotive Monopoly

Many people are curious about why China is reiterating the term of “vehicle connectivity”<sup>(3)</sup>. Sean said it is the major distinction between China and foreign countries in the direction of intelligent vehicles development.

The key to intelligent vehicles is to perceive and judge the road situation and external environment. If the road infrastructure is not upgraded accordingly to convey all driving related information via full digitalisation, intelligent vehicles will have to rely entirely on its own sensory system to react to the outside world. Instead, with the fully digitalised smart infrastructure, intelligent vehicles will be able to exchange data and information with on-site infrastructure and other vehicles. In other words, its judgment on the external environment will no longer be confined to the in-vehicle sensor. This enables smart vehicles to cope much better with the external adverse impact of extreme environment and weather.

*(3) Using artificial intelligence from the cloud platform, data from smart vehicles and infrastructure will be integrated for centralised analysis. This improves co-ordination among on-road vehicles, as well as reduce traffic congestion, and enhance road safety and energy efficiency in the long run.*



## 網聯化 打破外國壟斷

中國的智能汽車業強調「網聯」二字，令很多人感到疑惑，沈霄指出這正是中國與外國在智能汽車發展大方向上的差異。

智能汽車的關鍵是對路面情況及外在環境的感知和判斷，如果道路基礎設施未能相應提升至數據化，智能汽車只能單純依靠自身的車載傳感器判斷四周環境；相反，若基礎設施也能智能化和數據化，智能汽車便可與各基礎設施以及其他智能汽車交換數據和訊息，令它更有效地感知外部環境並作出更佳判斷，因此能大大減低極端環境及惡劣天氣對感知能力的不良影響。

「國外的智能汽車業界一般朝着改良車載感知系統方向發展，對政府主動提升道路基礎設施持保留態度。但中國政府十分支持業界，在基礎設施上充分配合，以實現交通數碼化。」

有國家政策支持，中國智能汽車業一致朝着「網聯化」<sup>(3)</sup>發展，從而讓載有人工智能的汽車達致V2V（汽車對汽車）及V2X（汽車對萬物，包括行人及基礎設施）的連繫。沈霄指政府將在特定主要城市或區域，設立智能網聯汽車和雲控技術試點，成功後更有望擴展至全國。藉「網聯」這個與外國不同的發展方向，令中國智能汽車業長遠有望打破外國長期以來在汽車業的壟斷。「有人說這是『彎道超車』，但基於本質上的差異，我認為『換道超車』是更準確的說法。」

*(3) 智能汽車網聯透過雲端人工智能技術，匯集智能汽車及道路基建的大數據，經中央系統分析和篩選後，協調路面上的智能汽車，既可疏導交通，也令出行更安全和節能。*

“The intelligent vehicles industry in foreign countries have doubt on their governments to upgrade the necessary road infrastructure, therefore, their development focuses mainly on improving the in-vehicle sensory system. However, for China, the government is very supportive of this technology and is willing to upgrade the infrastructure so as to realise digitalisation of transportation,” Sean said. The national policy has encouraged the relevant industries to develop a connected network which equips the AI-embedded intelligent vehicles with ability to communicate vehicle-to-vehicle (V2V) and vehicle-to-everything (V2X) including pedestrians and infrastructure.

Sean also revealed that the Chinese government’s pilot project to test the ICV and autonomous driving cloud control solution in specific cities and regions is expected to be expanded to the rest of the country after successful trials. The adoption of a different approach in developing intelligent vehicles compared to foreign countries makes it possible for China to contest the monopoly held by traditional automotive manufacturing countries. “People said that we are overtaking on a curve. However, based on our difference in nature, overtaking on a new lane is a more precise description, I believe,” Sean said.

#### Smart and Safe Mobility for Hong Kong

In the interview, Sean expressed his sympathy while talking about the recent fatal double-decker crash in Tai Po Road.

“Every one of our company was deeply saddened by the fatal tragic crash (the route number of the bus involved happens to be the same as the stock code of TUS International). We feel that we have a mission to enhance the road safety by promoting preventive measures. During the public holiday in the Chinese New Year, our colleagues therefore gathered to investigate possible solutions.”

Sean believes that the ADAS and the autonomous driving cloud control solution of TUS International are applicable to our public transport operations including franchised buses. By accumulating and learning the good driving behaviour of experienced bus drivers, such as braking and speed control in the specific areas, as well as the skills required under extreme weather or slippery road, young bus drivers can thus quickly familiarize with the technique required for driving heavy public transport with an aid of the ADAS. The risk of accident due to human error can therefore be reduced. Moreover, once sufficient data is collected, bus companies can exchange data with other public transport companies so as to enhance the overall safety in the long run.

“Our vision is to develop cost-effective and energy-efficient driving solutions with reinforced learning capability so as to provide a safe, green and smart mobility experience for the general public,” Sean reiterated. While Hong Kong has been developing over the past few decades, our transportation mode has not been advanced in same pace to achieve full digitalisation, he observed. TUS International is very willing to provide technical support to the public transport industry and the Hong Kong Government to improve our mobility.

Talking about promoting innovation and technology in Hong Kong, Sean believed that the Government’s role should not be confined to capital injection alone. Extending to policy support and relaxation of the regulatory framework are much desired. With a sustainable ecosystem, he believes that the flourishing of I&T development is just a matter of time.



#### 關心香港 智慧出行提升交通安全

訪問中提及早前大埔公路巴士車禍，沈霄顯得特別感慨：「我們公司上下都因車禍感到非常痛心（有關的巴士路線恰與公司的上市編號相同），感覺我們有個使命來推動提升駕駛安全的措施，避免慘劇重演。因此在農曆年假期間，同事都集合起來，研究可行方案。」

沈霄認為，啟迪國際的智能駕駛輔助系統和雲控技術，也能應用到巴士公司等多個公共運輸系統。既運用和累積有經驗的車長在特定路段的車速及剎車控制等優良駕駛行為數據，同時加上在極端天氣及特殊路面狀況（如天雨及路面濕滑等）的駕駛處理等範例，讓年輕車長能在智能駕駛系統的輔助下，更快掌握各路線的特殊情況及大型公共交通工具的駕駛技巧，減低人為錯誤導致意外的風險。

收集到足夠數據後，如果能與其他公共運輸企業做到數據互通，長遠可有效提高交通運輸系統的整體安全性。

「我們的願景是研發成本效益高、功耗合理及具備深度學習能力的完整智能駕駛解決方案，從而為廣大市民創造安全、節能的智慧出行體驗。」沈霄指出，香港過去數十年，城市不斷發展的同時，交通發展卻彷彿未有跟上步伐，未能實現智能化。啟迪國際十分願意在技術層面支援公共運輸企業及香港政府，以改善本地的交通運輸。他更指出香港要提倡科技創新，政府的責任並非單純提供資金，而是應在政策上多加支持，放寬相關法規。只要有可持續的生態環境，創新科技自然會百花齊放。

# TUS INTERNATIONAL, **DISCOVER** AUTO-DRIVING AI POWER



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system solutions in China  
國內領先的ADAS方案  
一級供應商



Develop autonomous  
driving solution with data  
fusion and reinforced  
learning  
開發具備數據融合及強  
化學習能力的自動駕駛  
解決方案



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Guests of sharing session: (from left) Mr. Eric Yeung (moderator), Mr. Sean Lee, Ir. Allen Yeung, Mr. Karl Ma, Mr. William Gee and Mr. Peter Lam  
分享環節嘉賓：(左起) 楊全盛先生 (主持)、李帆風先生、楊德斌工程師、馬志剛先生、季瑞華先生及林榮執先生

# Sharing Session of Smart City Blueprint Luncheon

## 智慧城市發展藍圖午宴分享環節



At the Smart City Blueprint Luncheon, Smart City Consortium (SCC) invited Ir. Allen Yeung, Government Chief Information Officer; Mr. Karl Ma Chi-kong, Executive Director and Chairman of TUS International Limited; Mr. Sean Lee, Director & Chief Executive Officer of China Mobile Hong Kong; Mr. Peter Lam, Managing Director, Engineering of HKT and Mr. William Gee, Partner of PwC and Vice-Chairman of Asia PKI Consortium to share their points of view in the smart city development in Hong Kong. Mr. Eric Yeung, President of SCC, was the moderator of the sharing session. The session was conducted in English.

在智慧城市發展藍圖午宴上，智慧城市聯盟邀請了政府資訊科技總監楊德斌工程師、啟迪國際有限公司主席及執行董事馬志剛先生、中國移動香港董事兼行政總裁李帆風先生、香港電訊工程部主任總經理林榮執先生及普華永道合夥人兼亞洲公匙基建聯盟副主席季瑞華先生參與交流環節，各人就香港智慧城市發展分享想法、互動交流，並由智慧城市聯盟主席楊全盛先生擔任主持。交流環節以英語進行。

**Eric:** Ladies and Gentlemen, welcome to our luncheon. I think most of you would have finished the main course by now. Why don't you turn around and listen to our gentlemen's sharing? This would be an exciting part.

After listening to the sharing by our Chief Executive, smart city development, as mentioned by her, is not only the Government's work as we also need to collaborate with the private sector and industries as well. Here, we have representatives from our industry. As a platform like SCC, it is our honour to have this sharing session for having interactive discussion.

When we walked around with The Chief Executive and chitchatted with her along the way, we can feel that she has the passion and eager to see more smart city applications and initiatives implemented in Hong Kong as soon as possible. Let me ask Allen Yeung, the major subject officer of the *Blueprint* in Hong Kong. In order to achieve a smarter city in Hong Kong, which aspects you consider need to be highlighted?

**Allen:** In order to build a smart city for Hong Kong, it is important to join hands to build the city together. It is not just the Government's work, but also the work with partners especially those from the industry. I would like to highlight a couple of new but important projects that the Government is planning to roll out. As mentioned by our Chief Executive, one would be the electronic ID (eID). Another one would be the smart lampposts. Once it is rolled out, the smart lampposts will collect a lot of city data, including weather, air quality, traffic flow and people flow. It would also facilitate provisioning for wireless small cell station, a street furniture for the 5G and Wi-Fi network.

Sitting next to me are the representatives from China Mobile Hong Kong and HKT. We have explored how they can make use of the smart lampposts for providing the future 5G network services. Of course, 5G would further enable many new city services like autonomous vehicles and other services down the road so it is very important. It is not just a Government project. It is also about the Government, service providers and operators who provide citizen's services.

Another example would be the provision of open data by the Government. The Chief Executive also mentioned that it is very important for the Government to open up more data. We would also encourage the community to make good use of such data to develop innovative applications. It is only with those interactive approaches that we can continue to have a better flow of information, a better flow

**楊全盛:** 歡迎各位出席今天午宴。相信各位已享用主菜，我希望邀請大家轉身，聆聽我們嘉賓精彩的分享。

正如剛才行政長官林鄭月娥女士所說，發展智慧城市不僅是政府的責任，私營機構與各行各業的合作亦同樣重要。智慧城市聯盟作為一個協作平台，今天非常榮幸能邀請到幾位業界代表於台上與我們溝通互動。

剛才與行政長官的短暫交流中，我們能感受她就推動香港盡早發展智慧城市及創新科技的決心，也期待更多智慧城市相關的應用和建議。容許我先向作為《智慧城市藍圖》主要推手的楊德斌作出提問。你認為將香港打造成智慧城市的重點是甚麼？

**楊德斌:** 為了將香港打造成智慧城市，我們需要攜手合作。除了政府的工作，業界的參與亦非常關鍵。我想藉此機會，介紹一些政府計劃推出的全新重點項目，當中包括剛才行政長官所提及的數碼個人身分 (eID) 及智慧燈柱。智慧燈柱能協助我們收集多種實時城市數據，包括天氣資訊、空氣質素、交通及人流狀況等；上面更可安裝無線小型發射站，提供第五代流動通訊服務 (5G) 及無線網絡服務 (Wi-Fi)。

現時我身旁就有中國移動香港及香港電訊的代表。我們已探討過未來怎樣利用智慧燈柱提供 5G。5G 能催生不同的全新城市應用，包括無人駕駛車輛及其他街道智能服務等。因此這不僅是政府的計劃，也是政府與電訊服務供應商及其他營運商共同為市民提供的服務。

另一個例子是開放政府數據。行政長官提及政府開放更多數據的重要性，我們亦鼓勵社會大眾善用開放數據，創造對社會有價值的創新應用。只有透過以上的互動方式，我們才能不斷促進資訊流通，為市民研發更多改善生活的創新科技應用。我們希望業界人士能將這些重要訊息帶出會場，並予以實踐，以惠及香港市民。

**楊全盛:** 楊德斌剛才提及多個令人期待的項目，稍後我們將讓李帆風和林榮執分享更多有關智慧城市基礎設施的發展。然而要推行創新科技，資金是不可或缺的部分。今天我們邀請到多年來於

of continuous innovation and live application for our citizens. These are very important messages that we would encourage everyone to take home for the benefit of our citizens.

**Eric:** Allen Yeung has highlighted several things that we are very eager to see. Surely, I will let Sean Lee and Peter Lam to share more about the smart city infrastructure as well. Yet, firstly, when we talk about applications or those projects, money comes first, and here we have Karl, one of the most successful investors and incubators. I know TUS is a very successful facilitator in Hong Kong and China. From your point of view, what kind of project initiative TUS could help us to develop a smart city?

**Karl:** I want to share some observations as I have lived in different Chinese cities in the past 15 years. First of all, I would say we have the best payment system in China, which is also the most advanced payment system in the world. We have WeChat Pay and Alipay, we do not even use cash right now. We have the most advanced mobile network in the world. We are probably the first country to fully utilize the 5G network. I would say, in China, especially in the major cities, we probably have the best incubation and investment system in the world. So we are involved in all kinds of projects and we are interested in all kinds of technologies relating to smart city development.

In order to push forward the concept of smart city, the society itself and every citizen has to embrace and endorse this concept. I think that it is an overall collaboration between everyone. In China, everyone is enjoying this new, advanced and convenient technology. Everyone is enjoying the better security, better efficiency and also better life. I will borrow a very central theme from the 19<sup>th</sup> CPC National Congress in Putonghua.

**Eric:** No worries. We have NICAM system here.

**Karl:** “Everyone is aspired to live a better life.” If everyone shares the same dream, I am sure that it does not matter what kind of technology or what branch of technology we are using. There would be plenty of opportunities for us such as investors and incubators to invest in and make profits, and for the society to share the overall economic benefit of smart city development.

**Eric:** I think that is part of the vision and mission of SCC as well. I am sure that we could work together to achieve that. When we are talking about smart cities infrastructure, China Mobile Hong Kong is one of the key operators in Hong Kong. In fact, I am one of your users.

初創培育及投資方面甚有心得的馬志剛。啟迪國際於中港兩地皆是非常成功的促進者。你認為啟迪國際能如何推動香港智慧城市發展？

**馬志剛:** 我想分享一些自己的觀察。過去15年我於中國不同城市居住過，我認為中國擁有全球最佳、最先進的支付系統。有了微信支付及支付寶，我們現在甚至已甚少使用現金。我們亦擁有全球最先進的流動通訊網絡，相信也會成為第一個全面使用5G的國家。在中國，特別是主要城市，我們有最好的初創培育和投資體系，故此我們參與的範疇甚廣，亦十分關注所有與智慧城市有關的創新科技。

社會及市民要先接受並支持智慧城市理念，這是每個人相互合作的成果，對打造智慧城市尤其重要。在中國，創新及高端科技為大眾帶來方便，人人都得以在這個更安全、方便及美好的環境生活。我想以普通話引述「十九大」其中一個重要主題思想。

**楊全盛:** 不用擔心，我們有麗音系統。

**馬志剛:** 「為了全體人民對美好生活的追求。」若每個人都有同樣的夢想，相信不論是哪一種科技或在哪個科技領域，我們作為投資者和初創培育者，都有相當多的投資及創造財富獲利的機會，而市民大眾也得以共享智慧城市所帶來的經濟成果。

**楊全盛:** 這正是智慧城市聯盟的願景和使命。相信我們能一起合作，共同實現這些目標。提及智慧城市基礎設施，中國移動香港也是本地其中一個主要的電訊服務供應商。事實上我也是你們的用戶。



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**Sean:** Thank you very much.

**Eric:** So what kind of advantages you will leverage to achieve the Government's *Blueprint*?

**Sean:** Firstly, China Mobile Hong Kong welcomes this *Smart City Blueprint*. As a leading operator in Hong Kong, and a wholly owned subsidiary of China Mobile, the biggest mobile operator in the world, we assure we shall implement the most advanced technology and innovative solution to support this smart city development in Hong Kong.

Many people asked me what the "and!" in our logo stands for. Those are the initial for the three words - A New Dream! However, do you know how much China Mobile Hong Kong has done? We not only want to connect people at any time and any where, we also dream to build a high quality of life for people in Hong Kong, which is actually in line with the vision of smart city project. We can foresee that everything will be digitised, we can foresee that everything will be connected, we can foresee that massive data will be collected and analyzed by Artificial Intelligence (AI).

The era of Internet of Things (IoT) is coming and no doubt that IoT is one of the major enablers of smart city development. Today, China Mobile Hong Kong has already deployed Narrow Band Internet of Things (NB-IoT) technology on our 4.5G network to provide more efficient machine-to-machine communication. However, to fully support the smart city infrastructure, the 5G network is required.

The 5G network can not only deliver ultra-high-speed and ultra-high-capacity broadband service, it also enables massive machine-to-machine connection and support ultra-reliable and low latency device-to-device communication. This will enable more advanced IoT applications for smart city development such as autonomous vehicle and remote healthcare service. That is why we are so happy to see the announcement about the 5G spectrum release plan last week.

To cope with the smart city development, we are interested to apply for a trial permit for the 5G network this year. We also fully support the Government's public-private partnership program and keen to deploy a 5G trial network in selected areas for some regional living hubs such as the Science Park. We are also open to participate in any innovative smart city application testing program for startup companies.

**李帆風:** 多謝你的支持。

**楊全盛:** 你們又會利用哪些方面的優勢，協助政府落實《智慧城市藍圖》的方針？

**李帆風:** 首先，中國移動香港非常樂見政府推出《智慧城市藍圖》。作為香港主要的電訊服務供應商，以及全球最大規模電訊服務供應商中國移動全資擁有的子公司，我們會繼續努力發展高端科技，並推出不同創新方案以推動香港的智慧城市發展。

很多人都問我們公司商標中「and！」的意思。其實它是「A New Dream！」（新夢想）的首字母組合。多年來中國移動香港為社會貢獻良多，我們不但希望隨時隨地連結市民，更致力為香港市民構建一個更優質的生活環境。這與智慧城市的願景同出一轍。我們預見將來所有事物都會電子化，並進入萬物互聯的年代；我們亦預見各種大數據將被收集，並由人工智能進行分析。

物聯網時代即將來到，毋庸置疑，它將成為發展智慧城市的關鍵。今天中國移動香港已將窄頻物聯網（NB-IoT）技術應用到4.5G網絡，以提高機器對機器的通訊效率。但要全力發展智慧城市基礎設施，我們需要建設5G網絡。

5G網絡能大大提高寬頻服務的超高速數據傳輸和網絡容量。它不但能處理大量機器對機器通訊，亦能提供非常可靠和超低時延的端對端通訊，並在智慧城市的發展中支援更高規格的物聯網應用，包括無人駕駛汽車及遙距醫療服務等，所以我們對上星期公布的5G頻譜供應計劃非常感興趣。



**Sean:** Moreover, with the full support of our mother company, as you know, in China, they are more advanced in this area, we will import and localize some successful innovative applications from the headquarters to Hong Kong. Our CEO said, “4G is changing our life. We believe 5G will change our society.” Finally, with our big data cloud network, Internet of Things and AI development, we could fully support the Government’s smart city development and help to build a high-quality society for the people of Hong Kong.

**Eric:** Certainly! I am sure that we have lots of startups that need you and Mr. Lam’s help to provide more innovative applications.

**Sean:** I hope so.

**Eric:** When we are talking about telecom infrastructure, of course, we cannot miss HKT. I think they have the longest history in Hong Kong, right? I just chatted with Peter off the stage. They are not just talking about doing the telecom infrastructure, but also exploring other kinds of smart technologies as well. Can you share with us?

**Peter:** Of course! First of all, my company is very excited to see the release of the *Smart City Blueprint* last year. It is the first strategic policy that covers the whole bunch of ideas in a very systematic way, like smart mobility, smart government, smart people, smart society, smart economy, etc.

Under Allen Yeung’s consolidation, I think there are more than 30 initiatives under the *Blueprint*. I am proud to say that currently HKT is almost involved in all the initiatives. Smart city infrastructure is a typical example. Hong Kong has the best infrastructure in the world in terms of fiber coverage, mobility, and mobile networks. At the same time, we are working closely with the Office of Government Chief Information Officer, Innovation and Technology Bureau and a lot of government bureaux.

I know our time is limited. I will just mention one infrastructure: street furniture. If you look at the 5G environment, we need 10 times more cell sites for 5G than 4G, so how can we achieve that? I think my counterparts in Mainland China are also facing similar problems. Street furniture like lampposts or bus shelters and even payphone kiosks are very crucial to the 5G infrastructure. Therefore, we are working closely with Allen Yeung’s team and various Government departments like Highways Department, trying to initiate trials in four areas. That would be very exciting. After the trials, I think we can learn

**李帆風:** 為配合智慧城市發展，我們有意在今年申請5G技術測試許可，也將全力支持政府推行的公私營合作計劃，並在科學園等特定區域測試5G服務。我們亦樂於為初創企業的智慧城市創新應用進行測試。

在內地擁有較先進技術的母公司，亦將全力支持我們推動智慧城市發展。我們將從內地總部引入一些成功的創新應用並加以改良，以切合本地市場需要。如我們集團的首席執行官所言：「4G改變生活，5G改變社會。」此外，我們將利用大數據雲端平台、物聯網及人工智能技術，協助政府推動智慧城市發展，為香港市民打造更美好的生活環境。

**楊全盛:** 這個當然。我相信有很多初創企業都需要你和林榮執的幫助，才能推出更多的創新應用。

**李帆風:** 希望如此。



**楊全盛:** 談及智慧城市基礎設施，當然不得不提在香港歷史最悠久的電訊營運商——香港電訊。剛才在台下與林榮執聊天，發現他們除了發展通訊基礎設施，也積極研發更多的智能科技。可否跟我們分享一下？

**林榮執:** 當然可以。我們公司對政府發表《智慧城市藍圖》感到非常雀躍。這份《藍圖》是首份有系統地涵蓋整個智慧城市概念的發展政策，當中包括智慧出行、智慧政府、智慧市民、智慧社會和智慧經濟等範疇。

根據楊德斌的歸納，政府的智慧城市發展策略包括超過30個倡議，香港電訊很榮幸能參與當中近乎所有項目，發展智慧城市基礎設施就是其中之一。香港擁有世界一流的基礎設施，如光纖覆蓋、交通配套及流動網絡等。同時，我們亦一直與政府資訊科技總監辦公室、創新及科技局和不同政府部門緊密合作。

more and expand it to other city areas. In the past, we had Wi-Fi.HK. We were a big contributor to help the Government to build a Wi-Fi city.

**Eric:** I often use that.

**Peter:** Yes! Karl just mentioned the mobile payment system in China, and we also have our own mobile payment services in Hong Kong, called the Tap & Go. In the emerging market, we see the potential of green environment technologies. We actually formed a joint venture with CLP to do the Electric Vehicle Charging. All in all, we participated in all these smart city initiatives.

**Eric:** That is great! We are very glad to have more companies like yours that have diversified applications in Hong Kong to help achieve a smarter city. However, apps development needs a good infrastructure, right? As Allen Yeung mentioned, the eID is also one of our key infrastructures. As far as I know, Asia PKI Consortium is a key driver of the eID infrastructure in addition to SCC. William Gee, could you share more with us?

**William:** Both The Chief Executive and Allen Yeung mentioned about the eID. If you look at the *Smart City Blueprint*, one of the components is actually identity. Putting on my hats as a partner of PwC, we are delighted to have the opportunity to participate in this consultation study. I thank everyone for their contribution and sharing.

The identity is the key factor. If you do not have that identity component, you would not be able to fully implement health, data and some of the other aspects. What we have been doing over the last 20 years is working with the Hong Kong Government and other territories to build what we call the invisible infrastructure to support everything, including the law, the protocol and the management framework. A lot of these you cannot see. You can talk about the smart lampposts and so on, which is something that you have to implement and build, but the legal infrastructure, the mechanism of how to make that into a trusted framework is something that you cannot see.

The Asia PKI Forum has been working with our entities within Asia Pacific, ASEAN and supported by the Hong Kong Government through their leverage on CEPA. We built the mutual recognition framework with Mainland China. Through that mechanism, we are now able to have this non-face-to-face identity authentication mechanism. I do not know how many of you actually notice that, as you walk in the door, there is a demonstration.

**林榮執:** 時間有限，我只談談其中的街道設施。5G比4G需要多10倍發射站，如何在基礎設施上配合5G發展是一個難題。我相信內地同業也面對着同樣問題。因此智慧燈柱、巴士站及電話亭等街道設施將成為發展5G配套的重要部分。因此，我們正積極與政府資訊科技總監辦公室、路政署和其他政府部門緊密合作，在四個地區進行試驗，結果令人相當期待。透過試驗計劃，我們會汲取經驗，以便日後將項目擴展至其他地區。過去我們已大力支持政府的Wi-Fi.HK計劃，協助建構全城無線網絡。

**楊全盛:** 我也經常使用這項服務。

**林榮執:** 沒錯！馬志剛剛才談及內地的流動支付系統，事實上香港也有自己的流動支付系統——Tap & Go。在新興市場中，我們亦看到環保科技的潛力，早前更與中華電力成立合資公司，推出電動車充電服務。總而言之，我們正全力參與這些智慧城市發展項目。

**楊全盛:** 很高興能有你們這些公司為香港智慧城市發展提供多元化方案。然而發展創新應用亦需要完善的基礎設施，剛才楊德斌所提及的數碼個人身分就是其中之一。我知道亞洲公匙基建聯盟與智慧城市聯盟一樣，一直積極推動數碼個人身分。季瑞華又可否跟我們分享一下？

**季瑞華:** 行政長官和楊德斌都分別提及數碼個人身分的重要性，它也是《智慧城市藍圖》中一個重要範疇。作為普華永道的合夥人，我和同事都非常榮幸能參與這次研究諮詢，亦衷心感謝所有曾提供意見的人。

數碼個人身分是一個重要因素。缺少了數碼個人身分，我們將不能推行醫療及數據等智慧城市科技。過去20年間，我們與香港政府及其他地方政府合作，建設所謂無形的基礎設施以支援法制、草案及管理架構等多方面的發展。這些設施都是肉眼看不見的——智慧燈柱是我們要實質地興建或推行的基礎建設，但一個各方信賴的法律及規管機制則是無形的。

亞洲公匙基建論壇一直與我們亞太區的夥伴及東盟合作，並受惠於香港政府的《更緊密經貿關係的安排》，我們得以與內地建立身分互認系統，並落實遙距身分認證機制。不知在座各位有沒有留意到入口附近的實物示範。

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2541 9900

**Eric:** I have tried.

**William:** You have tried, right? That is actually what we call a business-to-customer model. The Hong Kong business is actually linking up with Mainland consumers and allowing a non-face-to-face identity authentication to be effective to support cross-border commerce. If you combine that with what we are trying to do in Hong Kong, the eID, you can effectively extend that possibility into business-to-customer, business-to-business and customer-to-customer and then go beyond the borders of Hong Kong into Asia Pacific by using Hong Kong as a hub for this cross-border communication and support One Belt One Road as well as the Great Bay Area initiative.

I would say that is a very important infrastructure which you cannot see, touch, and feel, but it is there to support what we are trying to build in terms of smart city development.

**Eric:** I agree with William. I think the eID is not just about the infrastructure. It is also about the whole development of our economy. I am afraid that we have to conclude the panel right now. Allen Yeung, would you like to give a quick response in one or two sentences to summarize your opinions?

**Allen:** I am delighted to see the active participation from the industry. Particularly, these gentlemen sitting on the panel are actively seeking a closer collaboration in building a smart city for the Hong Kong people. I would like to sincerely thank all your participation and look forward to a closer collaboration.

**Eric:** Thank you, Allen Yeung. Thank you, everyone.

**楊全盛:** 我試過。

**季瑞華:** 很好。它就是所謂的「企業對客戶」的商務模式。香港商界正加強與內地顧客的連繫，並利用遙距身分認證促進跨境商貿。只要加上我們在香港積極推動的數碼個人身分，就可將有關技術擴展到「企業對客戶」、「企業對企業」和「客戶對客戶」等商務模式，並以香港作為基地，將這個跨境通訊技術拓展至亞太地區，同時支援一帶一路和粵港澳大灣區發展規劃。

雖然這個基礎設施看不見、摸不著、感覺不到，但這項技術正正是智慧城市發展的重要支柱。

**楊全盛:** 我同意季瑞華的說法。數碼個人身分除了是一項基礎建設，亦關係到香港整體的經濟發展。分享環節差不多進入尾聲，可否請楊德斌簡單地概括你的想法及回應？

**楊德斌:** 我很高興看見業界人士，特別是在座各位攜手合作，積極投入智慧城市發展。我在此衷心感謝各位的鼎力支持，並期望將來能與各位有更緊密的合作，共建智慧城市。

**楊全盛:** 多謝楊德斌。多謝各位。



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# Momentum for smart city development in Hong Kong

Originally posted on Harbour Times on 23<sup>rd</sup> February, 2018

## 大步向前發展智慧城市

原刊於2018年2月12日信報財經新聞

**Dr. Winnie TANG, JP**

鄧淑明博士 太平紳士

Founder & Honorary President,  
Smart City Consortium

智慧城市聯盟創辦人及榮譽主席



Around two years ago, the Smart City Consortium (SCC) was established to promote smart city development in Hong Kong. Its first gathering, held in Lan Kwai Fong, saw over 300 participants crowded into the venue. On the 7<sup>th</sup> February 2018, SCC held a luncheon which was attended by nearly 400 members and guests from different sectors. Representatives from education, infrastructure, finance, communications, transport and environmental protection, as well as consulates from a number of countries packed the venue, giving people the sense that Hong Kong is truly ready to be a smart city.

### Plan

At the event, The Chief Executive reviewed Hong Kong's progress in developing early stage policy functions needed to support smart city development, such as the set up of Policy Innovation and Co-ordination Unit. Once the Legislative Council passes the policy, the Unit will review laws that stifle innovation and technology. Meanwhile, the planning of Hong Kong-Shenzhen Innovation and Technology Park in the Lok Ma Chau Loop has just been completed. It will become the largest innovation and technology centre in the region. All of these gave us great confidence in the smart city development.

### Start with the people

Government policy is certainly important. However, I always believe in the power of bottom up co-creation by citizens. The power of brainstorming can be enormous, and the ideas from the government and citizens can complement each other.

大約兩年前，以推動香港智慧城市發展為己任的「智慧城市聯盟」（聯盟）剛剛成立，首次聚會，300位來賓把中環蘭桂坊的會場擠滿。聯盟於2018年2月7日舉辦午宴，雲集不同界別的會員和來賓更近400人，從教育、基建、金融、通訊、運輸到環保等的政商人士及多國領事，把遠眺維港的偌大會場再次擠得水洩不通，令人感到香港在智慧城市上真的蓄勢待發。

行政長官林鄭月娥在午宴上談到香港在智慧城市的進展，如即將成立的政策創新與統籌辦事處，一待立法會通過，便會着手檢討窒礙創科的法例；落馬洲河套地區「港深創新及科技園」的規劃程序也剛完成，它將成為本地最大型創新及科技中心，這些消息為與會的我們打下強心針。

發展智慧城市，政策推動當然重要，不過，我一向相信從下而上，集思廣益的力量宏大，兩者配合才可相輔相成。因此，聯盟這個結集專業人士的民間組織，在香港致力宣揚理念之餘，更一直馬不停蹄，成立雖然不足兩年，已經與12個國家和地區簽訂了25份諒解備忘錄，希望透過到世界各地觀摩交流，擴闊同儕的視野，同時為香港尋找更多機會。

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Since its establishment two years ago, the non-governmental organisation SCC has been working hard to promote smart city ideas in Hong Kong. SCC has signed 25 memorandums of understanding with 12 countries and regions, we hope to broaden our horizons through exchanges with different smart city organisations in different countries, while exploring more opportunities for Hong Kong at the same time.

### Cooperate – with the world

LinkedSmart, a new platform for business matching established by the end of January this year, is an important cooperative platform among SCC, Smart City Development Alliance in Mainland China and Guangdong-Hong Kong-Macao-Bay Area Economic and Trade Association. This platform aims at connecting entrepreneurs and investors from all over the world. Riding on the advantages of Hong Kong being an international financial centre, the platform promotes the development of startups through incubators, financing, listing of smart city projects. By doing so, Hong Kong will gradually develop its entrepreneurial ecosystem, i.e., perfecting the use of talents, development of policies, matching demand with available funds.

We also announced the establishment of the Global Smart City Consortium, a worldwide innovation platform to encourage countries in introducing their smart city-related industries, technologies and standards. At the same time, through the transfer of technological knowledge and cooperation in innovation, smart city technology will be promoted through internationalisation and commercialisation, developing into another economy in future.

### Onwards to victory

We are very grateful that SCC has developed with only 20 experts few years ago to the scale today. However, we are not complacent. We know that if Hong Kong does not move forward, we will be surpassed by others in less than 20 years. No doubt, in promoting smart city and starting a new business, the road is full of uncertainties. While stumbling along, I think of the saying from Winston Churchill, the then English Prime Minister. Because of a movie, his famous sayings during the World War II was widely quoted recently. One of them: "Victory in spite of all terror - Victory, however long and hard the road may be, for without victory, there is no survival."



### 四大範疇漸臻完備

於一月底成立的商業配對平台「領智網」，便是我們與中國智慧城市發展聯盟及粵港澳大灣區經貿協會的重要合作，目的是連結全球各地的創業者和投資者，利用香港國際金融中心的優勢，促進新經濟初創在孵化、融資、上市和智慧城市項目的發展，讓香港在創業生態系統，即人才、政策、需求和資金四大範疇漸臻完備。目前，已經有逾30家國際投資機構和近300個初創企業準備加入平台。

我們也宣布成立「全球智慧城市聯盟」，這個全球創新平台旨在鼓勵各國協助引入與智慧城市相關的產業、技術和標準；同時透過相關領域的知識技術轉移和創新合作，促進智慧城市技術邁向國際化和商業化，希望藉此為未來打開另一個窗口。

由數年前只有20人的智慧城市專家小組，到今天人才鼎盛的聯盟，我們非常感恩，但卻不敢自滿，心知香港再不大步向前，不到廿年可能已被「後浪」沒頂。

推動智慧城市和創新創業，前路充滿未知，在蹣跚摸索的時候，我想起英國一代首相邱吉爾。因為一套電影，近日他在二戰期間的名言又再廣為傳頌。其中一句：「無論前路如何令人懼怕、如何漫長、如何艱辛，也要謀取勝利，否則我們就不能生存下去。」（"Victory in spite of all terror—Victory, however long and hard the road may be, for without victory, there is no survival."）共勉之。

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## Our Eclipsing Credit Scoring System

### 港信貸評級體制失優勢

原刊於2018年1月22日信報財經新聞

**Mr. Emil CHAN**  
**陳家豪先生**

*Chairman, FinTech Committee,  
Smart City Consortium*  
智慧城市聯盟金融科技委員會主席



This year, China took a bold step towards a more market-led economy. The People's Bank of China (PBOC) announced on 4<sup>th</sup> January that it has officially accepted Baihang Credit Scoring's license application for the domestic personal credit scoring (as known as Xinlian). Baihang Credit Scoring, led by National Internet Finance Association of China, is going to be the first private institute to provide personal credit information services.

In the past, under the centrally planned economy, the PBOC's Credit Reference Centre was the only organisation to collate credit data from and for banks and financial institutions to conduct risk assessments.

In the past 10 years, however, China's financial market reform on the legal infrastructure and financial regulatory framework has contributed to its expansion. Moreover, the thriving customer market is equally important to the emergence of new individual financial products.

Online payment service providers, such as Alibaba and Tencent, have snatched significant portions of the retail payment market from their conventional banking counterparts. According to the statistics from iResearch, a mainland research company, the percentage of Internet finance in the third-party mobile payment market in Q2 2017 is 41%, while personal finance is 27%, with online shopping being less than 18%. It is evident that third-party online payment platforms like Alipay and WeChat Pay are more than payment options for P2P small-value transaction. These e-Commerce solution providers will soon be dominating business models for various types of financial services for the citizens.

今年1月4日，中國央行人民銀行受理了俗稱「信聯」的百行徵信的個人徵信（credit scoring）業務申請，意味中國徵信生態揭開新的一頁，由過往計劃經濟時期的中央主導步入市場主導的新年代。

過去，中國在計劃經濟政策下，徵信體系就只有「央行徵信」——先整合來自各銀行及金融機構的數據，再提供給各銀行及金融機構使用，主要功能是協助放款機構做好風險評估工作。過去十年，內地不斷通過法律和制度的改革去為金融市場增值，再加上本土消費市場日益成長，個人金融產品自然不斷有革新。阿里巴巴和騰訊等互聯網公司提供的金融服務產品，目前已經從傳統銀行手上取得了絕大部分的零售支付市場份額。據內地研究機構艾瑞的統計報告顯示，去年次季度第三方支付交易規模中，互聯網金融佔比達41%，個人業務只佔27%，線上消費佔比不到18%。由此可見，支付寶、微信支付等第三方支付平台已經從一般小額消費，轉向更能變現的金融服務領域，更慢慢成為國民與金融系統互動的主流。



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### Be Aware of Which Direction The Wind Blows

Locally, the Hong Kong Association of Banks (HKAB), the DTC Association (DTCA) and the Commercial Credit Reference Agency collate credit information from small and medium-sized enterprises (SMEs), such as business registration number, total credit limit, mortgage loans, indebtedness and credit history. As to personal loan, TransUnion, co-founded by financial institutions, is an information sharing database collating credit information, which was further commercialised after acquisition by TransUnion International in 1999. As the only consumer credit reference agency in Hong Kong, TransUnion Limited has currently collected both positive and negative credit information on about five million customers, ranging from personal profile to records of secured and unsecured lines of credit, as well as credit cards record. Many of which are provided by hundreds of banks and microcredit firms.

Openness, adaptability and creativity were the driving forces behind the internationalisation of Hong Kong's economy over the past century. Low transaction costs, less stringent Know-Your-Customer (KYC) regulations, free capital flows, comprehensive judicial system, well-integrated information infrastructure and political stability have reinforced Hong Kong's position as the leading financial centre in the Asia Pacific.

As the application of big data analysis and artificial intelligence are expected to dominate the FinTech landscape in the future, global financial institutions discovered that the extensive analysis on spending habits and individual characteristics can provide more reliable data in calculating credit scores than traditional approach based on income and repayment records. Meanwhile, people are asking whether Hong Kong is ready to embrace the dawn of Internet revolution in terms of legislation, regulatory framework, workforce re-skilling, market orientation and privacy protection? Chance favours only those with the prepared mind. We need to re-think on how to catch up with the global trend of FinTech revolution.

Our Government can play an important role in transforming our credit scoring system. Only by leaving the beaten path could we avoid losing ground to our competitors. Hong Kong, what is our next move?

### 守株待兔也要聰明

在香港，企業徵信一直由銀行公會與存款公司公會設立的商業信貸資料庫處理，主要收集中小企業的一般賬戶資料，如商業登記證號碼、不同信貸類別的總授信額、抵押、欠款等紀錄。個人徵信方面，由目前唯一的香港環聯資訊有限公司提供服務，最初由商業銀行自發建立共享數據庫，之後由美國環聯公司進行市場化運作。香港環聯掌握全港495萬消費者的信用訊息，例如個人一般資料和信貸申請資料。當中包括信用卡、無抵押貸款及按揭貸款的正面和負面訊息，由百多家包括銀行及小額貸款公司提供。

香港金融市場在上世紀一直以市場開放、靈活、勇於創新著名，吸引了全球投資者前來「掘金」。由於交易成本低、開戶容易、沒有資金出入境限制，再加上法律健全、通訊發達、政治環境穩定，讓香港贏得亞太金融中心地位。不過，當網絡年代來臨，大數據應用日趨成熟；當訊息革命達致頂峰，人工智能應用漸漸變成主流；當全球金融機構發現全面分析貸款人的行為數據及身分特徵，比起依賴過往還款紀錄及收入去評定信貸評級更為靠譜的時候，香港的相關法律、監管制度、人才培訓、市場定位及個人私隱條例，有過相應的調整和配合嗎？機會只留給有準備的人，香港就算要繼續守株待兔，也需要考慮在哪株樹下會有更多機會遇上兔子吧！

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