



## Land Surveying Division

Sr Dr Conrad Tang LSD Council Chairman

## Smart City

**Meeting with the Consultant Team for the Study of the Development Strategy for Common Spatial Data Infrastructure (CSDI) on 12 May 2017 in the HKIS Conference Room (Reported by Sr Eddie Wong)**



The Government's Development Bureau (DevB) appointed PricewaterhouseCoopers Advisory Services Limited (PwC) to undertake a consultancy study of the development strategy for common spatial data infrastructure (CSDI). The HKIS, as a key stakeholder whose members use spatial data in their professional work, was invited to discuss CSDI with PwC with a view to formulating the development strategy from "joined-up government" and "spatially-enabled society" perspectives.

Sr Dr Lesly Lam, HKIS Vice-President (first-right above); Sr Paul Tsui (second-right); Sr Eddie Wong (third-right); and members of the LSD Smart City Working Group hosted the meeting on 12 May. The HKIS welcomed the Government's CSDI initiative and agreed that CSDI was the foundation of a smart city. It promotes further application development to enhance people's livelihoods, as well as catalyses commercial opportunities. We have kept in mind CSDI

development in Hong Kong and showed PwC an article, "空間數據基礎設施 智慧城市重要基石," which we published on 22 October 2016 in the *Hong Kong Economic Journal*. We exchanged some samples of smart data and GIS applications in the surveying industry and cited the difficulties we faced when using them. We foresaw that spatial data will play an increasingly important role in our industry.

Sr Dr Lesly Lam pointed out two initial things the Government should do: 1) **open** up all spatial data and 2) speed up the progress of transforming paper-format data into a machine-readable format. Also, we suggested that the Government make the land boundary data more transparent and link it to land rights and property registration. We told PwC that Hong Kong was given a relatively low rating when it came to registering property in the 2016 World Bank Doing Business Report.

With reference to the road map of CSDI in developed countries, a **top-down approach** is the most effective and only way to promulgate the Government's initiatives. We had hoped that CSDI could be extended to all bureaux/departments (B/Ds) instead of just covering the branch offices under DevB, since some spatial data, such as censuses and transport, were not under DevB's purview. For the private sector, the Government could add some open data clauses when granting new franchises once current ones expire. For example, its key consideration when granting/renewing a bus franchise is if a prospective/existing operator can open up real time bus locations and capacities. We believed that spatial data, just like road infrastructure, should be Government-funded and **free** to use. To this end, we further suggested formulating an open data policy to override the "full cost recovery" basis on existing government fees for items related to spatial data.

A CSDI collaborative **platform** should be set up for the custody of spatial data contributed by all B/Ds, even those in the public sector, in the future. It would provide metadata, sample data, API, and success stories, along with tools

for data searches, map-viewing, downloading, and spatial analysis. It should be accessible on mobile devices and connected to social apps.

Sr Paul Tsui emphasised the importance of land surveyors in CSDI implementation, as they are the experts in positioning and acquiring, using, and analysing spatial data. They also have plenty of experience in data conversion, alignment, and specification. An as-built plan and BIM certified by land surveyors could ensure data quality and interoperability, so as to facilitate the subsequent reuse of spatial data.

We proposed that addresses, administrative boundaries, buildings, land covers, lots/properties, terrain, transport, land uses/plans, hydrography, imagery, positioning infrastructure, and demographics be included in the **framework data** of the future CSDI. In addition, the dataset should be capable of incorporating 3D data and BIM.

Sr Eddie Wong viewed that CSDI should be user-driven. Other than interviewing department representatives and professional bodies one by one, consultancy studies should be done smarter and more innovatively. **Facebook** is a good means to promote CSDI initiatives and collect public feedback so that the platforms and data the government provides could meet public expectations. Holding a “smart data, smart application” **campaign** for students could encourage them to solve urban challenges by reusing spatial data, wireless sensors, internet-connected devices, and big data technology, as well as inspire and energise younger generations to increase their participation in and contributions to smart city development.

Finally, we suggested a **sustainable** CSDI supported by a concrete management framework to ensure that the policy is properly implemented, while the situation is reviewed from time to time. A mechanism should be established and flexible enough to cater to new framework data and data owners, agents, and users, along with data model changes in B/Ds in the future.

## Membership

A workshop was arranged on 12 May for LSD probationers to help them pass each step of the APC route. Sr Edmond Yu and Sr Kenneth So, the Chairman and Secretary of the LSD Education Committee, respectively, hosted the meeting.

Both surveyors shared their experiences with and knowledge of the APC steps. They brought up the salient points that had to be observed and stressed the dos and don'ts of synopses, written submissions, and final interviews.

The audience raised many questions, which indicated that the probationers were keen to obtain their membership qualifications. Similar workshops will be arranged in the future to help probationers proceed through their APC routes and assistance should be rendered to them when necessary.



Thanks go to the correspondence from our members, particularly Sr Francis Lee and Sr Ian Wootten, who brought up new ideas on improving the CPD events. Our CPDs are still operated in a lecture mode, but members have suggested that they be done online, as reading communications online is now a part of daily life. Plus, our CPD delivery mode should not be confined to Cantonese only; we should attend to the needs of our English-speaking members, too. I have put forward these reasonable suggestions to our CPD group. We shall discuss them and come up with a solution next month.