Land Surveying Division
Sr Paul Tsui LSD Council Chairman

Hong Kong-Shanghai Data Cooperation Forum and Open Data Challenge 2023

On 13 August, I was invited to help referee the final assessment of the Hong Kong-Shanghai Open Data Challenge 2023 competition, which was co-organised by the Office of the Government Chief Information Officer of the HKSAR Government and Shanghai Municipal Commission of Economy and Informatization. This event was a follow-up to the fifth (online) meeting of the Hong Kong and Shanghai Cooperation Conference held on 30 August 2021 between two delegations led by the Chief Executive of the HKSAR and Shanghai Mayor Gong Zheng to strengthen cooperation between both cities' big data industries.

The competition encouraged all participants to make the best use of the open data resources in Hong Kong and Shanghai to serve the following objectives:

1) Facilitate the exchange of experiences in data technology between talents from Shanghai and Hong Kong through competition, training, and conferences.
2) Share the latest developments and future plans for open data in the two cities.
3) Showcase best practices in the use of open data in both places and demonstrate how they can help promote smart cities.
4) Explore how Hong Kong and Shanghai can more effectively use open data to drive future developments in the digital economy.
5) Boost cooperation between both places on open data applications to empower the development of smart cities.
6) Promote the data ecosystems of digital businesses in both cities.

The themes of the competition were "Smart Mobility," "Smart Living," "Smart Environment," and "Smart Economy" under the six smart areas of the Smart City Blueprint. Each team was allowed to choose one theme. The Shanghai open data can be accessed at the Shanghai Government Data Portal (https://data.sh.gov.cn/), while Hong Kong's open data are available at DATA.GOV.HK (https://data.gov.hk). Contestants were encouraged to use Hong Kong open geospatial data offered by the Common Spatial Data Infrastructure (CSDI) Portal in their entries, as this was a unique advantage of Hong Kong.

The competition attracted over 80 entries, of which 20 (ten from each city) were shortlisted for the final assessment held in Shanghai. A Hong Kong team, the 62_UVent® Smart Ventilation System team working in the Smart Environment category, won the Grand Prize. Its members believed that restaurant kitchen exhaust is a major source of air pollution in urban areas. For their submission, they used GIS and open geospatial data to compare the distribution of air pollution in Hong Kong and Shanghai by analysing their restaurant, convenience store, and public nighttime light distributions.

Following this competition, with Hong Kong's InnoTech Blueprint outlining the city's macro-I&T development goals for the next 5-10 years, including a vigorous promotion of data circulation and applications, it is imperative to build a big data innovation platform to serve both cities and deepen cooperation between their big data industries.

Merit Award Presentation to the Shortlisted Teams in the Smart Living and Smart Economy Categories

The Judges and Shortlisted Teams for the Final Assessment

Senior Government Officials with the Organisers, Judges, and Winners

CPD Highlights

Visit to the Q-Leak Underground Water Mains Leak Detection Training Centre

On 29 July, the LSD visited Q-Leak, a centre for underground water mains leak detection established by the Water Supplies Department (WSD). The visit was led by LSD Vice Chairman Sr CHU Siu-ki and HKIS Water Leak Detection Working Committee Chairman Sr KOO Tak-ming. The delegation received a warm welcome from Dr Wallace Lai.

Restricted by the limited space in the lab, Dr Lai was commissioned by the WSD in 2019 to design and build the world's first full-scale training centre of leak detection and diagnosis on Tsing Yi, where a Memorandum of Understanding for teaching, R&D, and public engagement was signed in November 2021.

During the visit, Dr Lai introduced the design and construction of the centre to simulate water leakage of underground pipes of complicated water mains networks. Then he illustrated the types of underground utility records and surveying approaches. After that, he demonstrated new initiatives and developments such as a vehicle-mounted, dual polarised ground penetrating radar (GPR) system; an unmanned GPR-enabled truck; and post-processing and analysis solutions were demonstrated.

The visit successfully concluded after fruitful discussions on the role of land surveying professionals in the underground utility industry, the need for stakeholders to agree on utility survey standards and specifications, and the importance of a centralised UU information platform that can consolidate records from utility stakeholders and can be accessed via need-based applications.