Opening up 3D Digital Map in Hong Kong: Pilot in Kowloon East

Alex CHU and Ko-kwan, Ben Fan (Hong Kong SAR, China)

Key words: Laser scanning; Photogrammetry; Standards; Open Data; Open Access; 3D Digital Map, Common Spatial Data Infrastructure

SUMMARY

The Lands Department (LandsD) of the Hong Kong Special Administrative Region (HKSAR) Government provides high-quality geospatial information and spatial data services to the society of Hong Kong for smart city development. The 3D digital map forms a major building block of Common Spatial Data Infrastructure (CSDI) to facilitate the sharing and opening of government geospatial data and meet the needs of digital map applications.

In 2021, LandsD identified Kowloon East, a district of about 24 sq. k.m, as a pilot project area to generate a high-quality 3D digital map. It aimed through the project to gain more practical experience to complete the 3D digital mapping project for a whole territory of Hong Kong by the end of 2023. This paper presents the work done in the pilot project, including the global market research processes, the technical specifications preparation, the project implementation approaches, findings and challenges. We will also discuss the potential of open access to data, including crowdsourcing, to involve the community in geospatial data collection for sustaining the 3D digital map development in Hong Kong in the future.

The results of the 3D digital map obtained in the pilot project will be shared with the public to make greater use of spatial data in research and application development. The availability of free digital map data will facilitate the development of smart cities, realising the visions of the Smart City Blueprint for Hong Kong 2.0 and bringing benefits to society as a whole.

Opening up 3D Digital Map in Hong Kong: Pilot in Kowloon East (11495) Alex CHU and Ko-kwan, Ben Fan (Hong Kong SAR, China)