

30 March 2023

To : ALL Authorized Persons  
Registered Structural Engineers  
Registered Geotechnical Engineers  
Registered Inspectors  
Registered General Building Contractors  
Registered Specialist Contractors  
Registered Minor Works Contractors

Dear Sir/Madam,

### Smart Site Safety System

The Government has been promoting the wider adoption of advanced technology and innovation in construction industry for enhancing site safety. I write to appeal to you to adopt a Smart Site Safety System (SSSS) in your contracts to uplift site safety performance.

2. SSSS generally comprises three components, namely smart safety devices for monitoring activities and identifying safety hazards; a communication network for transmitting data collected from smart safety devices; and a centralised management platform for providing a one-stop hub for data analysis and alerts generation, as well as facilitating follow-up actions. The system enables the project team to grasp the safety situation of the entire construction site by collecting and transferring real-time data to a centralised management platform. Whenever a potential hazard is detected, the system will immediately alert the safety management staff and workers on site. Suitable items of smart safety devices include:

- (a) Digitised tracking system for site plants, powered tools and ladders;
- (b) Digitalised permit-to-work system for high risk activities;
- (c) Hazardous areas access control by electronic lock and key system;
- (d) Unsafe acts / dangerous situation alert system for mobile plant operation danger zone;
- (e) Unsafe acts / dangerous situation alert system for tower crane lifting zone;
- (f) Smart monitoring devices for workers and frontline site personnel;
- (g) Safety monitoring system using artificial intelligence;
- (h) Confined space monitoring system; and
- (i) Safety training with virtual reality technology.

3. You are strongly encouraged to adopt the SSSS and select suitable devices of SSSS (not limited to those enumerated above) for use in your construction contracts based on the nature of the construction works and details of high-risk activities involved. Reference materials<sup>1</sup> on SSSS are provided in the “Guide to Smart Safety-Related Technologies for Use in Construction Works” issued by the Construction Industry Council (CIC).

4. The Construction Innovation and Technology Fund (CITF) established under the Development Bureau and administered by CIC will launch a new funding category on 1 April 2023 to provide subsidies up to \$7.5 million per contractor / subcontractor to support their adoption of SSSS in construction sites of the private sector. A list of SSSS products currently available under the CITF Pre-approved List is provided at the CITF website<sup>2</sup> for reference.

Yours faithfully,



( AU-YEUNG Hoi-pang )  
Assistant Director/New Buildings 2  
for Director of Buildings

c.c. The Real Estate Developers Association of Hong Kong

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<sup>1</sup> [https://www.cic.hk/eng/main/aboutcic/publications/reference\\_materials/](https://www.cic.hk/eng/main/aboutcic/publications/reference_materials/)

<sup>2</sup> <https://www.citf.cic.hk/?route=funding&funding=33&lang=1>

