

Application Guide for

Smart Site Safety System (4S) Labelling Scheme

1. Background

- 1.1. This Application Guide sets out the approach and procedures to be adopted in the processing and assessment of applications for 4S Labelling Scheme.
- 1.2. In 2023, Technical Circular (Works) No. 3/2023 was issued by the Works Branch of the Development Bureau (DEVB) promulgating that public works contracts with a contract sum exceeding HK\$30 million should adopt 4S.
- 1.3. To promote a wider adoption of 4S in construction projects for uplifting site safety, the DEVB and the Construction Industry Council (CIC) have collaboratively rolled out the 4S Labelling Scheme. The Working Group of 4S Labelling Scheme under the CIC is established to handle procedural matters for the 4S Labelling Scheme and processing the applications under the 4S Labelling Scheme.

2. Eligibility Criteria of 4S Labelling Scheme

- 2.1. The 4S Labelling Scheme is targeted at local construction projects, including public works and non-public works with adoption of 4S for monitoring the respective risks identified. (*public works include projects undertaken by Architectural Services Department (ASD), Civil Engineering and Development Department (CEDD), Drainage Services Department (DSD), Electrical and Mechanical Services Department (EMSD), Highways Department (HyD), and Water Supplies Department (WSD))
- 2.2. Proper use of 4S in construction projects
 - 2.2.1. Sample use of 4S can refer to, but is not limited to, DEVB “Technical Circular (Works) No. 3/2023”¹ and CIC Reference Material “Guide to Smart Safety-related Technologies for use in Construction Works”² and Recommended 4S packages in Annex A.
 - 2.2.2. The project team should select suitable types of smart safety devices based on the nature and/or risk(s) of the construction works.
 - 2.2.3. If any 4S component malfunctions and cannot be rectified quickly, an alternative backup plan should be implemented.
 - 2.2.4. The 4S solution provider or delegated person who familiar with the implemented system should perform regular functional check of all 4S components, and the check reports should be kept throughout the project period and presented for inspection by the CIC or Works Department upon request.

3. Assessment Criteria

- 3.1. Risks should be identified based on the scope and nature of construction works. A comprehensive risk assessment should be done by the safety officer and determination of risks should be referred to the “Code of Practice on Safety Management”³ issued by Labour Department.

¹ <https://www.devb.gov.hk/filemanager/technicalcirculars/en/upload/1393/1/C-2023-03-01.pdf>

² [https://www.cic.hk/files/page/51/RM%20Smart%20Safety%20\(Eng\).pdf](https://www.cic.hk/files/page/51/RM%20Smart%20Safety%20(Eng).pdf)

³ <https://www.labour.gov.hk/eng/public/os/manage.pdf>

- 3.2. Relevant 4S solutions should be applied to address respective risks identified. If one solution is applied to mitigate certain risks, it should be adopted broadly across different times and locations whenever applicable.
- 3.3. Location plans for the 4S devices, sensors/cameras setup during the works should be submitted to demonstrate the proper implementation of 4S solutions. For 4S solutions without a fixed location, such as smart wearables, operation arrangements or other related documents describing the use of the solutions should be submitted.
- 3.4. Proper installation and continuous functioning of 4S solutions should be demonstrated during the site inspection conducted after the expected deployment date.

4. Processing and Assessment of Application for 4S Labelling Scheme

- 4.1. The main contractor of a local construction project is eligible to submit an application for her project for a 4S Label. The following information should be submitted to the CIC for assessment:
 - 4.1.1. A completed online application form in CIC 4S Labelling Scheme webpage⁴;
 - 4.1.2. Application fee (waived before 1 January 2025);
 - 4.1.3. Scope of works for the works contract;
 - 4.1.4. Location Plan(s) to illustrate where the 4S components with fixed location;
 - 4.1.5. Operation arrangement document(s) to describe the use of 4S solutions without fixed location; and
 - 4.1.6. Information of 4S product(s) used without CITF Pre-Approved code, like product description, features and specifications, user guide, etc.

Upon receipt of an application, the CIC will assess the completeness of the documents submitted and will request the applicant to provide further details to substantiate the application, if needed. The application will be regarded as withdrawn if the applicant fails to provide the necessary details within 3 months from the date of request made by the CIC.

- 4.2. The CIC Assessment Team (AT) (either staff of the CIC or the authorised representatives by the CIC) will review the content of the submitted documents and conduct a site inspection. The CIC AT will make a recommendation for granting 4S Label to the projects to the Working Group of 4S Labelling Scheme for approval or disapproval.
- 4.3. It is expected that the site inspection should be arranged in 1 month from completed submission of documents and satisfied by the CIC.
- 4.4. The contract title, site location, name of the main contractor and the project client/developer will be listed on the CIC website and provided to the Labour Department regularly. The 4S Label for a project will remain valid for 1 year from the approval date. The applicant can choose to renew the 4S Label or the project will be removed from the list.
- 4.5. The application process will normally take around 2 months to complete with necessary documents being submitted.

5. Notification of Assessment Result

- 5.1. Main contractors will be informed of the assessment result by email. If a 4S Label is granted to a project, an electronic copy and a plaque of the 4S Label with unique identity

⁴ <https://cic.hk/4s-labelling>

will be issued and sent to the main contractor concerned for printing and displaying at the site entrances of the labelled project.

- 5.2. Information of the 4S Labelled projects will be listed on the CIC website and regularly provided to the Labour Department.

6. Payment

- 6.1. Application fee is waived before 1 January 2025.

7. Renewal of Registration

- 7.1. The CIC will issue renewal reminders to the main contractors of 4S Labelled projects 3 months prior to the date of expiry of their existing 4S Labels.
- 7.2. The main contractors should submit their online renewal applications for the 4S Labelled projects with the latest 4S plan at least 1 month prior to the date of expiry of their existing 4S Labels.
- 7.3. The CIC AT will review the content of the submitted documents and make a recommendation to the Working Group of 4S Labelling Scheme for approval or disapproval of the renewal applications. The CIC AT may have the discretion to carry out site inspection for assessment of the renewal applications. Approved applications will be valid for an additional one-year period.
- 7.4. Renewal fee is waived before 1 January 2026.

8. Surprise Inspection

- 8.1. The CIC AT reserves the right to conduct surprise inspections for all 4S Labelled projects randomly without prior notice. The CIC AT will then report the finding and recommendation on follow-up actions, as appropriate, to the Working Group of 4S Labelling Scheme.
- 8.2. If 4S is found not satisfactory adopted, a notification email will be sent to the main contractor. The 4S Label will also be confiscated from the main contractor and this status will be updated on the CIC website within 7 working days from the notification.
- 8.3. To reclaim the confiscated 4S Label, the main contractor should:
 - 8.3.1. submit a reclaim application with a 4S improvement plan to the CIC AT;
 - 8.3.2. satisfactory passed the site inspection assessment by the CIC AT; and
 - 8.3.3. submit a reclaim fee (HK\$2,000).

9. Appeal Cases

- 9.1. The main contractor of the 4S Labelled project with 4S Label confiscated (the Appellant) may lodge an appeal to the 4S Labelling Scheme Appeal Panel (4SLSAP) set up under the CIC by notifying the CIC by email by 7 working days upon notification of the decision of confiscation of the 4S Label by the CIC. The confiscation of the 4S Label will be on hold during the appeal process. For the avoidance of doubt, indication will be provided on the webpage of the CIC that appeal on the confiscation of the 4S Label of a respective project is being processed.
- 9.2. The Appellant should submit the following to the CIC for processing the appeal, no later than 10 working days upon notification of the decision of confiscation of the 4S Label:
 - 9.2.1. A completed application form for lodging an appeal; and
 - 9.2.2. An appeal application fee (HK\$1,000).
- 9.3. Upon receipt of all necessary documentation of an appeal case, the 4SLSAP will review and decide on the case within 1 month. The CIC will then inform the Appellant of the

decision by the 4SLSAP. The application fee will be refunded to the applicant if the appeal is successful.

9.4. The Appellant will be informed of the result by mail.

10. Application

10.1 Email is the primary communication channel between the CIC and the applicants.

Applicants are recommended to regularly check the mailbox of their email address(es) provided to the CIC in their application forms.

11. Enquiry

Construction Industry Council

38/F, COS Centre

56 Tsun Yip Street

Kwun Tong, Kowloon

Tel : 2100 9000 Fax : 2100 9090

Email : 4s.labelling@cic.hk

-End-

Annex A - Recommended 4S packages (R = recommended 4S Products; O = Optional item)

Package	Type of Works (4S Sample Package)	Centralised management platform	Digitalised tracking system for site plants, powered tools and ladders	Digitalised permit-to- work system for high- risk activities	Hazardous areas access control by electronic lock and key system	Unsafe acts / dangerous situation alert for mobile plant operation danger zone	Unsafe acts / dangerous situation alert for tower crane lifting zone	Smart monitoring devices for workers and frontline site personnel	Safety monitoring system using Artificial Intelligence	Confined space monitoring system	Safety Training with VR Technology
A	Single-tower Building (superstructure construction)			O	R	R	R	O	R	O	
B	Multiple-tower Building (superstructure construction)	O	O	R	R	R	R	R	R	O	O
C	Minor works /Repair (RMAA)			R	R			O	R	O	
D	Ground Investigation			R		R		O	R		
E	Building Demolition			R	R	R		R	R	O	
F	Foundation			R		R		O	R		
G	Site Formation			R		R			R		
H	Site Formation, Large Scale	R	O	R	R	R		R	R		O
I	Flyover/ Carriageway/ Road Widening	R	O		R	R		R	R		O
J	Footbridge system (including lift installation)		O			R		R	O		
K	Sewage/Water Treatment Works/ Stormwater Tank	R	O	R	R	R	O	R	R	R	O
L	Drainage/ Sewage Laying/ Utilities works		O	R		R		R		R	O
M	Port Works/ Pier/ Reclamation	O	O	R		R		R	R		O
N	Tunnelling	R	O	R	R	R		R	R	R	O
O	Landslip Prevention and Mitigation (LPM)		O			O		R			
p	Confined Space*	O		R	R			R	R	R	

*Environmental Monitoring system for harmful gas detection and network setup inside the confined space are recommended too.