

# Embracing 4S

Fueling a **SAFER** Construction Industry  
in the Modern Era

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中華人民共和國香港特別行政區政府  
發展局

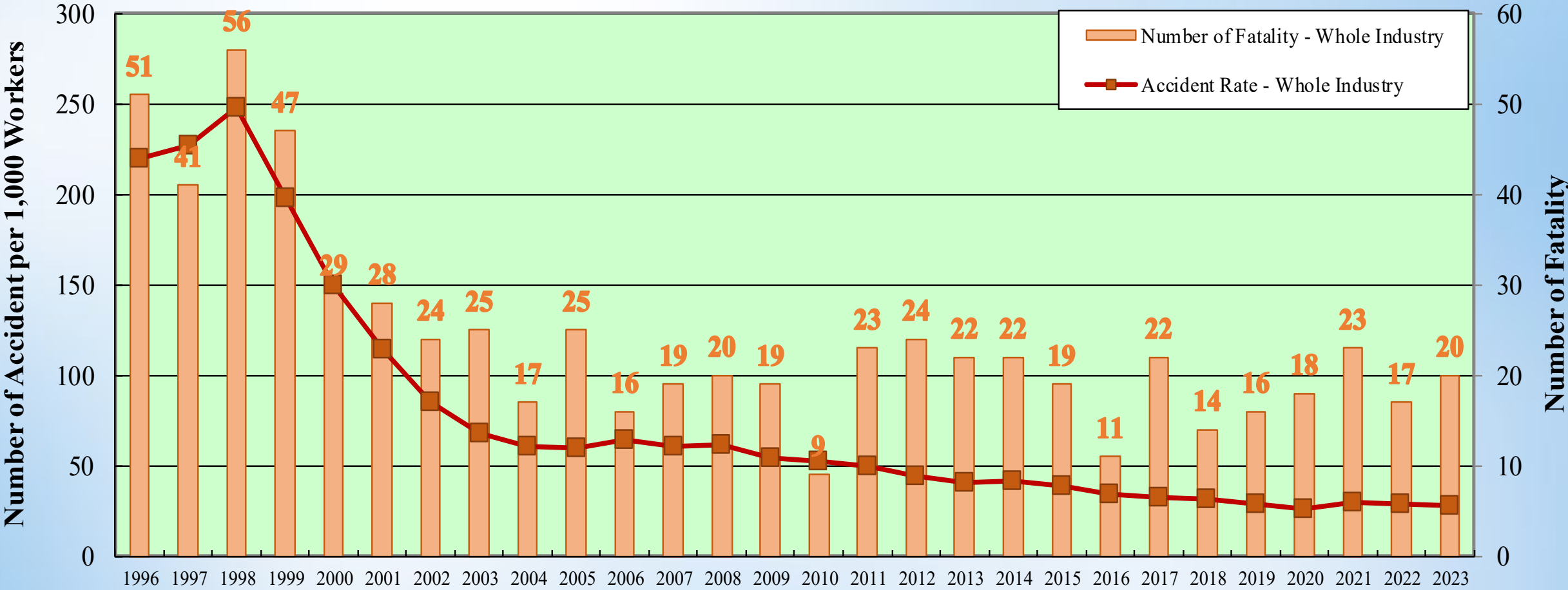
Development Bureau  
The Government of the Hong Kong Special Administrative Region  
of the People's Republic of China





建造業意外率「稱冠」

# OUR EFFORT





# Our Smart Sites





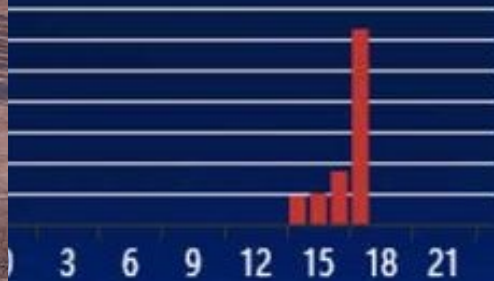
5G智慧工地AI可视化综合监管平台

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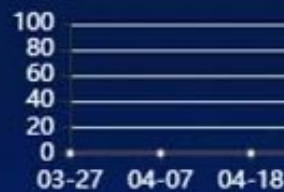


# Benefits

时间



告警趋势 ● 安全帽检测





Ref. : DEVB(W) 516/80/01

Group : 2, 8

27 February 2023

Development Bureau  
Technical Circular (Works) No. 3/2023

### Smart Site Safety System

#### Scope

This Circular sets out the policy on adoption of Smart Site Safety System ("SSSS") to enhance our safety management system, with a view to striving for further excellence on the safety performance in public works contracts.

#### Effective Date

- This Circular shall take immediate effect.

#### Effect on Existing Circulars

- This Circular shall be read in conjunction with the Construction Site Safety Manual ("CSSM"), DEVB TC(W) No. 1/2020 on Score Card for Assessment of Site Safety Performance, DEVB TC(W) No. 2/2023 on Digital Works Supervision System and their subsequent updates.



## 安全智慧工地系統 Smart Site Safety System

超過 40 種預先批核的 SSSS 產品可供選擇  
More than 40 pre-approved SSSS products for selection

資助業界使用  
安全智慧工地系統  
每位申請者最高 \$750 萬!  
Max. \$7.5M funding per applicant for  
SSSS adoption!

APPLY  
NOW  
立即申請

#### 申請框架 (安全智慧工地系統)

- 適用於2023年4月1日或之後遞交的基金申請
- 每位申請者的總資助上限(創新建築科技和建築信息模擬)增加至總額750萬元(新增的港幣150萬元只限於2023年4月1日後購買/租賃的安全智慧工地系統)
- 資助模式: 70% 配對資助(本地開發的創新技術或產品可獲80%配對資助); 租賃可獲50%配對資助
- 合資格工程項目: 私營工程項目
- 備註: 當申請者用盡新增的150萬元資助購買安全智慧工地系統, 可繼續使用每位申請者原有600萬總資助上限(創新建築科技和建築信息模擬)的餘額購買安全智慧工地系統相關產品。

#### Application Framework (SSSS)

- Applicable to new funding applications submitted on or after 1 April 2023
- Overall ceiling (ACT+BIM): Increased to **HK\$7.5M** (additional funding of \$1.5M for SSSS products procured / rented on or after 1 April 2023)
- Funding Mode: **70%** for project adoption (80% for locally developed innovations or products); 50% for rental
- Eligible Projects: **Private Works Projects**
- Remarks: When the additional HK\$1.5M funding for SSSS is depleted, applicants could continue to apply for CITF for procuring SSSS products, using their remaining funding balance within the original overall ceiling (ACT+BIM) of HK\$6M



預先批核名單  
Pre-approved List



citf.cic.hk



發展局  
Development Bureau



CONSTRUCTION INDUSTRY COUNCIL  
建造業議會

# SMART SITE SAFETY SYSTEM

# Construction Innovation Expo 2022 Grand Opening Ceremony



# Information Sharing







# PROACTIVE LEARNING

# Qualified Supervision of Building Works Involving Mobile Plants and Tower Cranes

- Effective from 1 July 2024
- Impose conditions requiring the adoption of 4S when granting the first approval or major revisions of superstructure plans of private development projects



# 4S Product Packages

## 安全智慧工地系統 (4S) 10個主要類別：

1 中央管理平台

2 數碼化追蹤系統 (工地機械、電動工具及梯架)

3 數碼化工作許可系統 (高風險工作)

4 危險區域進出管制 (電子鎖系統)

5 移動設備操作區域的不安全行為/危險情況警報

6 天秤吊運區域的不安全行為/危險情況警報

7 前線工人智能監控設備

8 人工智能安全監察系統

9 密閉空間監控系統

10 虛擬實境安全培訓



由頭、跟到、落、尾。  
助你4S落地!

想提升工地安全?

CITF幫到你!

幫你慳錢

- 每間公司最高可獲750萬元資助採用4S，大幅增加對業界應用4S的支援。
- 每項4S產品的資助上限大幅調高至200萬元。

幫你落地

- 擴展資助範圍，涵蓋應用4S各個環節，資助有關的額外費用，包括因使用4S需提升網絡容量費用、額外增聘的人手、維護、技術支援。

幫你揀貨

- 積極物色合適的安全相關科技，加入預先批核名單，將審批時間縮短至30日。
- 推出多款針對不同類型及不同規模的私人工程制定4S套餐。

幫埋你買

- 加強採購支援，向4S供應商索取產品報價，簡化採購流程。

額外150萬元\*  
上限\$750萬!

\*專用於私營工地的4S產品

申請只需3個步驟：

1 瀏覽4S清單及選擇產品

2 自動填妥已選產品資料，及生成邀請報價表格

3 - 遞交電子申請  
- 無需提交報價 (稍後推出)

收到完整資訊後  
30天內\*通知結果  
(\*僅適用於預先核准的產品。  
非預先核准的產品為60天)



安全智慧工地小冊子



立即申請

## 安全智慧工地系統的標準套餐

就針對不同類型和不同規模的建築工程，基金設計了多款安全智慧工地系統標準套餐，並提供產品供應商名單給業界參考、選擇及採用。其中七款主要套餐如下，詳情請瀏覽CITF網頁及基金申請平台。



建議常用  
安全智慧工地系統  
的預設產品組合

A 套餐 單幢新建樓宇工程		
項目	建議組合	產品
1	基本組合	電子鎖系統
2		移動機械危險區域的警報系統
3		人工智能安全監察
4		天秤吊運 / 危險情況的警報系統
5	其他可選產品	密閉空間監控
6		前線員工智能監控
7		數碼化工地許可系統

B 套餐 新建屋苑工程		
項目	建議組合	產品
1	基本組合	電子鎖系統
2		移動機械危險區域的警報系統
3		人工智能安全監察
4		天秤吊運 / 危險情況的警報系統
5	其他可選產品	前線員工智能監控
6		數碼化工地許可系統
7		密閉空間監控
8		機械及工具之數碼追蹤
9		中央管理平台(CMP)
10		虛擬實境安全訓練

C 套餐 維修、保養、改建及加建工程		
項目	建議組合	產品
1	基本組合	電子鎖系統
2		數碼化工地許可系統
3		人工智能安全監察
4	其他可選產品	密閉空間監控
5		前線員工智能監控

D 套餐 探土工程		
項目	建議組合	產品
1	基本組合	移動機械危險區域的警報系統
2		數碼化工地許可系統
3		人工智能安全監察
4	其他可選產品	密閉空間監控
5		前線員工智能監控

E 套餐 樓宇拆卸工程		
項目	建議組合	產品
1	基本組合	電子鎖系統
2		移動機械危險區域的警報系統
3		人工智能安全監察
4	其他可選產品	前線員工智能監控
5		數碼化工地許可系統
6		密閉空間監控

F 套餐 基礎工程		
項目	建議組合	產品
1	基本組合	移動機械危險區域的警報系統
2		數碼化工地許可系統
3		人工智能安全監察
4	其他可選產品	前線員工智能監控

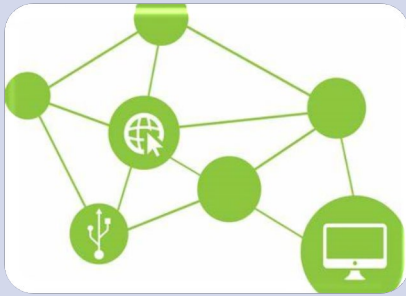
G 套餐 地盤平整工程		
項目	建議組合	產品
1	基本組合	移動機械危險區域的警報系統
2		數碼化工地許可系統
3		人工智能安全監察
4	其他可選產品	密閉空間監控
5		前線員工智能監控

備註：其他標準套餐，如渠務 / 污水鋪設 / 公用設施工程、隧道工程等，詳情請瀏覽基金網站。

# Expansion of Funding Scope for Adoption of 4S

NEW

## Additional Ancillary Costs Arising from 4S Implementation



Network  
upgrade



Additional  
manpower



Maintenance  
& Technical  
support

With effect from  
**20 May 2024**

# 4S Labelling Scheme

- Launched in May 2024
- Administered by CIC
- Targeted at both public works and private works contracts



安全智慧工地系統標籤計劃  
SMART SITE SAFETY SYSTEM  
LABELLING SCHEME

# 4S Labelling Scheme



安全智慧工地系統標籤計劃  
SMART SITE SAFETY SYSTEM  
LABELLING SCHEME

- Information to be submitted –
  - ◆ Scope of works
  - ◆ List of 4S adopted
  - ◆ 4S installation plans and operation arrangement
  - ◆ List of risk assessments
- Assessment team will prepare the checklist for site inspection assessment. The aim is to check the **existence** and **workability** of 4S adopted

# 4S Labelling Scheme



安全智慧工地系統標籤計劃  
SMART SITE SAFETY SYSTEM  
LABELLING SCHEME

- A 4S Label with unique identification will be presented to the site if 4S is satisfactorily adopted
- Information will be published on CIC webpage –
  - ◆ Name of Developer / WD
  - ◆ Name of Contractor
  - ◆ Contract title
  - ◆ Site address

# 4S Labelling Scheme



安全智慧工地系統標籤計劃  
SMART SITE SAFETY SYSTEM  
LABELLING SCHEME

- For quality assurance of the Scheme –
  - Surprise inspection by CIC to those sites with 4S Label
  - LD to refer those sites with unsatisfactory adoption of 4S to CIC for further follow-up
  - Annual updates on adoption of 4S by respective site after obtaining 4S Label
- 4S Label will be confiscated if 4S is not satisfactorily adopted
- Appeal Panel to review the decision of confiscation of 4S Label if not agreed by the contractor concerned



# Renewal of 4S Label



安全智慧工地系統標籤計劃  
SMART SITE SAFETY SYSTEM  
LABELLING SCHEME

- CIC will issue a renewal reminder to the main contractor of labelled projects **3 months** prior to the date of expiry of their existing 4S Labels
- Main contractor of the labelled project shall submit application for renewal at least **1 month** prior to the date of expiry by providing updates on the following –
  - List of risk assessments
  - List of 4S adopted
- Assessment Team will review the submitted documents (and carry out site inspection, if necessary) for making decisions on renewal

# 4S Labelling Scheme

For details, please visit the 4S Labelling Scheme website

[cic.hk/4s-labelling](http://cic.hk/4s-labelling)



[4sls@cic.hk](mailto:4sls@cic.hk)



2100 9000



Apply Now

4S Labelled Project List

## Background

In 2023, the Works Branch of the Development Bureau of the Government of the Hong Kong Special Administrative Region (DEVB) has issued Technical Circular (Works) No. 3/2023 promulgating the adoption of Smart Site Safety System (4S) in public works projects with a contract sum exceeding \$30 million.

DEVB and the Construction Industry Council (CIC) has collaboratively to establish the Smart Site Safety System Labelling Scheme (4SLS) to drive the full adoption of 4S in both public and private works contracts in order to further uplift the safety performance of the construction industry.

The main contractors that have interest to add their works projects in the 4SLS can apply directly to the CIC. If 4S has been satisfactorily adopted, an electronic copy of the 4S label will be issued for printing and displaying at the entrances of the site for labelled project. Information of the labelled projects will be listed on the CIC website and provided to Labour Department.

## Assessment Criteria

- Identified the risks of the project with a comprehensive risk assessment by safety officer
- Implement respective 4S solutions to address the relevant risks identified

齊心廣泛應用4S

鞏固工地安全基石

Zero "意外"  
ACCIDENT

地盤零意外 關懷建未來

Zero Accident, we Build, we Care