

# HASAS(NW) – 2021Q2-2021Q3

## Summary on Audit Findings

### 安全稽核結果

Occupational Safety and Health Council  
職業安全健康局





# Content

1. Overview on HASAS (NW) & HALENSAS Performance
2. Summary on Audit Findings 2021 Q2 – 2021 Q3



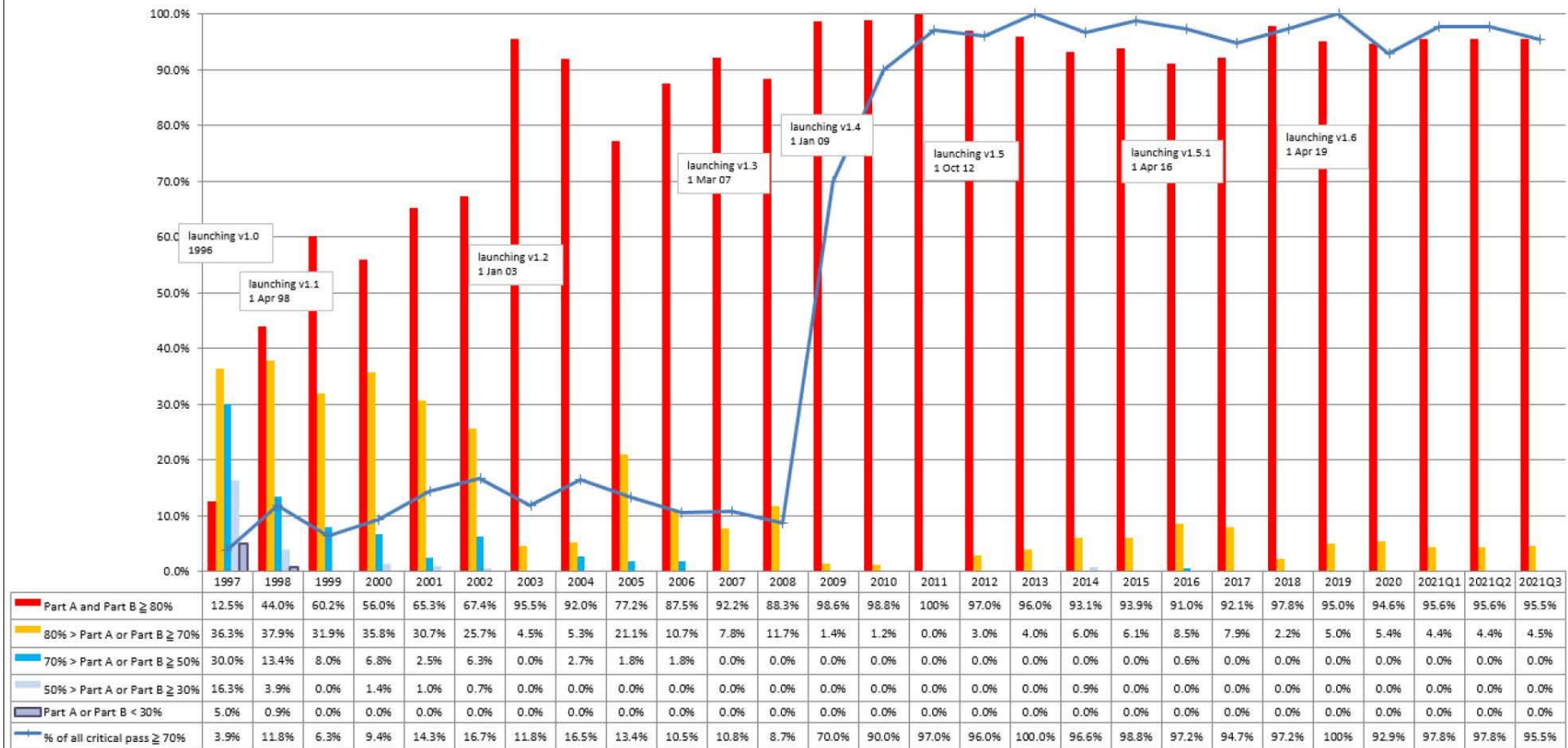
# Overview on HASAS Performance

## 安全審核表現總覽



# HASAS score trends of building contracts (from 1997 to 2021Q3)

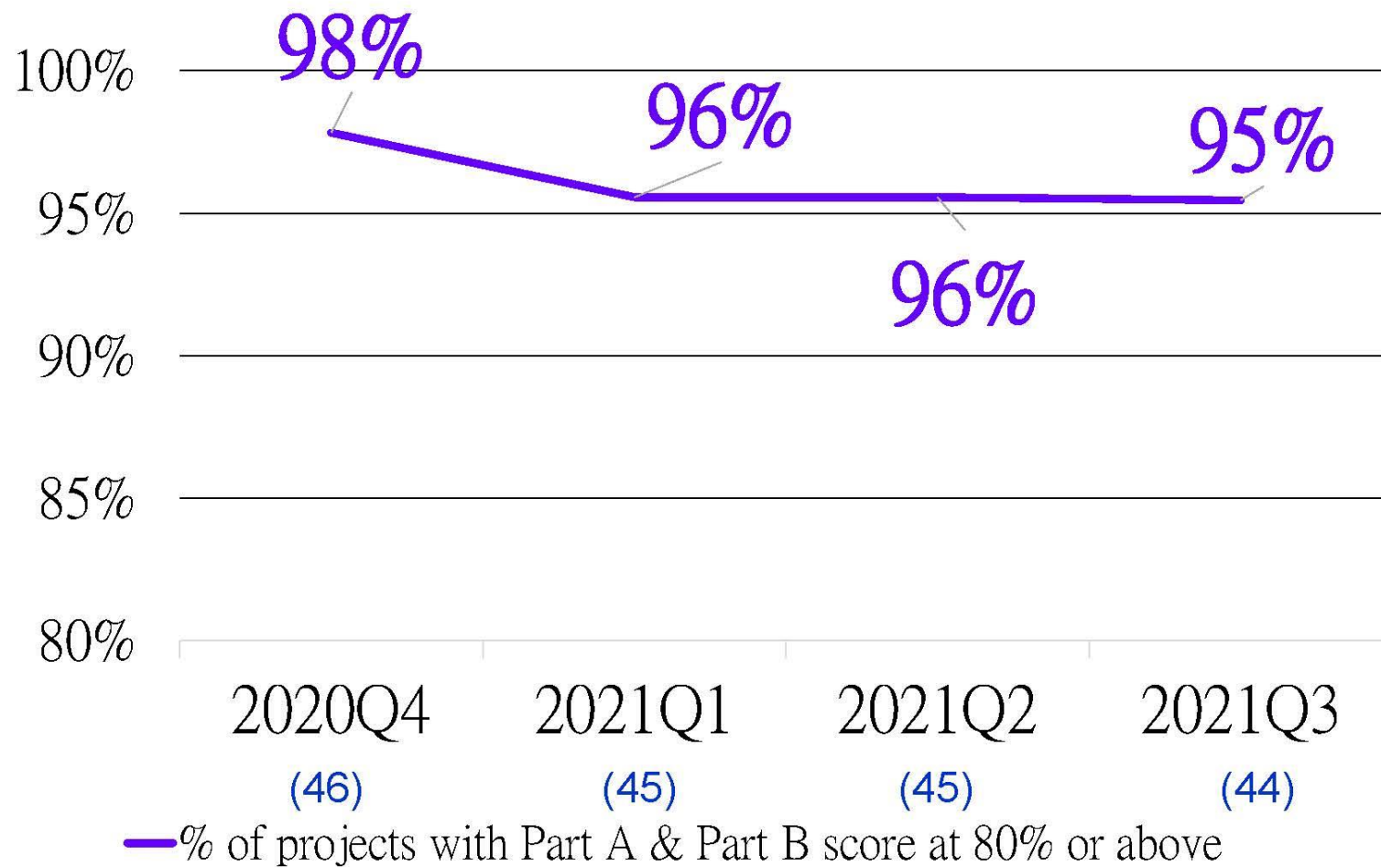
HASAS score trends of building contracts (from 1997 to 2021Q3)





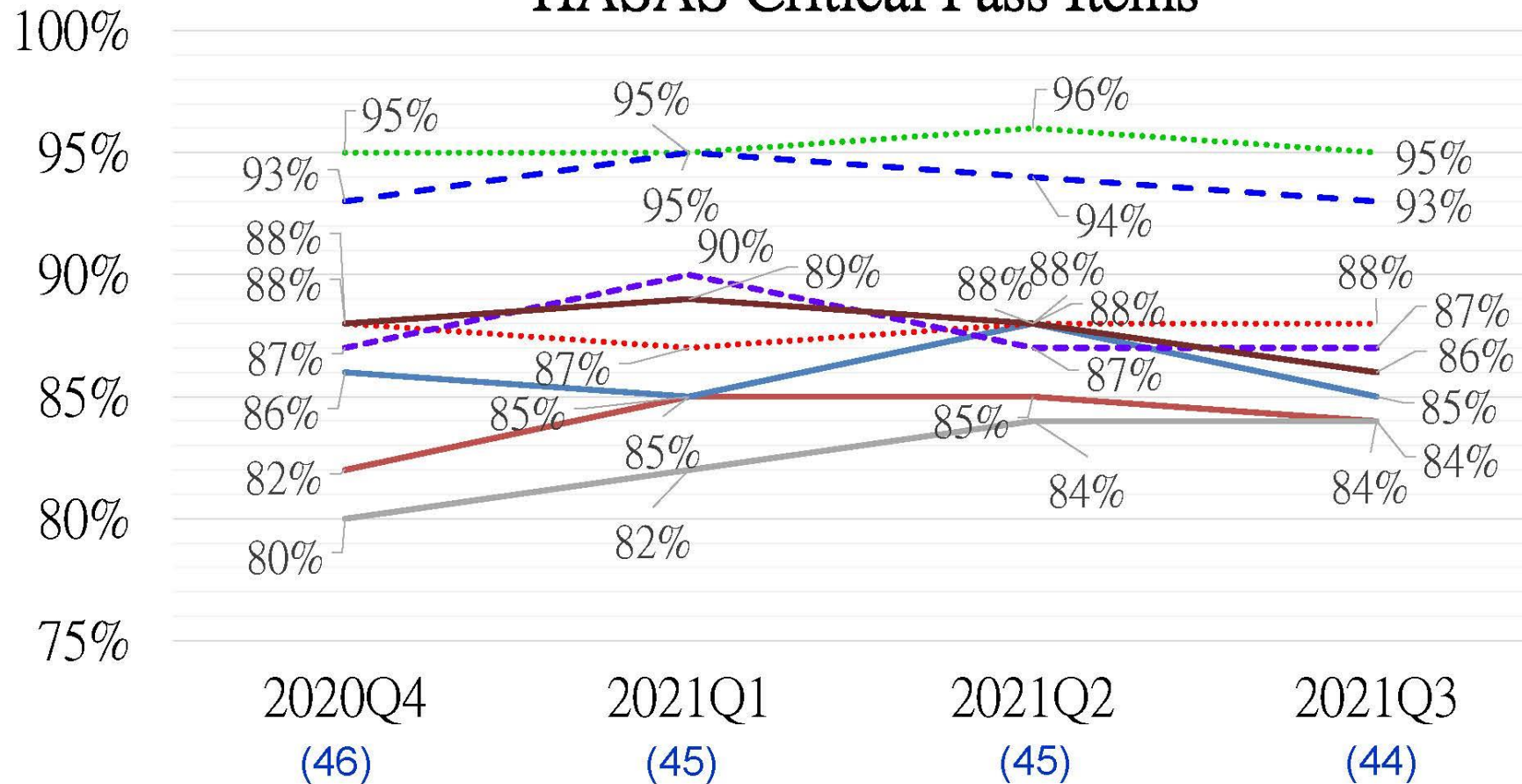


# HASAS



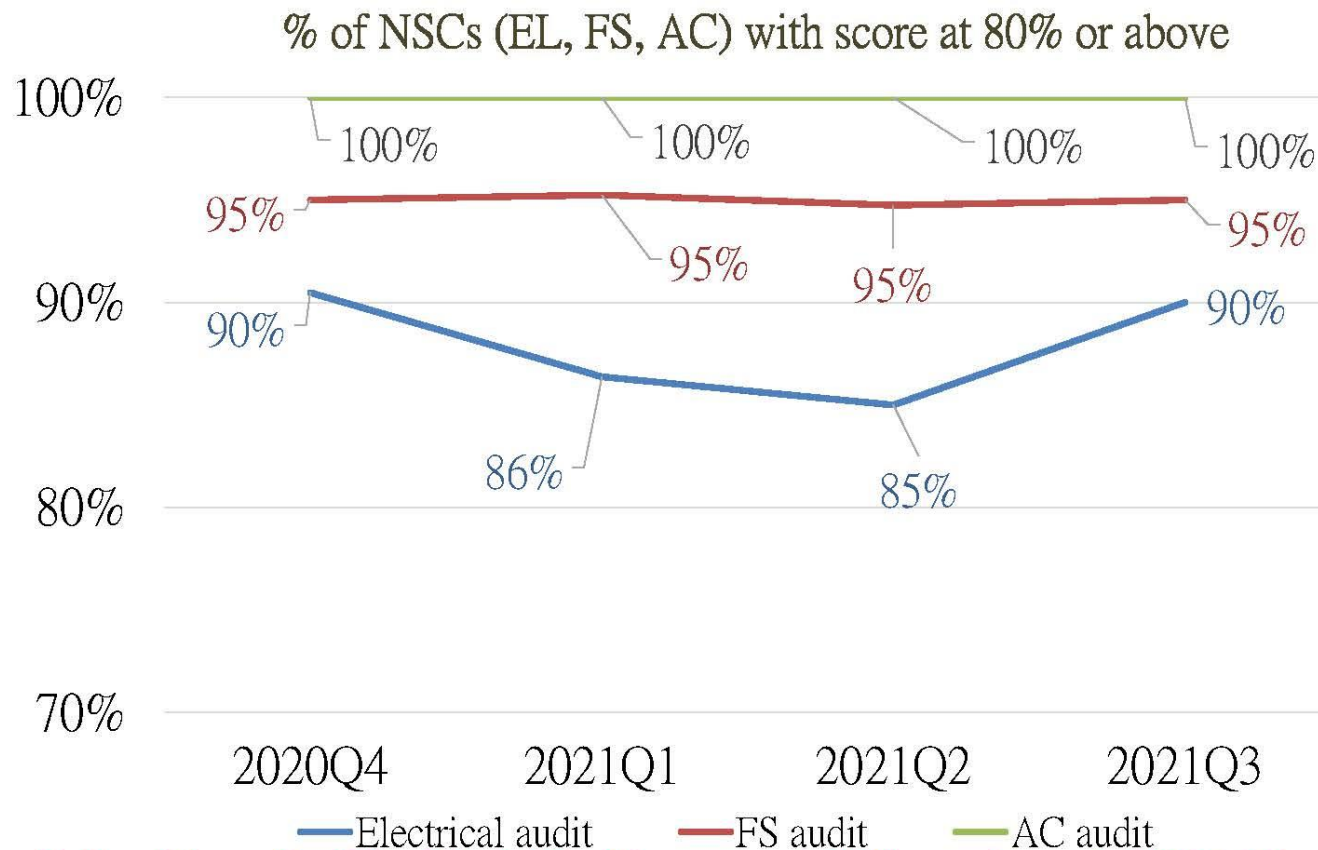


## HASAS Critical Pass Items



- Element 7 - Job Hazard Analysis
- Section 14.1.3 - Working at height
- Section 14.1.4 - Housekeeping
- Section 14.1.5 - Falling Objects
- Section 14.2.3 - Lifting Operations
- Section 14.3.2 - Electrical Supply System
- Section 14.4.1 - Tower Crane
- Section 14.4.2 - Mobile Crane



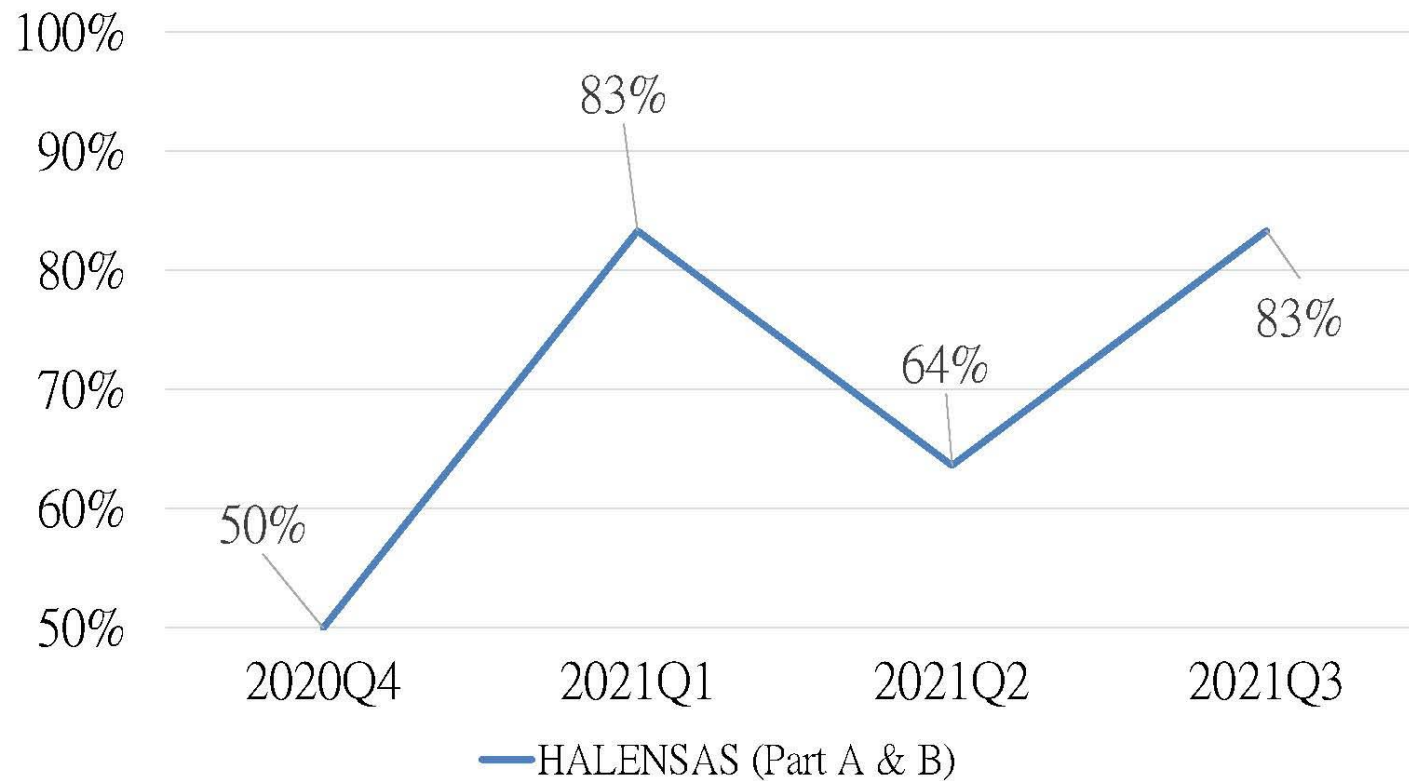


**Note : All audits (EL, FS, AC) with score at 70% or above in 2020 Q4 – 2021Q3**

	2020 Q4	2021 Q1	2021 Q2	2021 Q3
Electrical audit	19(21)	19(22)	17(20)	18(20)
FS audit	19(20)	20(21)	18(19)	19(20)
AC audit	6(6)	5(5)	6(6)	6(6)



% of Lift NSC (HALENSAS) with Part A and Part B score at 80% or above



**Note : All audits (HALENSAS) with Part A & Part B score at 70% or above in 2020 Q4 – 2021 Q3**

	2020 Q4	2021 Q1	2021 Q2	2021 Q3
HALENSAS	5(10)	10(12)	7(11)	5(6)





## Safe Scaffold and Workplace 安全棚架及工作場所



# GOOD PRACTICE 良好作業方式

- Provision of safe means of access & egress
- 提供安全進出通道





# GOOD PRACTICE 良好作業方式

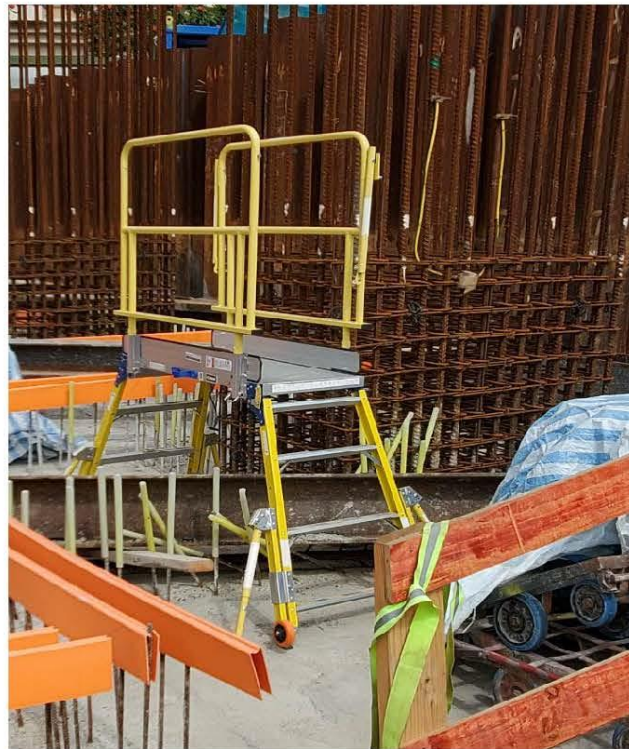
- Provision of proper working platform
- 提供合適工作平台





# GOOD PRACTICE 良好作業方式

- Provision of safe means of access & egress
- 提供安全進出通道







# GOOD PRACTICE 良好作業方式

- Floor opening was fenced off properly with warning notices
- 地洞妥善圍封並張貼警告標示





# Electrical Works 電業作業方式



# GOOD PRACTICE 良好作業方式

- Electric cables were properly suspended
- 電線妥善掛高





# Lifting Operations 吊運工序





# GOOD PRACTICE 良好作業方式

- Danger zone was fully fenced off
- 危險區域妥善圍封





# GOOD PRACTICE 良好作業方式

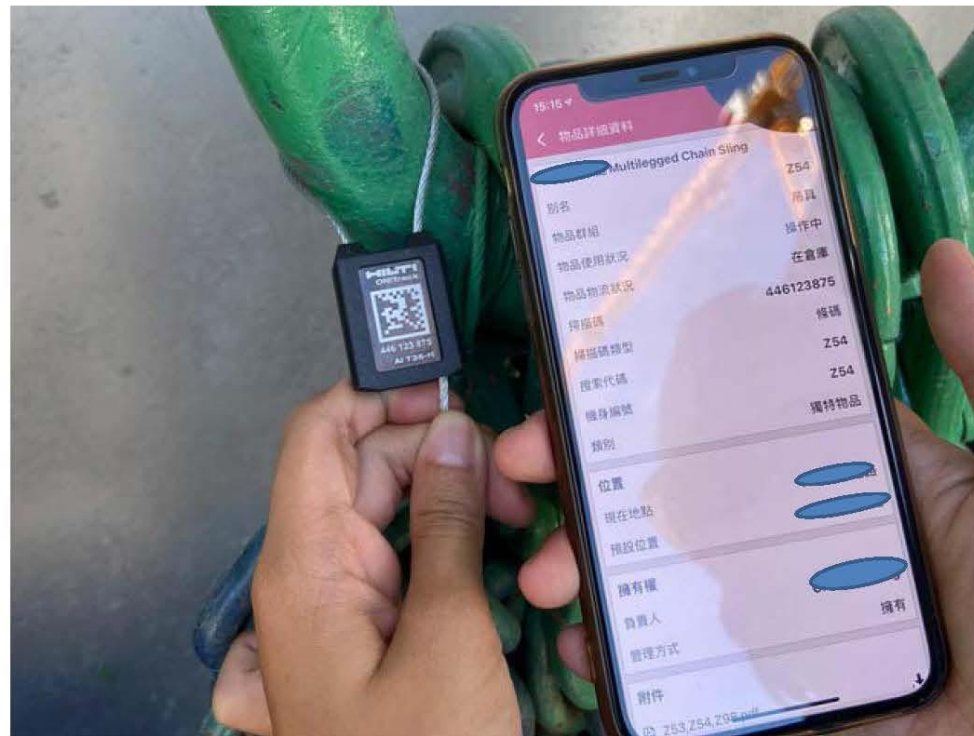
- Interlock devices for lifting hook
- 吊鉤設有互鎖式裝置





# GOOD PRACTICE 良好作業方式

- QR code for checking lifting gears
- 使用二維碼檢查起重裝置





# GOOD PRACTICE 良好作業方式

- Provision of tower crane lifting zone alarm system
- 提供天秤吊運區警報系統







Others  
其他



# GOOD PRACTICE 良好作業方式

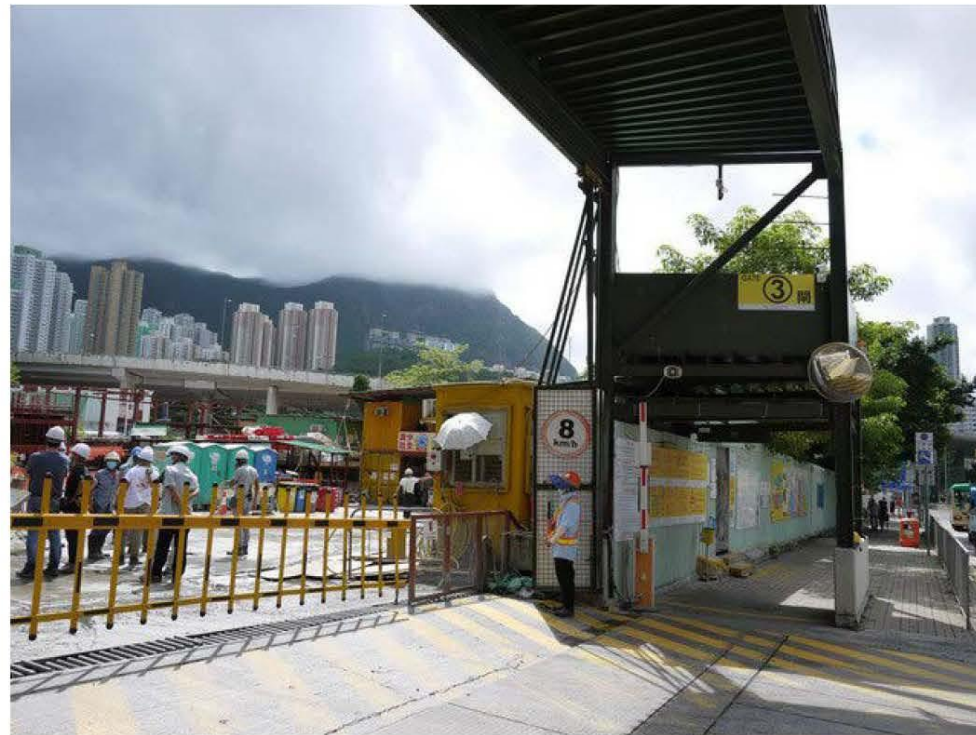
- Drill rod was fully fenced off by rigid barriers
- 使用穩固圍欄圍封鑽桿





# GOOD PRACTICE 良好作業方式

- Provision of height limit alerting system of site vehicle
- 提供地盤車輛高度限制警報系統





# GOOD PRACTICE 良好作業方式

- RFID system to prevent from collision
- 無線射頻辨識系統預防碰撞意外

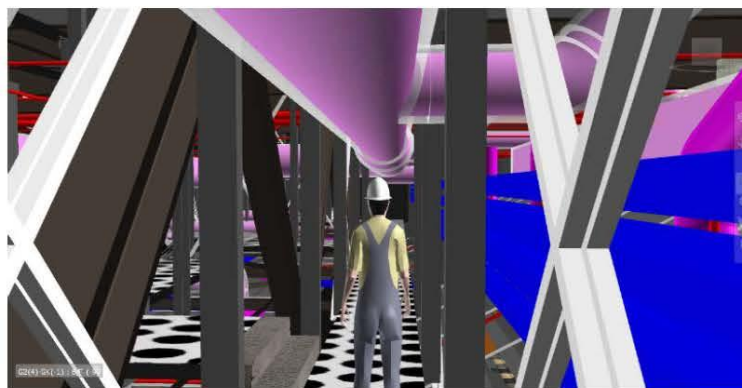






# Safety Innovation 創新工地安全措施

## BIM for Safe Construction of Arena Roof



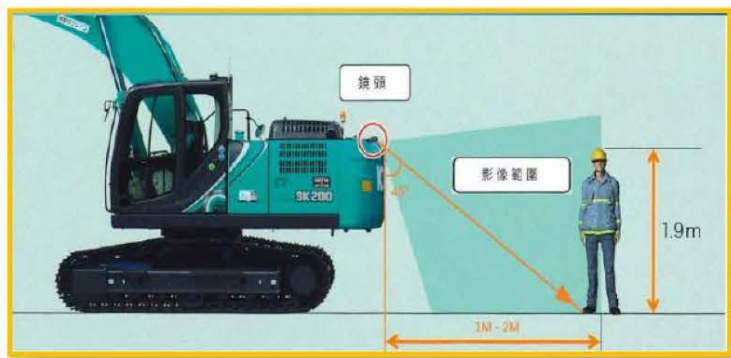
- BIM ensured the feasibility and accuracy of the “All-In-One Lifting” Method for the installation of Roof Steel Truss of GIC-Multi-Purpose Arena. It reduced enormous works at high level and aided rehearsal for workers to get familiarized with the working procedures.
- 透過使用建造資訊模型(BIM)，確保使用創新方法於多用途體育館安裝天花鋼結構的可行性和準確性，大大減低高空工作的需要，而透過使用BIM進行安全訓練，能令工人更熟悉相關工作程序及安全措施。





# Safety Innovation 創新工地安全措施

## I-Vision Smart 360° AI Monitoring System



- I-Vision Smart 360° AI Monitoring System was developed to reduce blinding spot surrounding the excavator. The monitoring system can minimize accident occurrence as the system can provide a prompt warning to operations and workers approaching the excavator within 2-meter.
- 應用360°人工智能偵測系統於挖掘機可有效避免操作時出現盲點。偵測系統可偵測到2米內的人像，警報器會發出警號及閃燈亦會不斷運作，以作提示接近挖掘機的人士以及操作員，可減少意外的發生。







# Safety Innovation 創新工地安全措施

## AI Monitoring System for mobile crane operation



- AI monitoring system for mobile crane can automatically generate alert to surrounding workers and frontline supervisors once it detects unsafe lifting operations. Furthermore, the system can also automatically record the unsafe lifting operations to the database for analysis, education and other promotional activities.
- AI流動式起重機操作監察系統能偵測不安全吊運操作以及發出警號提醒附近工人以及管理人員。另外，系統會自動記錄不安全吊運操作於資料庫以作分析及培訓推廣之用。





# HASAS(NW) – 2021Q2-2021Q3

## Summary on Audit Findings (NSC)

### 安全稽核結果(指名承判商)

Occupational Safety and Health Council  
職業安全健康局







# GOOD PRACTICE 良好作業方式

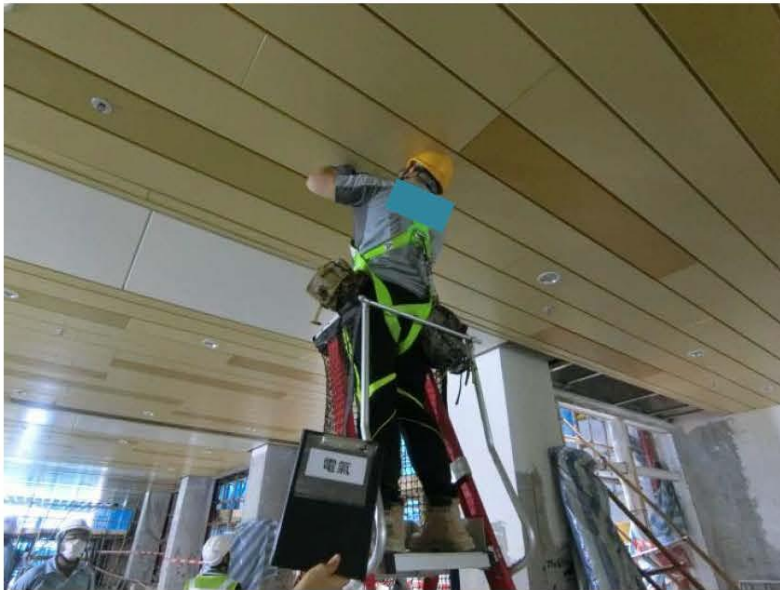
- Worker anchored lanyard at designated anchorage point
- 工友把尾繩繫於指定的繫穩點





# GOOD PRACTICE 良好作業方式

- Proper step platform was used
- 使用合規格的梯台





# HALENSAS – 2021Q2-2021Q3

## Summary on Good and Bad Practices

### 安全稽核結果

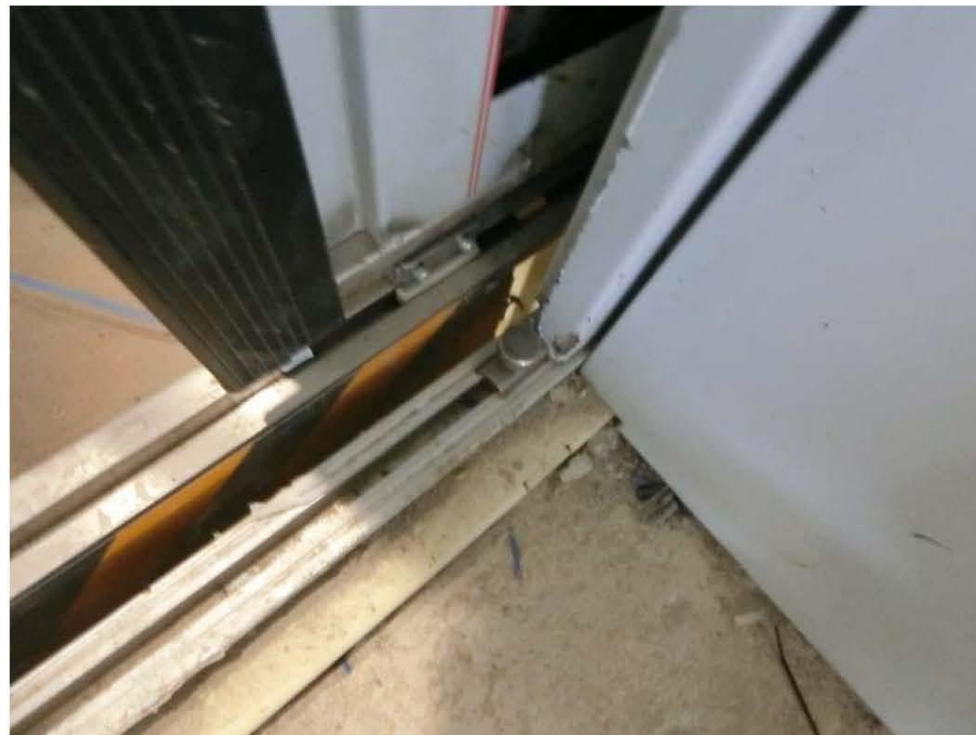
Occupational Safety and Health Council  
職業安全健康局





# GOOD PRACTICE 良好作業方式

- Provision of door stopper
- 提供攝門器







The END

Thank You!

