Seminar on Construction Workers Registration System (CWRS)

Jan 2020
About the CWRS Seminar

1. Terminology
2. System Overview
3. Benefits and New Workers Registration Card
4. Roles & Duties
5. System Components
6. CIC Android device
7. Other tested devices
8. Setup Procedure
9. Daily Operation after setup
10. Construction Workers Registration Gateway (CWRG)
11. CIC Daily Attendance Records (DAR) App
1. Terminology

**CWRS - Construction Workers Registration System**
- New system launched in Dec-2015

**SATM - Site Attendance Module**
- Old system using excel files to submit DAR

**Good List**
- The list of workers assigned to work on a specific contract or site
- Controlled by the site admin or master admin of an individual contractor

**Bad List**
- The list of workers not allowed to work on a specific site
- Controlled by CIC for all contracts or sites

**DAR – Daily Attendance Record**

**NFC – Near Field Communication**

**CWRG – Construction Workers Registration Gateway (Front-end portal)**

**CWR Card – Construction Workers Registration Card**
2. System Overview

CIC Cloud

Good List
工人註冊表

Bad List
失效註冊卡名單

Daily Attendance Records
工地出勤紀錄

Contractor's Internal Systems
承建商內部系統

Construction Workers Registration Gateway
建造業工人註冊平台

Construction Workers Registration Card
建造業工人註冊證

Tap Card
拍卡

Access Gate
閘機

Three Biometric Authentication Solutions (examples only)
生物特徵系統（例子）
3. Benefits

1. Enhanced flow of collection & submission of DAR
2. More options on card readers to record the workers registration card information
3. Web-based managing platform for daily site administrator work
4. Increased accuracy of DAR collection
5. Simplified registration process for workers
6. Workers can access their DAR on CWR card
7. Multipurpose on one card
3. New Construction Workers Registration Card
## 4. Roles & Duties

<table>
<thead>
<tr>
<th>Roles</th>
<th>Duties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Admin</td>
<td>• Manage and edit Good List and DAR</td>
</tr>
<tr>
<td></td>
<td>• Submit DAR via CWRG</td>
</tr>
<tr>
<td></td>
<td>• Login CIC DAR App for admin functions</td>
</tr>
<tr>
<td>Master Admin</td>
<td>In addition to the access rights of the Site Admin:</td>
</tr>
<tr>
<td></td>
<td>• Create / manage / delete site admin accounts</td>
</tr>
<tr>
<td></td>
<td>• Manage Contracts</td>
</tr>
<tr>
<td>Workers</td>
<td>• Tap CWR Card on CIC DAR App to create attendance record</td>
</tr>
</tbody>
</table>
5. System Components

Applications

- Construction Workers Registration Gateway [CWRG]
- CIC Daily Attendance Record Application [CIC DAR App]

Hardware

- Android device with NFC (NXP chipset) & GPS (ver.4.4.2 to 9)
  - * Final result depends on actual testing
- Computer with browser*
  - *IE: v.10 or above
  - Chrome: v.48 or above
  - Screen resolution: 1280 x 1024 (recommended)

CWR Card

- Valid & Updated Workers Registration Card
6. CIC Android Device

**Basic**
- Android (OS ver. 4.4.2)
- WiFi + 3G
- NFC (NXP chip set)
- GPS
- Micro USB
- Micro SD

**Durability**
- Water Resistant (IP54)
- Shock Resistant (810G)

**Options**
- Wiegand & RS232 & USB connectivity
- Fixation
7. Other tested Android Devices

1. Asus Zenfone 5**
2. CAT S41
3. HTC One E8
4. HTC One ME
5. HTC Desire 530
6. HTC U Play
7. Huawei Honor 6 Plus
8. Huawei Honor 10**
9. Huawei Nova 5T*
10. Huawei Y7 Prime 2018**
11. InFocus Vibe P1
12. LG G3
13. LG G3 Beat
14. LG GPro2
15. LG G4 Stylus
16. LG G5
17. LG Sytlus 2
18. LG Sytlus 3
19. LG X Power
20. LG K10 Power
21. LG K10 2017
22. LG Q Stylus +**
23. Meizu Pro 5
24. Motorola Moto G5 Plus
25. Nilamtec A1**
26. Nilamtec B1*
27. Nokia 4.2*
28. Nokia 7.2*
29. Nokia 8**
30. Nokia 8.1* (* Android ver. 9.0)
   (**) Android ver. 8.0)

1. The CIC does not hold any bias towards any brands or models of mobile device for DAR operations.
2. The list above is only a record of testing devices. Contractor users are free to choose any mobile device as long as they fulfill the basic requirements for the CIC Attendance apps operations.
7. Other tested Android Devices

31. Samsung Galaxy A8
32. Samsung Galaxy C5
33. Samsung Galaxy Grand Prime
34. Samsung Galaxy J5 2016
35. Samsung Galaxy Note 5
36. Solution Expert C530
37. Sony Xperia 10*
38. Sony Xperia 10 Plus*
39. Sony Xperia C3
40. Sony Xperia SP
41. Sony Xperia Z5 Premium
42. Sony Xperia M4 Aqua
43. Sony Xperia XA
44. Sony Xperia XA1
45. Sony Xperia XA2**
46. Star On SP-3
47. Synergos CIC-M729
48. UniStrong E7738A1 (HK ver.)
49. UniStrong E7759-B2
50. Vivo Y95**
51. Xiaomi Mi5

1. The CIC does not hold any bias towards any brands or models of mobile device for DAR operations.
2. The list above is only a record of testing devices. Contractor users are free to choose any mobile device as long as they fulfill the basic requirements for the CIC Attendance apps operations.
8. Setup Procedure

1. Select contract
2. Register device
3. Synchronisation
4. Set to connect biometric device (optional)
9. Daily Operation after Setup

- Duties during the 7-day cycle:
  1. Check raw DAR
  2. Edit DAR if necessary
  3. Submit DAR in time

- Around 04:00, 10:00, 16:00, 22:00 (4 times daily)

Raw data will synchronize with CWRS automatically at
10. Manual Highlight - CWRG

- Contractor/ Contract Profile [chapter 2.2]
  - Apply new contract/ Update request
- DAR – Editing & Submission [chapter 2.3]
- Good list Conflicts [chapter 2.4.1]
- Export and Download [chapter 2.4.2 & 2.4.4]
- Email notifications [chapter 2.4.8]
- DAR for verification [chapter 2.4.9]
- Heartbeat [chapter 2.4.11]

https://cwrg.cic.hk/
11. Manual Highlight - DAR App

- Reminder on Stable Network [chapter 1.1.2]
- Device De-/Registration [chapter 1.1.3-4]
- Setup (Tap Indicator, Biometric, Auto-start, Heartbeat, Auto Download, Return Signal Response time) [chapter 1.1.6]
- Good List Management (Add/ Edit/ Delete) [chapter 1.2]
- Data Synchronization [chapter 1.4]
Thank you