CONSTRUCTION INDUSTRY COUNCIL
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# Seminar on Construction Workers Registration System (CWRS)

July 2020

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# 1. Terminology

**CWRS - Construction Workers Registration System**

- New system launched in Dec-2015

**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 construction sites
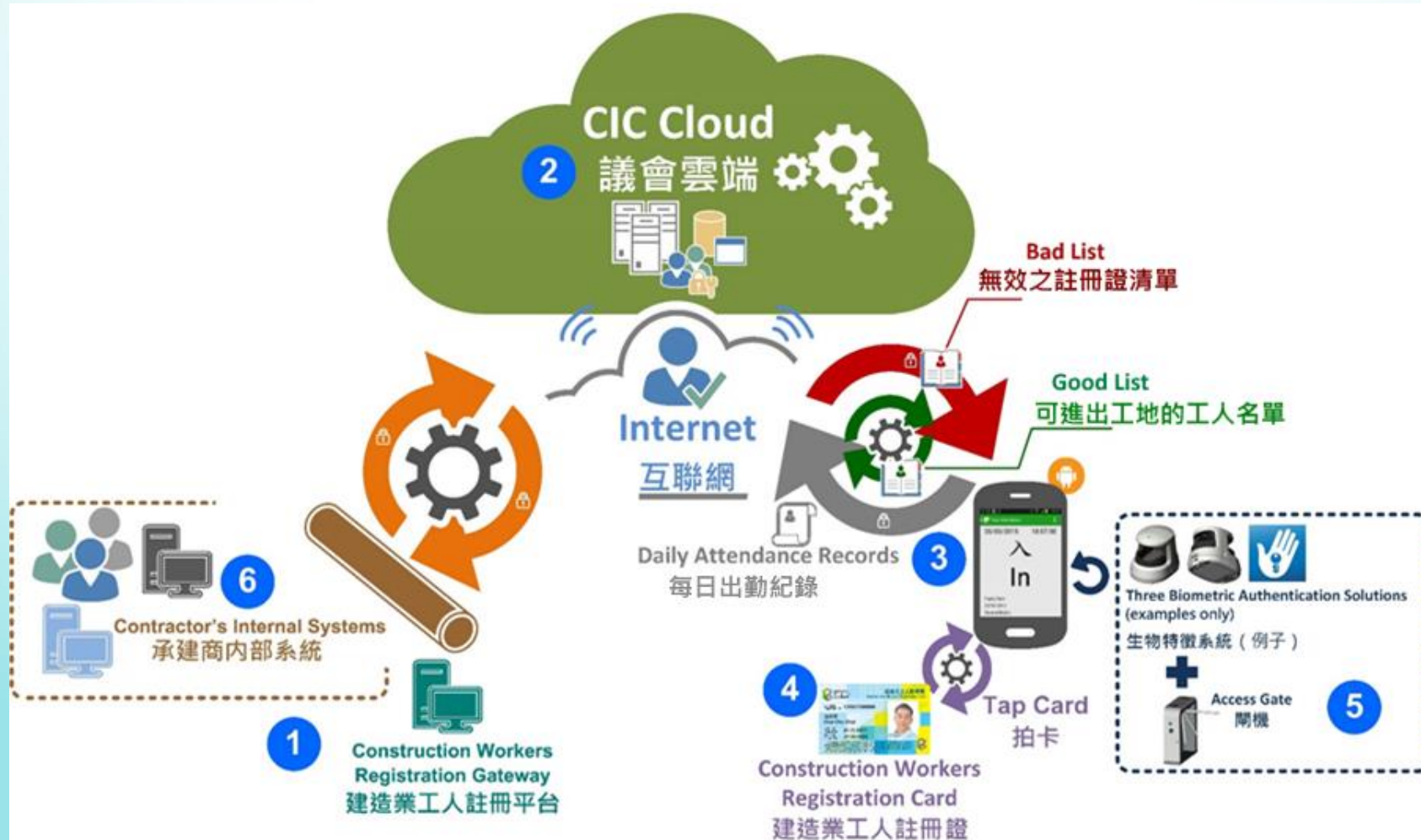- Controlled by CIC for all contracts or sites

**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

# 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 platform for managing daily site administration work

4. Increased accuracy of DAR collection

5. Simplified registration process for workers

6. Workers can access their DAR on CWR card

7. Multi-qualifications on one card

# 3. New Construction Workers Registration Card

# 4. Roles & Duties

| Roles | Duties |
|---|---|
| Site Admin | •Manage and edit Good List and DAR<br>•Submit DAR via CWRG<br>•Perform administrative work in DAR App |
| Master Admin | <u>In addition to the access rights of the Site Admin:</u><br>•Create / manage / delete site admin accounts<br>•Manage Contracts |
| Workers | •Tap CWR Card on card readers installed with DAR App to create attendance record |

# 5. System Components

## Applications

Construction Workers Registration Gateway [CWRG]

CIC Daily Attendance Record Application [DAR App][1]

## Hardware

Android device with NFC (NXP chipset) & GPS (ver.4.4.2 to 9)
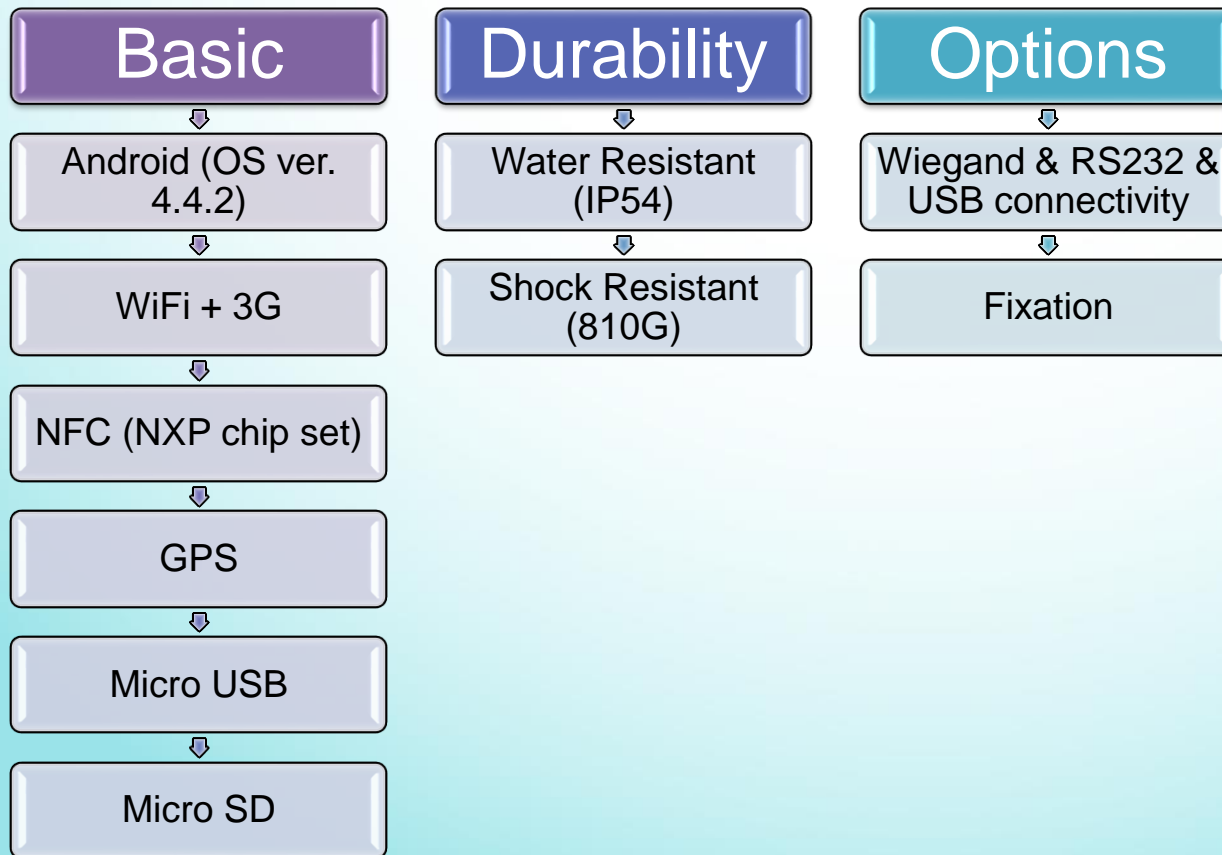
* Final result depends on actual testing

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

(1)  *You are advised to visit the CIC website regularly for latest release notes on DAR App and update your card reading device to the latest version of the DAR app.*

# 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. Huaiwei Y7 Prime 2018
11. InFocus M810t
12. Lenovo Vibe P1
13. LG G3
14. LG G3 Beat
15. LG GPro2

16. LG G4 Stylus
17. LG G5
18. LG Stylus 2
19. LG Stylus 3
20. LG X Power
21. LG K10 Power
22. LG K10 2017
23. LG Q Stylus +
24. Meizu Pro 5
25. Motorola Moto G5  Plus
26. Nilamtec A1
27. Nilamtec B1*
28. Nokia 4.2*
29. Nokia 5.3**
30. Nokia 8

*(\* Android ver. 9.0)*
*(\*\* Android ver. 10)*

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
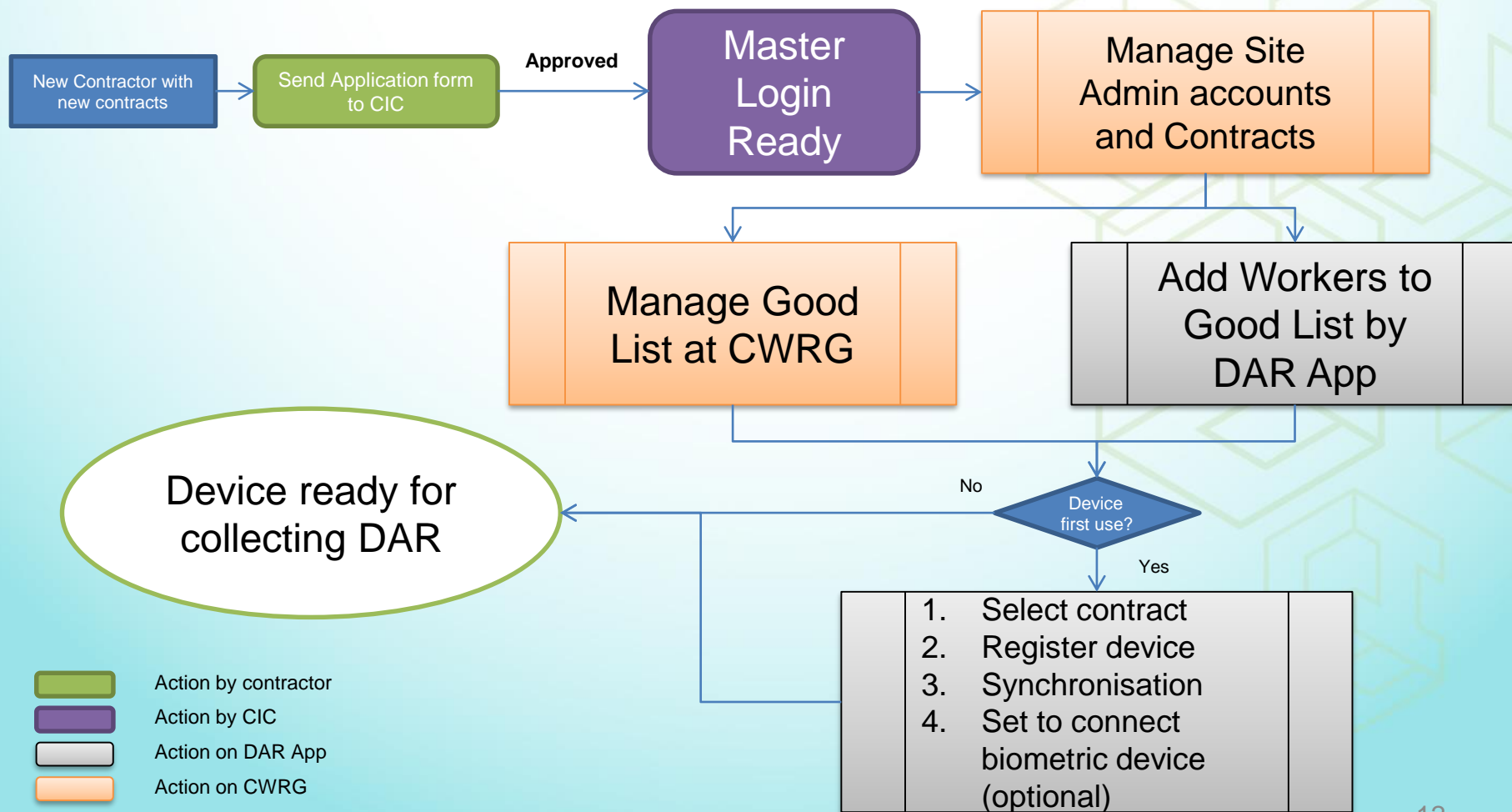
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# 7. Other tested Android Devices

31. Nokia 8.1*
32. Oppo A9 2020*
33. Oppo Find X2 Pro**
34. Samsung Galaxy A8
35. Samsung Galaxy C5
36. Samsung Galaxy Grand Prime
37. Samsung Galaxy J5 2016
38. Samsung Galaxy Note 5
39. Solution Expert C530
40. Sony Xperia 10*
41. Sony Xperia 10 II**
42. Sony Xperia 10 Plus*
43. Sony Xperia C3
44. Sony Xperia SP
45. Sony Xperia Z5 Premium

46. Sony Xperia M4 Aqua
47. Sony Xperia XA
48. Sony Xperia XA1
49. Sony Xperia XA2
50. Star On SP-3
51. Synergos CIC-M729
52. UniStrong E7738A1 (HK ver.)
53. UniStrong E7759-B2
54. Vivo Y19*
55. Vivo Y50**
56. Vivo Y95
57. Xiaomi Mi5

*(* Android ver. 9.0)*
*(** Android ver. 10)*

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# 8. Setup Procedure

```
New Contractor with
new contracts
    │
    ▼
Send Application form
to CIC
    │  Approved
    ▼
Master Login Ready
    │
    ▼
Manage Site Admin accounts and Contracts
    │
    ├──────────────────┬──────────────────┐
    ▼                                     ▼
Manage Good List at CWRG          Add Workers to Good List by DAR App
    │                                     │
    │                                     ▼
    │                              Device first use?
    │                         No ◄────┤      │ Yes
    ▼                                        ▼
Device ready for collecting DAR      1. Select contract
                                     2. Register device
                                     3. Synchronisation
                                     4. Set to connect biometric device (optional)
```

Legend:
- Action by contractor
- Action by CIC
- Action on DAR App
- Action on CWRG

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# 9. Good List

- A list of workers who are assigned to work on a specific contract/site and is managed by the Site Admin or Master Admin

- Site Admin/Master Admin should regularly review and manage Good List via CWRG portal or DAR App, including:
  - Register CWR cards for new workers
  - Update new CWR cards due to renewal / loss / update qualification for current workers
  - Update the site entrance period for workers
  - Update the practising trade for workers

- Site Admin/Master Admin should remind the workers to activate the new CWR cards upon receipt.

# 10. Daily Operation after Setup

**Raw data will synchronize with CWRS automatically at**

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

- Duties during the 7-day cycle:
    1. Check raw DAR
    2. Edit DAR if necessary
    3. Rectify problematic records (if any)

# 11. DAR Submission

Contractors must carry out the following steps and ensure all DAR are true and complete in each submission.

| | |
|---|---|
| 1. Ensure all DAR are completely uploaded from card devices to CWRG Cloud | • In "DAR Submission Summary" section of CWRG |
| 2. Rectify problematic records and verify all DAR are true | • In "Attendance Records for Verification" section of CWRG |
| 3. Submit verified DAR | • In "DAR Submission Summary" section of CWRG |

# 12. Law Requirement

- Pursuant to the Construction Workers Registration Ordinance (Cap. 583) (CWRO), the controller of a construction site is required to submit DAR for each period of 7 days, within 2 business days after each period.

- All DAR shall contain true and complete records.

- Failure to submit DAR in accordance with the CWRO is an offence and may be subject to prosecution.

# 13. 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]

  https://cwrg.cic.hk/
- Heartbeat [chapter 2.4.11]
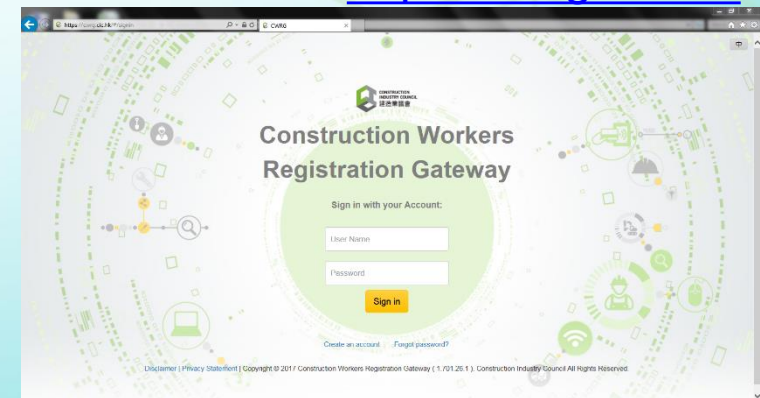
# 14. Manual Highlight – DAR App

- 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]

- Update (CIC DAR App upgrade) [chapter 1.6]



出勤記錄
29/09/2015        09:54:00
2015-09-29
09:53
成功
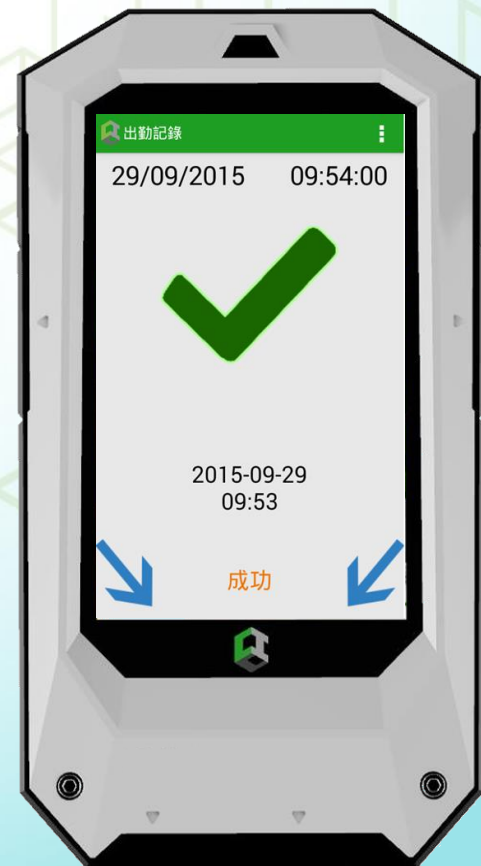
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# Thank you