

Improving Proof of Identity and Competence in the Construction Industry

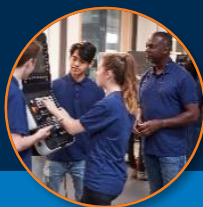
Mark Buckton



NOCN Group

Education & Skills Charity (UK & Internationally)

- Established in 1987
- Large, regulated international awarding organisation
- Market-leading independent apprentice End Point Assessment Organisation
- Access to Higher Education Courses
- **Job Cards**
- Industry Approved Short Courses - SiteRight
- Assessment services
- Consultancy and research



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NOCN Job Cards

Issues job cards for Construction Plant and Scaffolding that prove that an individual has achieved the required training, or competence based qualifications for the type of work they carry out, mainly in the UK construction industry.

- Helps people into employment through training and assessment
- Over 250,000 CPCS Card holders, 80,000 cards issues per year
- CPCS has 65 categories (types) of Plant
- CISRS has over 50,000 card holders and issues over 25,000 per year
- CISRS has 30 different cards – UK, International, type etc.
- Individual need to do an industry test
- They have 2 year to get a qualification
- Then seen as competent and allowed to work on-site
- Renewal test after 5 years
- Widening to other trades, e.g. General training and Firedoor Installation

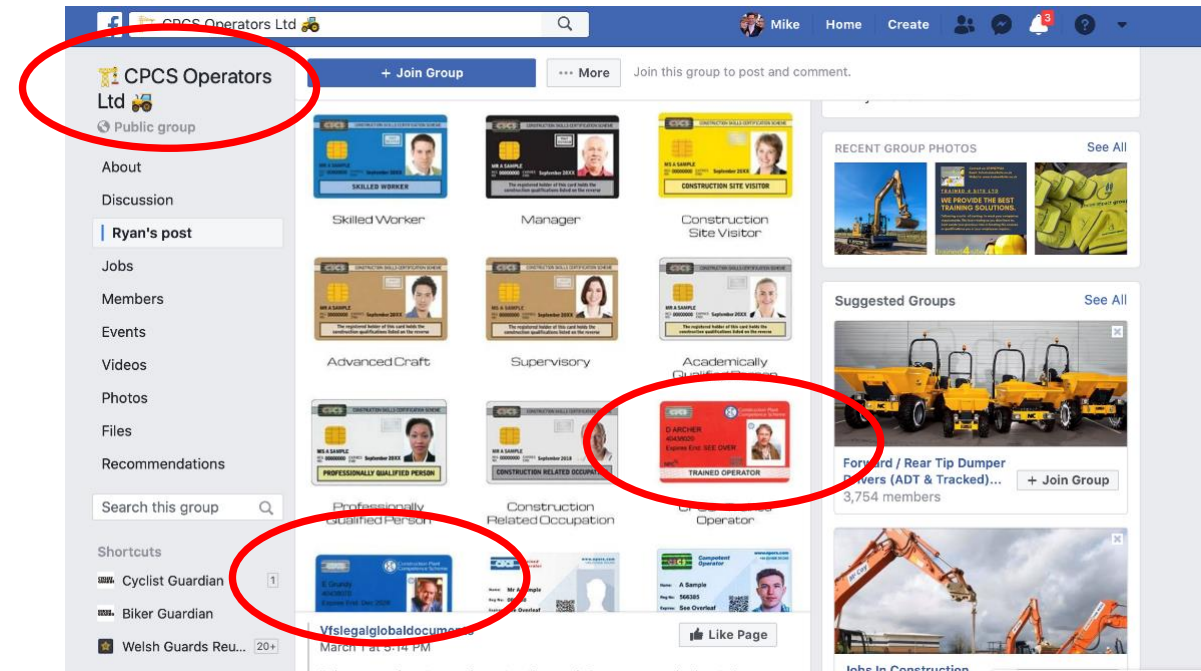


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Our Challenge

NOCN Job Cards issues a large number of different card types, designed to prove competency for various roles in construction, following training and testing.

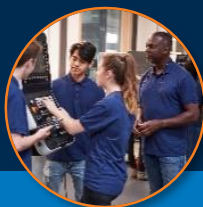
- Limited information can be printed on the back of a plastic card
- Additional qualifications/ training required individuals to be sent a new card
- Cards could be used after expiry, as dates were not regularly checked
- Photos can be changed on cards
- Fake cards were being produced by criminals and sold via social media



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Our Requirements

- Secure digital card system to increase safety and security of workers and the wider community.
- Fraud prevention – cards can't be copied or faked.
- Simple – must work for most people i.e. via phone, and without the need for new hardware.
- High Quality – the cards need to be clear to read visually and survive in harsh conditions.
- Ability to store greater amount of individual information securely.
- Reduction in plastics usage, carbon footprint and cost.
- Future proofing – solution which would enable additional services / support.
- Flexibility – so we can respond to issues



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Proof of ID

US Patent:10,102,364

Verification of both identification and presence over a network



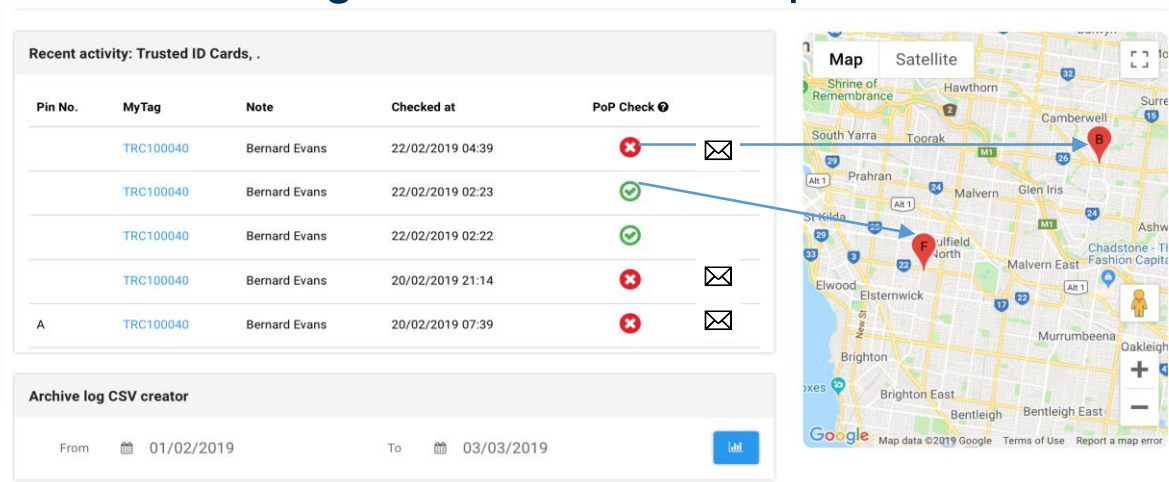
Patent 10,102,364



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MyTAG Secure ID

- Secure ID Cards that cannot be copied or cloned
- No App required to read
- Live reporting of counterfeited ID cards
- Real-time ID Card cancellation, renewal or amendment of ID Card data
- Real-time exception email reporting to allow immediate administrator interventions
- Geo-tracking of each ID card tap to mobile device



Pin No.	MyTag	Note	Checked at	PoP Check
	TRC100040	Bernard Evans	22/02/2019 04:39	✗
	TRC100040	Bernard Evans	22/02/2019 02:23	✓
	TRC100040	Bernard Evans	22/02/2019 02:22	✓
	TRC100040	Bernard Evans	20/02/2019 21:14	✗
A	TRC100040	Bernard Evans	20/02/2019 07:39	✗

Archive log CSV creator

From 01/02/2019 To 03/03/2019

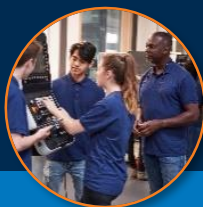
Multi-lingual available via the cloud

*“NO REQUIREMENT FOR SPECIALIST NFC READERS,
ANY STANDARD MOBILE WITH NFC CAN READ!”*



How the Solution Works

- On completion of assessment or qualification, NOCN holds the individual's data, and sends via MyTAG for their Job Card to be printed by Digital ID and dispatched to the worker.
- NOCN holds the training, testing and qualifications data on their secure servers for verification.
- Cards are HID NFC Cards, containing a Trusted Tag.
- At the construction site, the worker taps their Job Card on the NFC reader or mobile device.
- Genuine cards are authenticated, displaying name, photograph, training or testing record and qualifications.
- Manager checks the credentials – equipment authorised for use, first aid qualifications etc



Patent 10102364

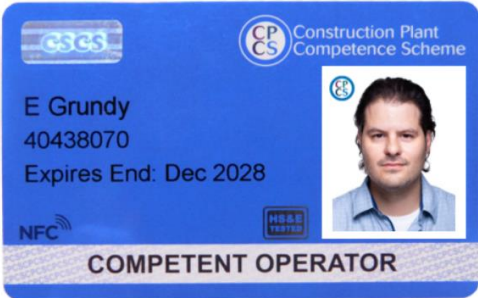


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How it works



NFC **Fraudulent Card**



NFC **Original Secure iD Card**



The Authenticated banner ↑



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Mobile Authentication

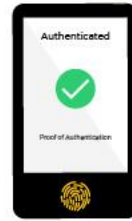
MyTAG Trusted iD

Patent 10102364

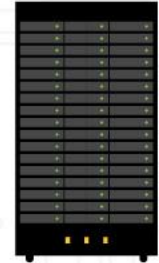
Unique codes every time



HTTPS://ABC127 ✓
HTTPS://ABC127 ✓
HTTPS://ABC127 ✓



Secure Servers



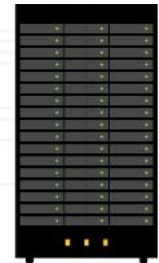
Copy code or refresh



HTTPS://ABC561 ✗



Secure Servers



Programmed and secure
Trusted NFC cards or tags

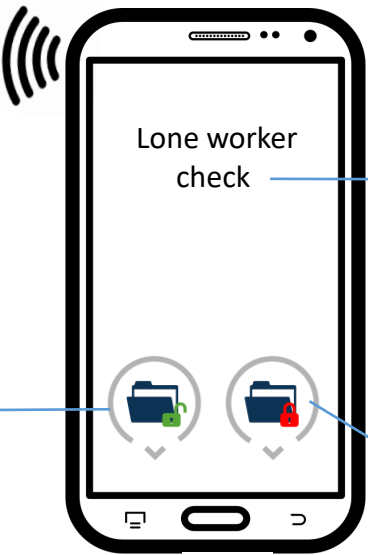
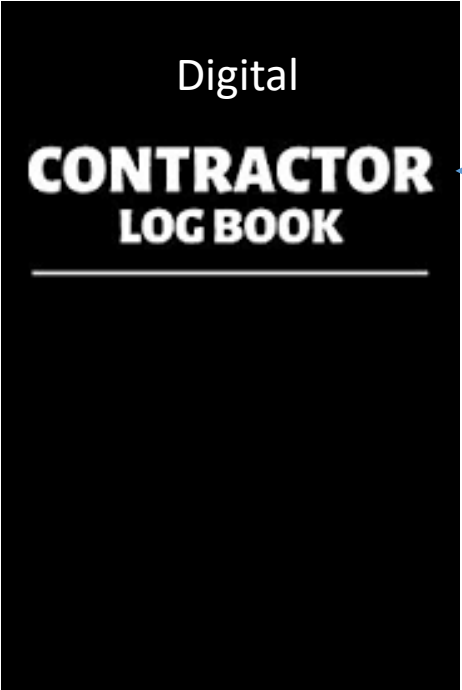
NFC enabled devices

MyTAG Platform integrated
to partner

Verify cryptographic
code for each tag

The road map:

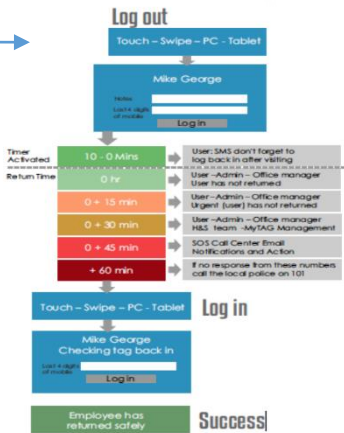
The card can be linked to a -



Confirmation of Authority to drive



Security within Wireless Technology



Cards used for site access

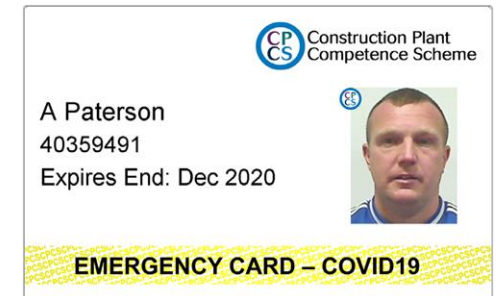


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Benefits of the new NOCN Job Cards

Patent 10102364

- **Increased security.** Individuals with cloned or altered cards cannot pass the test of the card being swiped on a reader or smartphone.
- **Compliance with health & safety legislation.** Ensuring the correct person with appropriate competence is carrying out the work.
- **Additional data is available.** e.g. individual medical records.
- **Greater functionality.** Communication with individuals, gate entry, equipment log books.....
- **Simple to use, no App required.**
- **Reduction in plastic usage (30-40%).** New categories do not require a new card.
- **Cost reduction.**
- **Flexibility** – new normal of responding to different situations – covid 19 cards



Patent 10102364



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Security within
Wireless Technology



Proof of I.D



Patent No: 10,401,364



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