



GOING SMART

CSCS will be launching its SmartCard at the end of 2009 which will supersede the existing CSCS 'dumb-card' currently issued. SmartCards will be like the traditional card in that information about the holder is printed on it. The difference is that a copy of the same data will also be stored in the chip. The design has also been updated slightly and the cards are being made more durable, however colour coding will remain the same.

Why Change to SmartCards?

In recent years the construction sector has raised concerns with CSCS about:-

- increasing numbers of forged cards
- misuse of cards eg. craft operatives using a green card
- cards not being sufficiently checked on some sites
- the number of cards that many people are expected to carry.

The SmartCard will help alleviate these issues as well as offer other additional, flexible benefits for the wider industry. By adopting smart technology, CSCS and its affiliate partners are developing the scheme to meet the needs of the construction sector in the 21st century.

Forgeries and Site Security

There are currently over 1.4 million cardholders, and CSCS works with 10 affiliated organisations to cover more than 350 construction related occupations. The scheme is now widely used on the majority of construction sites and with that success comes the problem of forgeries. CSCS has, over the last few years, received an increasing number of calls from worried site supervisors who believe they have been shown fake cards.

Scheme Manager, Gordon Jenkins, has given evidence at several successful court cases involving counterfeit cards. The most recent involved card issue on a considerable scale to overseas workers seeking contracts on UK sites. The forgeries were very hard to distinguish from the 'real thing' and it would only be someone working regularly with the cards that would notice incorrect fonts and colour tones. Using Smart technology reduces the risk of allowing someone on to a site with a forged card, who could potentially be a real danger to themselves and others. This in turn will improve construction site safety and security by ensuring that all those working on a site are competent and health and safety aware. The aim being to assist in reducing the number of construction site deaths and injuries.

Using card readers will speed up the process of checking cards at the site entrance. CSCS's helpline experiences huge call volumes from site supervisors and administrators wanting to verify card details. This is particularly high on Monday mornings. SmartCards will save hours of Site Supervisor time by reducing the need to ring the Helpline to verify a card's authenticity and ensure the card is still valid. Identities can be verified using card readers even if the printing on the card is badly worn.

Additional Benefits

Single Card

The CSCS SmartCard will be a high capacity card that can be used for a multitude of purposes beyond just storing CSCS data. Each additional use of the card can be achieved by installing a simple computer program called an 'applet' on to the chip. These can be added to specific CSCS SmartCards and then linked to work with the contractor's, homebuilders or client's own systems, e.g. site access, recording site specific training/CPD details such as tool box talks and site inductions, on-site card auditing checks etc.

Organisations can purchase special applet licences to add their own individual software requirements/uses to the SmartCards. This means that workers on their sites need only carry a single card. In addition, it creates a cost saving by reducing the number of cards currently issued.

Instant updates straight on to the chip

Information held on the chip can be updated electronically without having to issue a replacement card saving time and money. Additional requirements a contractor is demanding prior to the card's expiry can be recorded on the chip when it is next placed in a pc-connected card reader. Site workers can then demonstrate they have met that requirement e.g. Asbestos workers.

Access to cardholder's 'Fitness for Task' Information via CBH

Construction Employers who are members of CBH (*Constructing Better Health*) can access individual worker 'Fitness for Task' information. No sensitive medical information can be accessed using the SmartCard. It should be noted that only Occupational Health information undertaken via the CBH Scheme, where the individual has given appropriate consent, will be available. There are no plans to require CSCS cardholders to have an occupational health check.

Potential Insurance Reductions

CSCS has recently held discussions with Aon, the world's leading insurance broker. They confirmed their support for any action taken where clients would benefit from reduced uncertainty. Gareth Butler from Aon stated that: - *"The CSCS Smartcard keeps risk awareness at the top of the agenda by helping construction companies manage site safety and security. It's an excellent initiative to help avoid incidents in the first place but, in addition, will enable companies to demonstrate to insurers that they have identified their risks and have plans in place to reduce or manage them. **This is one of the most persuasive arguments for keeping insurance premiums down.** If a construction company can demonstrate that procedures were in place and correctly monitored, this could also decrease the likelihood of prosecution from the HSE under the Corporate Manslaughter Act and mitigate the potential for employers liability claims."*

Sites not wishing to use the SmartCard Technology

The SmartCard can continue to be used as at present as a "dumb" printed card if an organisation chooses not to use the technology.

Pricing

(See Appendix 2 for potential cost savings examples)

SmartCard

There will be a small price increase per card which is still to be finalised, however it will be approximately £5.00 more than the current price. (CSCS is in the final stages of negotiating production process costs.) CSCS is funding development costs of the SmartCard from its reserves.

Additional Individual Applet licences

Will usually run for 1 year, however may be offered for longer/shorter periods. The agreement will specify card quantities to be licensed and the duration. The proposed price is £1.00 per licence per card the applets are added on to.

There will also be a one-off system development fee. Clients will be able to utilise in-house or external IT resource to achieve this.

Readers

Various types of pc readers are widely available for as little as £16.95 + VAT. Handheld reader will be priced at £113.99 + VAT.

Benefits Summary

- Eliminates access to sites by fake or incorrect cardholders. Peace of Mind – knowing that workers on your construction site are bona-fide competent and safe workers.
- Reduces the number of different cards needed by offering construction employers, homebuilders and clients' the ability to add their own system and information requirements.
- Ability to view occupation health 'Fitness for Task' information if linked to CBH.
- Encourages CPD and provides additional proof of IiP commitment.
- Save Site Supervisor time in manually verifying card authenticity with CSCS's Helpline or on Phoenix online.
- Could provide insurance premium savings
- Cardholders have portable evidence of additional requirements sites may require all on one card.
- Allow CSCS to react to the evolving QCF Framework.

Appendix 1

Secure and Robust Technology

PC Readers *(To get most benefit from the SmartCard, CSCS recommends pc readers are used.)*

When a CSCS SmartCard is placed in a pc connected card reader it will link with a secure online website containing the CSCS database. CSCS data will be accessible only using card readers with appropriate software and cards will only be updatable via the synchronisation service. The CSCS software will be downloadable free of charge from its website. Alternatively, you will be able to purchase it on a CD-ROM as part of a package with a reader from CSCS's preferred supplier. All data transfers between the chip and the card reader will be securely encrypted. There is no ability to write data to the CSCS cards using the readers. The only way SmartCards can be updated is via a pc-connected card reader which will update them with any changes from the CSCS database, via the synchronisation service.

There are many types of PC readers which will be available from CSCS's preferred supplier; however they are also available elsewhere. They will display the cardholder's details and photograph on the computer screen both on and offline as shown below. This will demonstrate that the card is genuine and verify the information printed on the card. The CSCS SmartCard will be a dual interface card, which means it can be read using a contact reader (one where the card is inserted into a slot in the reader), or a contactless reader (one where the card is placed on the outside surface of the reader). Contactless readers cost slightly more but read cards more quickly.

Construction Clients, Homebuilders and Contractors with their own personalised applets will decide, as the licence holder, which construction workers' cards to deploy their applet to. Only the licence holder can read their information on these cards - the system is robust and secure and will only allow license holders to access their own applets.

Handheld Readers

Handheld readers can also be used. These are self contained, battery powered devices that can fit into a pocket. When a genuine CSCS SmartCard is inserted into the reader, the cardholder's name, CSCS number, qualifications, and card expiry date will be viewed on the display. This will demonstrate that it is a genuine CSCS card and will confirm the cardholder's details printed on the card. Only one type of specially configured handheld reader will be suitable for use with CSCS SmartCards. A link to CSCS's preferred supplier will be provided from the CSCS website prior to the introduction of SmartCards.

CSCS Screen Shot

The screenshot shows a window titled "CSCS Details" with a standard Windows interface. The main content area is divided into two sections. On the left is a visual representation of a blue CSCS card. The card features the CSCS logo at the top, a yellow chip, a photo of a man, and the following text: "Mr A Sample", "REG NO: 1234567890", "EXPIRES END: 2009-06-30", and "Skilled Worker". Below the card is a box containing verification information: "The authenticity of this card can be checked by telephoning 0844 576 8777", "www.cscs.uk.com", "Registration No: 1234567890", "NVQ Bricklaying L2", and "Accredited H+S Test". At the bottom of this box is the "constructing better health" logo and website information. On the right side of the window, under the heading "Details:", the following information is listed: "CSCS Card", "CSCS Reg. No: 1234567890", "Issued To: Mr A Sample", "Card Exp.: 2009-06-30", "Card Type: Skilled Worker", "Card Colour: Blue", "Qualifications", "NVQ Bricklaying L2", and "Accredited H+S Test".

CSCS

CSCS CONSTRUCTION SKILLS CERTIFICATION SCHEME

Mr A Sample

REG NO: 1234567890 EXPIRES END: 2009-06-30

Skilled Worker

The authenticity of this card can be checked by telephoning 0844 576 8777
www.cscs.uk.com
Registration No: 1234567890

NVQ Bricklaying L2
Accredited H+S Test

The cardholder has met the Health and Safety awareness requirements as laid out in the CSCS Scheme Booklet

constructing better health
www.constructingbetterhealth.com
tel: 0844 573 7726

Details:

CSCS Card
CSCS Reg. No: 1234567890
Issued To: Mr A Sample
Card Exp.: 2009-06-30
Card Type: Skilled Worker
Card Colour: Blue
Qualifications
NVQ Bricklaying L2
Accredited H+S Test

Appendix 2

Potential Cost Saving examples for Construction Employers

Assuming a Site Supervisor salary of £25K pa + £10K overheads = an average hourly cost to an employer of approximately £17.95 (based on 260 working days per year and 7.5 hours per day.)

	Checking 500 Cards	Checking 20 Cards
Existing System	Using Phoenix Online - each taking 30 seconds (2 per minute) = 4 ¼ hours or £76.29 of Site Supervisor time.	Using CSCS Helpline – Call length 20 minutes (cost approx £1.00.) Site Supervisor time = £5.98 (Total £6.98)
SmartCards and Readers	Each take 12 seconds to check (or 5 per minute) = 1 hour 40 minutes or £29.92 of Site Supervisor time.	Will take 4 minutes to check (even less time if using a contactless system.) = £1.20 of Supervisor time.

Expense Savings Example

The cost of creating specific company cards that link to security and other operational systems can be expensive. Examples have been cited of as much as £25.00 to £30.00 per card when taking into consideration system infrastructure needed and staff members to support the process.

Assuming a construction site with 500 workers	
Carrying a contractor's own specific yearly security card at £20.00 per card = £10,000.	Using a CSCS SmartCard applet at £1.00 per licence or £500 per annum. (Note Purchasers will also need to supply / develop their own software for putting their data into their applets and for reading their data from their applets).