Neil Boon (Chair of the Construction Group) introduced Mr Ray Johnson, Joint Managing Director of Safety Access Limited, which has been in existence for 23 years. The Company is a Health and Safety Training Consultancy specialising in scaffolding and working at height, with offices in Nottingham and also overseas in South Korea and Dubai.

’Scaffolding Safety Update (including NASC TG20:13)’

Ray Johnson BSc, Joint Managing Director, Safety & Access Ltd.

Ray began by explaining that his presentation today would outline the format of the new scaffolding standard and the key benefits and differences over the current Standard. Ray warned that the scaffolding industry is about to undergo the biggest change in working practice in 25 years, with the current Standard, TG20:08, being replaced by TG20:13 with effect from 1 July 2014. The new Standard is fully supported by the UK Contractors Group.

Ray went on to show a number of slides illustrating bad working practices, (photographs are on BHSEA website www.bhsea.org.uk), including examples of poorly erected scaffold installations and instances of workers cutting corners to save time. There were some instances of workers not wearing PPE, and situations where the scaffold offered inadequate protection due to missing guardrails. Some examples illustrated a scant regard for the protection of pedestrians or road users in close proximity to the site. Quite worryingly, there was a slide showing a scaffold company’s MD setting a very bad example to his workers by his dangerous actions whilst working at height.

The Standard SG4:10 ‘Preventing Falls in Scaffolding’ came out in 2000. Ray advised that SG4 is the first document that employers and clients should consult when employing or supervising scaffolders. The Standard includes the requirement to work on a fully boarded platform with double guardrails and covers the wearing and use of appropriate PPE.

Safe Zone
The Safe Zone is a platform of four boards with a guardrail. Workers should wear a harness at all times and be clipped on within 1 metre of the unprotected
Scaffolders must work from the ground level up. The guardrails must be installed before the platform. A point to always remember is that collective fall protection must take precedence over personal fall protection.

**Training**

Scaffolding construction workers should be trained to CISRS/PASMA Standards at either the Basic or the Advanced Level:

- **Basic Level:** Ray explained that 80% of jobs could be carried out by an Operative trained to Basic Level.
- **Advanced Level:** An advanced scaffolder would be required for specialised scaffolding erection.

Trainees and the scaffolders’ labourers must always work under supervision. Ray added that his own organisation will be running courses from 1 July.

**Types of Scaffold**

There are two types of scaffold:

- **System Scaffold:** Which has its own training scheme: System Scaffold Product Training Scheme (SSPTS), which covers the basic and supervisor levels and
- **Tube and Fit Scaffold:** Workers must be qualified for whichever scaffold type they are using.

George Allcock asked whether SSPTS is a competence card. Ray explained that it is essentially a CSCS type card which requires 4 weeks training and an NVQ level 2 or 3.

There is a Scaffold Inspection Course – currently two days for the basic operative and three days for the advanced operative. After 1 July 2014 the basic course will be extended to three days.

**Key causes of accidents**

- Poor design
- Poor construction
- Poor quality materials
- Etc. etc. (see [www.bhsea.org.uk](http://www.bhsea.org.uk))

**European Standard 12811**

One of the biggest problems is in scaffold design, and even when the scaffold is designed, it doesn't necessarily translate into practice. Of course, where a Principal Contractor is appointed, that person should be making sure that the design is put into practice.

The original design standard, BS5973, was written in 1982, and was withdrawn in 2004 and replaced by 12811. 12811 is a European Standard, which didn’t say much (in Ray’s opinion). It is written in ‘Euro Speak and is highly technical. It was written for the European market, which generally uses the System Scaffold. This Standard was less appropriate for the Tube and Fit type, which is commonly used in the UK.
TG20:08 Technical Guidance on the Use of BS EN 12811-1

TG20:08 required scaffold designers to do intricate calculations for the wind loads and there were complex tables used for calculating maximum heights. Many directors consequently demanded that everything be designed.

However, the big problem with design is that in a number of cases, the scaffolder does not have access to the design or interprets the design incorrectly. Often site agents will not manage the project properly or check that the scaffold matches the design.

The Principal Contractor, if there is one, will make sure that the design is put into practice. The necessary expertise may have to be bought in if not available in-house. TG20:08 will be withdrawn in July.

TG20:13 ‘A Comprehensive Guide to Good Practice for Tube and Fitting Scaffolding’

We now have TG20:13 and this represents a complete sea change. It offers a detailed explanation with clear diagrams and examples of scaffolding types. TG20:13 consists of a number of books and some software. Including:

a) Operational Guide
b) Design Guide
c) E-Guide, including software which takes the compliance sheets a bit further
d) User Guide for the individual scaffolder or those managing the site

Ray explained that the new Guides, which have been produced in conjunction with the HSE, cost £600,000 to develop. He added that whilst the set of Guides is a costly outlay for those in the scaffolding industry, (at around £1000 for the complete set), they are nevertheless far clearer, comprehensive, informative and relevant than the previous guidelines. Ray advised that once a complete set is purchased, then it will be possible to order copies of the individual components separately. Companies will have to purchase the whole suite of Guides. It is intended that the Standard will remain valid for at least five years.

Compliance Sheets

There are various Compliance Sheets for different types of scaffold. The Compliance Sheets will enable any scaffold to be erected up to 60 metres high without the need for further professional design. Ray went on to distinguish between what was ‘design’ under the old standard and what is now and has been included within the new standard (TG20:13). If the scaffold is TG20:13 compliant then it is deemed to have been designed.
Upon inspection of a scaffold, the HSE can, of course, ask to either see the Compliance Sheets or the scaffold design.

E-Software

Ray then gave a brief and useful demonstration of the new eGuide. The software is comprehensive, fairly simple to use and assists in the process of
designing the appropriate scaffold for a given situation. If the software subsequently shows that the scaffold is not compliant, then it will be necessary to approach a suitably qualified designer.

The purpose of the software is to generate TG20:13 Compliance Sheets. The user selects the type/nature of the scaffold to be erected and the Guide produces a diagram which gives some specific details for example, the number of ties required etc. There is a facility to select the location, topography, seasonal factors and wind factor etc. The software has been designed so that most people will only need 5-10 minutes to learn how to use it.

**Members' Questions**

Andy Chappell, Honorary BHSEA Member, asked about the ‘cowboys’ and protection for the house holder? How can the house holder be reassured that the Guidance is being followed? Ray’s advice was to make sure that the contractor is an NASC registered member.

Another question raised prompted the response from Ray that the employer/client should be asking for the Compliance Sheet from the scaffolder at the beginning of the work. Following the installation of the scaffold, the employer/client should expect a handing over certificate from the scaffolder.

Following a query from Craig Nevin, Dudley MBC, Ray confirmed that if the scaffold design has to be changed for any reason then another Compliance Sheet must be provided.

Finally, Ray added that the scaffolding checklist previously in existence will become irrelevant after 1 July 2014. (Don’t forget to check BHSEA website [www.bhsea.org.uk](http://www.bhsea.org.uk) for the slides covering today’s presentation and for Ray’s contact details).

Neil thanked Ray for his (usual) excellent presentation, and asked members to show their appreciation in the usual way.