

project safety journal

projectsafetyjournal.com

health, safety and wellbeing in the built environment

Spring 2022



‘Protecting people’s lives’

Safety professionals on
why their careers are so rewarding

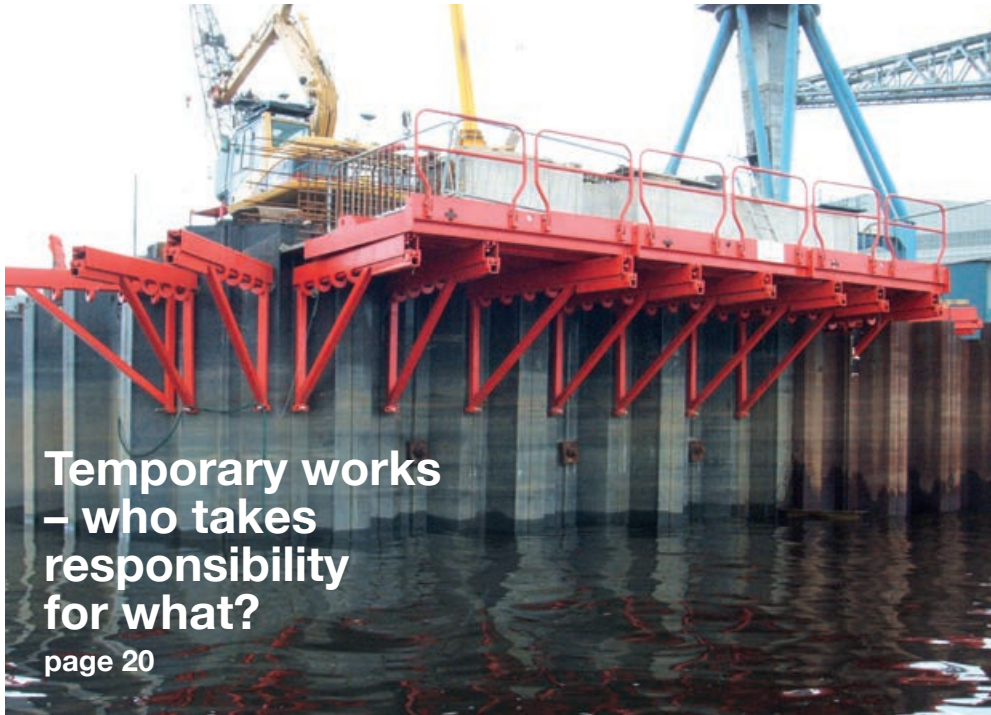


BUILT FOR THIS MOMENT

On the ground and in the sky, the building goes on. The air is buzzing. The team's all here – still digging, lifting; still sawing and shouting. But this time, it's different. Now the teamwork – and the fist bumps – mean a little bit more. Now you're working together like never before. On beams and girders, in hoists and trailers, you're building our future – right now. And we're here to help you do it.

We're Bluebeam. Built for today. Building for tomorrow.

bluebeam.com/uk/now



Temporary works – who takes responsibility for what?

page 20



Sharing expertise with mixed reality

page 18



Should construction test for drugs?

page 16

Inspiring women

page 12

“When it comes to research, everything is new. It’s what makes my role challenging. I have to work with the academic team, making sure that everything is done safely”
Jessy Gomes, UCL



In this issue

- 05 Welcome
- 06 News: Reader survey
- 09 Opinion: Jean Hewitt
- 11 Opinion: Tricia O’Neill
- 12 Cover feature: Inspiring women
- 16 Introducing drug testing
- 18 Digital: Mixed reality and safety
- 20 CPD: David Thomas on managing temporary works
- 26 Legal: Lessons from a fatality on a windfarm site
- 28 HSE annual statistics and prosecutions
- 30 Events: Spring conference

While we aim to use images that demonstrate best practice in this magazine, some are for illustrative purposes only.

Association for Project Safety

5 New Mart Place, Edinburgh EH14 1RW
Telephone: +44 (0)131 442 6600
www.aps.org.uk | info@aps.org.uk

Atom Media Partners

Project Safety Journal is published for the Association of Project Safety by Atom Media Partners.
Atom Media Partners, 26 Bedford Square, London WC1B 3HP
Telephone: +44 (0)20 7490 5595
www.atompublishing.co.uk | eva@atompublishing.co.uk

Project Safety Journal

Editor: Will Mann
will.mann@atompublishing.co.uk
Associate editor: Kristina Smith
kristina.smith@atompublishing.co.uk
Production editor: Sarah Cutforth
Art editor: Heather Rugeley
Advertising manager: Dave Smith
dave@atompublishing.co.uk

Printing

Printed by Precision Colour

Copyright

The contents of this magazine are copyright. Reproduction in part or in full is forbidden without permission of the editor. The opinions expressed by writers of signed articles and letters appearing in the magazine are those of their respective authors, and neither the Association for Project Safety, Atom Media Partners or Project Safety Journal is responsible for these opinions or statements. The editor will give careful consideration to material submitted but does not undertake responsibility for damage or their safe return. All rights in the magazine, including copyright, content and design, are owned by the Association for Project Safety and/or Atom Media Partners.



Fast Reliable Effortless

Wireless connectivity that just works.

As the leading provider to the construction industry, and experts in wireless connectivity, we are confident we can improve your site operations to help you build and sell homes quicker. **Get in touch today.**

Call **0333 900 1026** or visit
ukconnect.com



Welcome

The APS has a new look to share with you this month: we've relaunched our magazine as *Project Safety Journal*, along with its own website. By **Lesley McLeod**

It's time to spring into something new – so, welcome to this fresh edition of *Project Safety Journal*, the magazine free for members of the Association for Project Safety.

With summer just round the corner, APS has news about our next series of webinars. Because we know many of you are actively working and advising on major projects around the country APS will be taking a look at safety and design risk management in infrastructure. This issue, we examine the causes of a fatality on a windfarm site.

On a happier note, why not Save the Day for Wednesday 11 May 2022? APS will be building on the success of last year's mental health day with a deep dive into the Building Safety Bill. The Bill – and all the new regulations that will flow from it – is something that, from our recent member survey, we know matters to you. It's clear you think it is going to have a major impact on your world of work so APS will be responding to your concerns with tailored training and CPD.



Lesley McLeod
Association for
Project Safety

“Remember, you can now take PSJ with you anywhere you go – on your phone, on your laptop or on your tablet

There will be more about this as the new regulations take shape and it becomes clearer what you will all need to do. In the meantime, you can read in the News section all about the other things you had to tell us. Rest assured APS has been listening to what you've said and will try our best to ensure our events and courses meet the needs you have highlighted.

I am pleased you'll also find a nod to International Women's Day in the magazine. Rounding off APS's successful diversity, equality and inclusion season, we've profiles of some truly inspirational women in a feature looking at careers in construction safety. We'll speak about the previously unmentionable with a piece about the menopause. And there's a thought-provoking piece on mental health from Skanska's Tricia O'Neill.

That's not just something for those of our members identifying as women. We all need to care about open access and deepening the

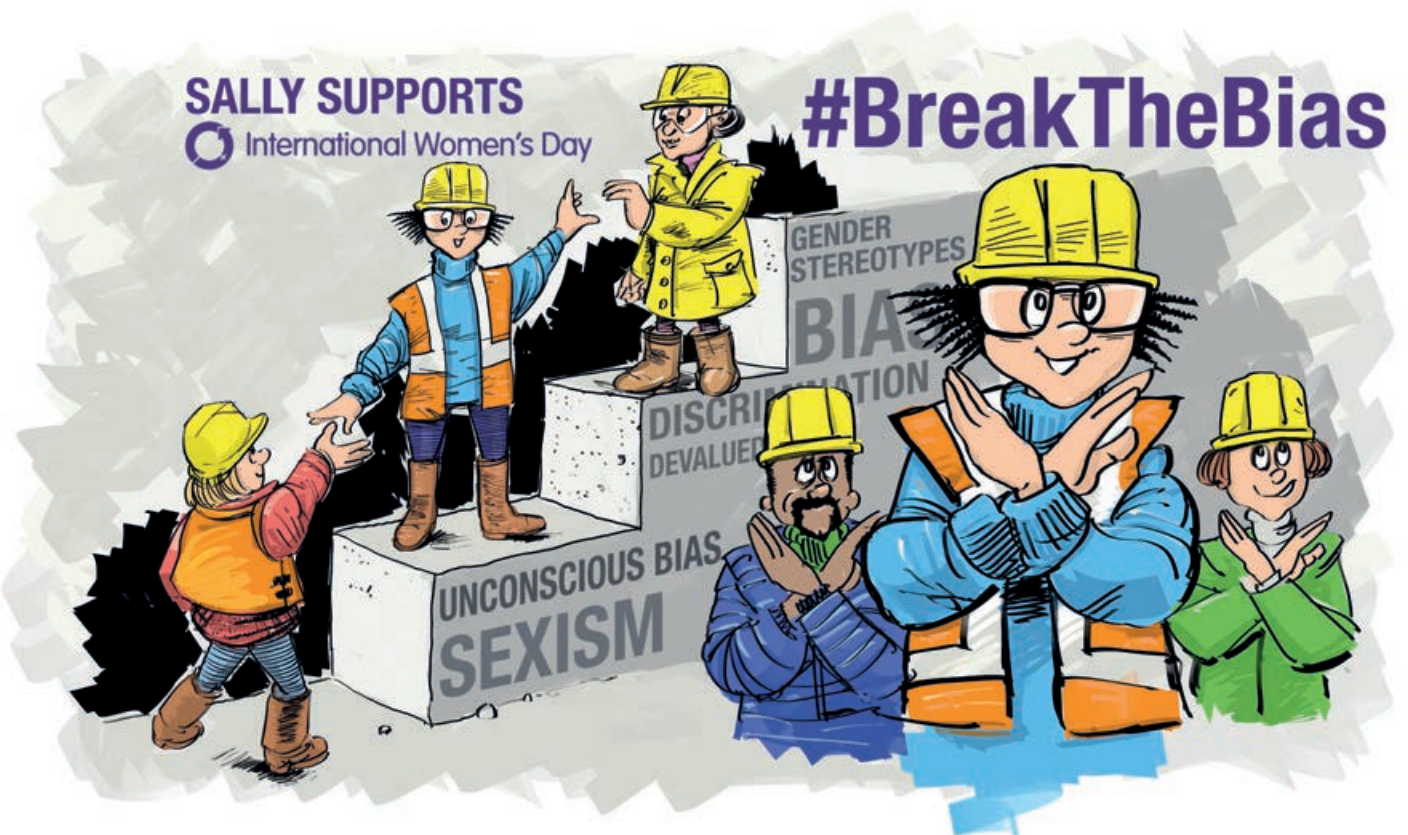
pool of talent on which the industry can draw. Construction needs more colleagues with different skills and insights. They strengthen our teams, improve safety and drive up the quality of our built environment. What's not to like?

Well, maybe, where the workplace crashes into civil liberties. In this edition we tackle one of the most vexed issues head on with an article about drug testing on site. We are also taking a look at how safety can be improved by using augmented reality technology.

I hope you enjoy the magazine. Remember, you can now take PSJ with you anywhere you go – on your phone, on your laptop or on your tablet. You can read it at your desk. The magazine's new website is now live – projectsafetyjournal.com – and I'd encourage you to check it out.

Our new CPD self-test is on there too so give it a go – it ties into an excellent piece on temporary works. Please let us know what you think. ●

Lesley McLeod is CEO of the Association for Project Safety.





Half of APS members ‘unsure’ how to plan for Safety Bill

Survey of safety professionals also reveals concerns that tight programmes are leading to increased design and construction risks. By **Will Mann**

A clear majority of Association for Project Safety (APS) members believe the looming Building Safety Bill will be the biggest issue affecting their roles over the next decade – but 50% say they are ‘unsure’ how to plan for it.

Those are among the key findings of a survey of the APS membership to mark the relaunch of the association’s magazine as *Project Safety Journal*.

Asked what issues will have the biggest impact on their jobs over the next five to 10 years, 61% cite the

looming Building Safety Bill. Only 8% say they are ready for the Bill while 28% say they know what they need to do.

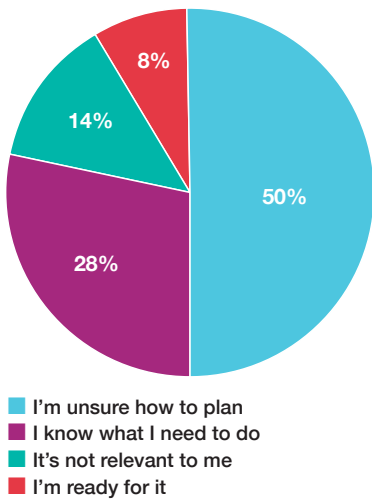
And even though the new Bill is currently passing through parliament, APS members are worried about attitudes to safety in the wider industry. Asked about the biggest safety challenges faced by construction projects, 60% say that ‘insufficient time is given to design and planning phases’. A further 44% say ‘construction programmes are too tight’.

Above: Building safety is considered the area where health and safety professionals need to upskill most

Other issues expected to have an impact on the roles of health and safety professionals over the next decade include skills and supply chain capacity (picked by 49% of respondents), retrofit and low carbon technology (48%) and digitalisation (47%).

Nearly a third (31%) of those surveyed are concerned about the competence and skills of designers, with 28% saying the same about construction management professionals. Unsurprisingly, building

The new Building Safety Bill is currently passing through parliament. Which of these is most true for you?



Views of APS members

“Clients are not willing to allocate resources to health and safety.”

“There is a lack of health and safety awareness amongst all project participants from the client through to the trades.”

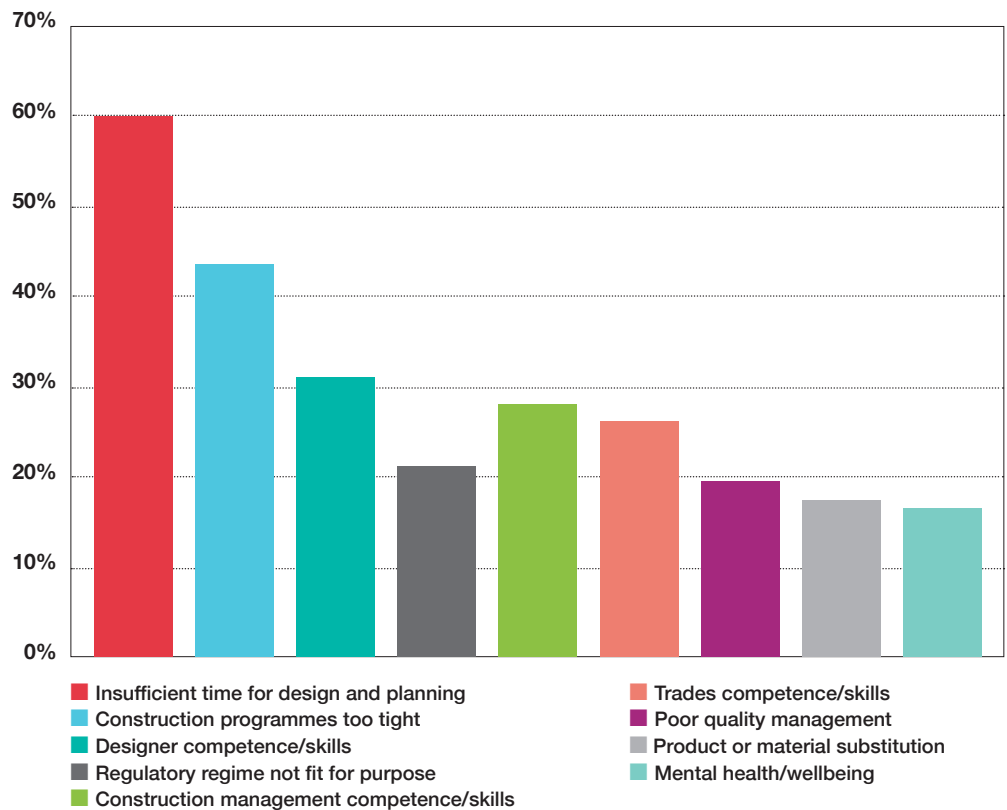
“Unrealistic bid prices lead to bad decisions from the start of a project.”

“There is a lack of competency and skills among some principal designers.”

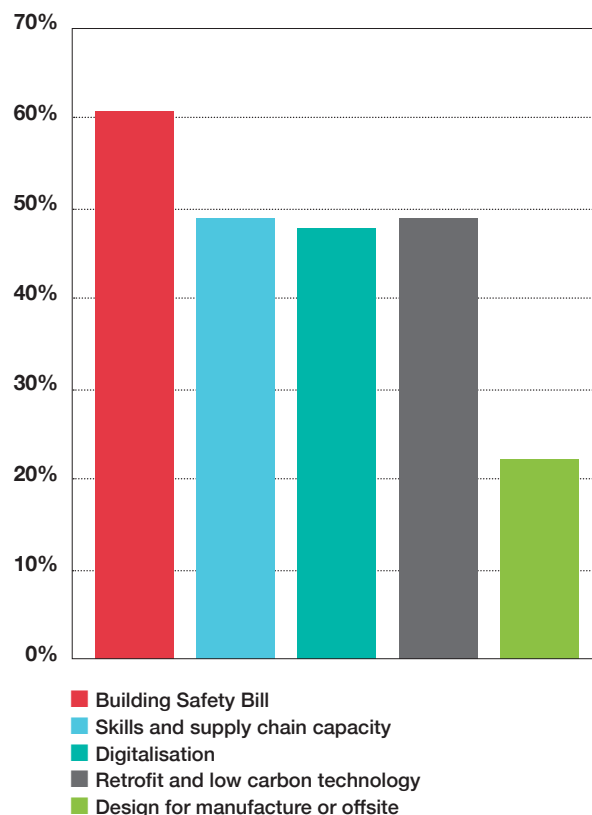
safety is considered the area where health and safety professionals need to upskill most (70% of respondents picked this option). Other skill priorities cited include retrofit and low carbon technology (chosen by 43%), digital tools and processes (also 43%) and general legal issues (41%). Another 28% feel that health and safety professionals could improve their softer skills in areas such as teamwork and leadership.

Some 138 APS members responded to the survey in January 2022. ●

What is the biggest safety challenge projects face today?



What will have the biggest impact on your role in the next 10 years?



70%

Say health and safety professionals need to upskill on building safety

60%

Say there is insufficient time given to design and planning on projects

47%

Say digitalisation will have a big impact on their roles in the next decade

8%

Say they are ready for the Building Safety Bill



DIGITAL CONSTRUCTION WEEK

EXCEL LONDON
18-19 MAY 2022

INNOVATION IN THE BUILT ENVIRONMENT

Register to attend DCW

Join innovators from across AECO to
debate, discuss and share ideas to help
build a more digitally enabled industry.

Discover the latest technology to help you on the journey towards digitalisation

Learn from expert speakers and improve the way you work

Network with your peers to share ideas and experiences

REGISTER FOR FREE

www.digitalconstructionweek.com

@DigiConWeek Digital Construction Week @DigiConWeek

Organised by
diversified
CONSTRUCTION GROUP

HEADLINE PARTNERS



GOLD SPONSORS



Designing for the menopause

Ahead of International Women's Day on 8 March, Buro Happold's **Jean Hewitt** argues the built environment sector must do more to address the needs of menopausal women



Jean Hewitt
Design consultant
Buro Happold

Menopausal women are the UK's fastest growing workforce demographic. Typically occurring between the ages of 45 and 55, symptoms of the approaching menopause unfortunately very often align with the time when so many women are reaching the level of experience and potential for top leadership roles.

Common symptoms can include fatigue, anxiety, hot flushes, alongside moments of 'brain fog' and difficulty concentrating. Although not everyone experiences these symptoms severely, studies show that a significant three in five say this has negatively impacted them at work. An astonishing one in four have considered leaving their jobs.

For far too long, menopause has been considered a taboo topic but it's now time for businesses and designers of the built environment to stand up and take note as things are finally starting to change. We've recently seen the launch of a parliamentary inquiry into the workplace treatment of women experiencing menopausal symptoms, plus the recent success of a campaign to reduce the cost of repeat prescriptions for women on hormone replacement therapy (HRT) to help manage symptoms.

Efforts such as these have brought the issue into the wider public domain and led to a growing number of discussions about the impact

“Hot flushes are common symptoms, so appropriate ventilation and humidity control are important

menopause and other hormonal changes, such as PMT, IVF, gender transitioning and some endocrine conditions, can have.

There are plenty of employee-focused initiatives that can help, from running management training workshops and generally raising awareness, to having policies and guidance in place that allow adequate and flexible breaks. Adjustments to employees' working hours to avoid congested travel arrangements can also have a positive impact.

Rethinking workspace design

It's important to consider the physical environment and how this can be made more comfortable, as symptoms can be experienced for many years. This can mean rethinking how our workspaces are designed, built and operated. For instance, as hot flushes are one of the most common symptoms, appropriate ventilation and humidity control are important, as well as access to suitable shower or wash facilities.

Having a calm restorative place to momentarily escape if symptoms become too much is beneficial, as are general features aligned to wellbeing such as biophilic design. Engaging with stakeholders early to incorporate their needs is essential, as designing in rather than retrofitting is typically more convenient and less expensive.

Workplaces have a responsibility to provide an environment where employees can thrive and flourish. We can all play a part in improving the places where we work and designers of the built environment itself should be at the very heart of this. ●

Jean Hewitt is senior inclusive design consultant at Buro Happold.





UCEM

UNIVERSITY COLLEGE
OF ESTATE MANAGEMENT

No. 1

provider of online
surveying degree
apprenticeships

BUILT FOR TALENT

- Improve retention
- Increase diversity
- Attract new employees
- Utilise levy-funding

Chartered Surveyor

undergraduate and postgraduate routes available

Building Control

Construction Site Management

ucem.ac.uk/employer-apprenticeships

businessdevelopment@ucem.ac.uk



Changing mindsets

It is five years since Skanska UK began its mental health awareness journey. **Tricia O'Neill** explains how the culture of the group has changed – and what the next steps are

It's easy to say "Let's talk about mental health". But less easy to do it.

That's why, when we started our journey towards a better mental health culture back in 2016, we decided not to train mental health first aiders immediately. If people don't feel able to talk about their mental health, those vital first conversations with first aiders are far less likely to take place.

Instead, we focused first on mental health awareness training, delivering half-day sessions to as many people as we could. Initially, we offered the training to anyone who wanted to do it. Then, three years ago, we upped the ante by making awareness training one of our key performance indicators



Tricia O'Neill
UK head of health risk management, Skanska

Top: Skanska mental health first aiders display a sticker to identify them to workers who need help

(KPIs) for the executive team and senior managers. Today, nearly 60% of our 3,300 UK staff have been through mental awareness training and we have a network of 165 mental health ambassadors, trained with help for Mental Health First Aid (MHFA) England.

We've also been working to include our supply chain in this culture change. Poor mental health is endemic in construction, given the demographic, the peripatetic nature of the work and long hours on site.

Around 250 people from our supply chain, mostly HR and senior directors, attended training courses, which we delivered to them free of charge. For SMEs in particular, signposting to resources has proved one of the most useful elements of this training.

When it comes to changing culture, strong leadership is as important as building capability and resource. Our CEO Gregor Craig has been a strong advocate, talking about the wider impact of mental health on his own family and using his platform as chair of the CBI Construction Council to raise awareness.

Just over five years along our journey, we see that the culture is changing. Whereas before, conversations about mental health were few and far between, today they are commonplace. For example, we start meetings with a 'check-in' and it's not unusual for

“Today, nearly 60% of our 3,300 UK staff have been through mental awareness training and we have a network of 165 mental health ambassadors

people to mention the fact they've had counselling that week, are experiencing personal problems or that they are feeling low.

Now our plan is to increase our network of mental health first aiders. With the foundations laid, we feel that they can have far more impact on our 50-plus construction sites and in our offices.

Heightened awareness of the things that can cause or exacerbate mental ill health is feeding into the way we plan and tender for projects. It's important that we communicate to our clients how our policies around health and wellbeing translate in practical terms. One of the biggest risk factors is fatigue – reducing this risk requires proper planning and proper resourcing.

There is still plenty more change to come – for Skanska, its supply chain and its clients. At least we can talk about it now. Let's keep talking and keep changing. ●

Tricia O'Neill is Skanska's UK head of health risk management.

Inspiring women

In a combined celebration of National Careers Week and International Women's Day, **Kristina Smith** spoke to four professionals with a passion for health and safety – and for encouraging others into the industry they love

The caring disruptor

Margaret Sackey, capital projects health and safety manager, University College London

Margaret Sackey says that she came into health and safety “by accident”. But, having listened to her story, there's another way to look at her transition from civil engineer to health and safety expert: she's a natural leader who started instigating safety regimes because it made sense. And, because she did it so well, she made herself a sought-after commodity.

“I like to help and come alongside people to improve health and safety compliance,” says Sackey, when asked what she most enjoys about her role.

Her drive to help people, inside and outside work, is perhaps the reason why she has succeeded in establishing new systems and procedures in each of the organisations for which she has worked. After Lambeth Borough Council, she was headhunted by the newly established Transport for London and more recently University College London (UCL), where she is health and safety manager for capital projects.

Sackey's health and safety journey began when she encountered a potential health hazard – pigeon guano – as she was crawling on scaffolding beneath Vauxhall Bridge, overseeing a refurbishment project. As a result, she found out about risk assessments and went on to learn about the new Construction (Design and Management) (CONDOM) regulations – later to gain the more palatable acronym of CDM – when they were introduced in March 1995.

At Lambeth Council, Sackey was pushed forward to do a presentation to the Health and Safety Executive (HSE) about how she was applying the CDM regulations on one of her projects. “I became known as

CV

- Headhunted to bring best-practice procedures to UCL's £1.7bn capital works programme in 2018

- Headhunted as senior health and safety manager at the newly formed Transport for London (TfL) in 2001, unifying practices and procedures from six different organisations

- Worked at the London Borough of Lambeth for 17 years, starting as an assistant project manager overseeing works on highways and highway structures



Mrs CDM throughout the local authority," she says.

Working with the council's health and safety manager, she rolled out a training programme to get all the council's employees up to speed across all its directorates where construction work was under way.

Sackey seems to relish the task of upgrading safety procedures and practices. "It's all about joining the dots," she says. "We all have strengths and weaknesses." It's about playing to people's strengths, she continues, and providing the right sort of training to help address weaknesses.

Sackey has been at UCL since 2018, joining the university four years into its 10-year £1.7bn capital works programme. "They wanted someone to bring in best practice, to improve the procedures, working alongside client managers, internal and external project managers, site-based teams, maintenance and operations staff," she explains.

One of her favourite tasks is delivering monthly UCL briefing and training sessions for internal and external people: client project managers, senior directors, designers, contractors. She has always been very active through the Institution of Civil Engineering (ICE), her "second home" as a young engineer thirsty for information. Now a fellow, she sits on the ICE's health and safety expert panel, which she chaired for two consecutive terms. She was also a member of the ICE's working group which produced the *In Plain Sight* report in 2018 in response to the Grenfell disaster.

With the approach of the Building Safety Bill, Sackey is busy preparing for yet another disruption, assembling training programmes to ensure UCL and its stakeholders are ready for the repercussions. "Don't wait until it happens. Even if you don't know what all the detail is going to be, start planning now," she urges. "It's a juggernaut, coming down the hill." ●

“They wanted someone to bring in best practice, to improve the procedures, working alongside client managers, internal and external project managers and site-based teams

Margaret Sackey, UCL



From A to Z

Beverley Sexton, health, safety and training manager, Jackson Jackson & Sons

Bev Sexton is sometimes called 'Alphabet Bev' due to the impressively long list of letters after her name: Dip2.OSH, CMIOH, FCIOSH, RMaPS, FRSPH, MIIRSM, CEnv, MIEMA, DipDEA, DipGDA, CertMgmt (Open). But the nickname could apply equally well to the long list of roles she carries out for Jackson Jackson & Sons, a Rochdale contractor.

After 18 years as health, safety and environment manager with Rank Brimar, a manufacturer of cathode ray tubes for the defence industry, and 11 years with Oldham Training Centre as health, safety and environment manager, Sexton joined Jackson in 2007.

She soon added 'quality' onto her initial responsibilities for health, safety and environmental management and has a string of other responsibilities including training, overseeing an apprentice programme, data protection officer, safeguarding officer and mental health support manager. Recently she trained as a retrofit co-ordinator, as she had already qualified as a domestic energy assessor under the old 'green deal' scheme.

One of her earlier tasks at Jackson was to work with every employee in the company – all 58 of them – to gain NVQs so that they could then go on to get CSCS (Construction Skills Certification Scheme) accreditation. Having started to carry out some HR tasks, such as sending out contracts to new employees, she went on to gain an HR level 4 qualification.

CV

● **HSEQ manager, Jackson Jackson & Sons since 2007**

● **HSE manager, Oldham Training Centre for 11 years**

● **HSE manager at Rank Brimar, manufacturer of cathode ray tubes for the defence sector, for 19 years**

“You get a bit of flak, but it is very rewarding, because you know you are helping to protect people's lives

Bev Sexton, Jackson Jackson & Sons

"I have to do CPD as a member of various professional bodies, so I looked for courses that counted as CPD as well," she explains.

With a teaching qualification gained at Oldham Training Centre, she is as enthusiastic about giving training as about receiving it, conducting many in-house training courses. As well as being cost-effective, in-house training is more immediate and can respond to business or individual needs, says Sexton. "In 2019, I successfully got Jackson's training academy approved by the CITB," she adds.

The best part of Sexton's job is visiting projects: "I enjoy going out on site, meeting the lads. I have a very good working relationship with the people on site."

Sexton has seen attitudes change over her 40-plus years in the industry. "I trained in a time where they did not take women very seriously," she says. "On my very first training course for NEBOSH, the instructor said: 'Health and safety is not a woman's job.' He wasn't there the next day." She and two other women on the course had reported back to their managers who had complained to the college.

Even when she joined Jackson, Sexton encountered some prejudice. "I remember my early days. Some people were saying 'She's a woman. What does she know?' I soon showed them..." Those experiences mean she is keen to help women into the industry, through Women in Construction, as a STEM ambassador and working with a local college and school.

Recently, Sexton has taken on an apprentice who will eventually take on health and safety management duties under her watchful eye. She believes apprenticeships are a good route for anyone looking to get into the industry and would encourage young people to pursue a career like hers:

"It's a very tough career but it's very rewarding," she says. "You have got to be able to do things with employees that they may not like. You get a bit of flak, but in the end, it is very rewarding, because you know you are helping to protect people's lives." ●

Rising star

Jessy Gomes, technical safety systems lead,
Here East campus, University College London

Jessy Gomes is both an employee at University College London and a PhD student there. At the university's Here East campus she is technical safety manager, overseeing the health and safety aspects of research on technology such as robotics, drones, biotechnology and bridge testing. In her PhD, she is researching how health, safety, wellbeing and the environment in construction could

work as an integrated system – rather than independently in silos.

Gomes began her career in sustainability-led roles in her home country of France. When she moved to the UK in 2012, the first opportunity she came across was in construction, where she felt at home because her father worked in the industry. Learning both English and the CDM regulations fast – and on the job – she

CV

● **Currently technical safety systems lead, Here East campus, UCL**

● **2012-2020, health, safety and wellbeing and CDM consultant for consultancies and clients including Goldman Sachs, EDF Energy, RBS and NHS**

● **In 2012 came to UK and worked for HSE in health and safety legislation research**

● **2007-2010, quality and sustainability roles for French firms Enedis, Autoliv and Agrana Group**

worked for two consultancies before moving to Mace Group, where she was selected to attend the company's executive and leadership programme at Imperial College London.

Unashamedly ambitious, Gomes won the Best Woman in Health and Safety category in the Women in Construction & Engineering Awards in 2021 and one of Health and Safety at Work's 40 under 40 achievers in 2018. She has been an IOSH council member since 2019. Gomes is frank about the challenges she faces, as someone who doesn't fit the traditional construction mould in the UK and explains that becoming a parent created even more barriers. (She talks about this in her recent TEDx talk.)

Gomes moved to UCL in 2020, a role which requires brand-new procedures – for the brand-new technology being developed there. "It's a building that is both an education and research facility, with external partners working alongside academics," explains Gomes. "We have different departments from UCL all under one roof, with ground-breaking research that interfaces between two or more disciplines. It could be nanotechnology, using robotics, for instance.

"When it comes to research, everything is new," she continues. "It's what makes my role challenging. I have to work with the academic team, writing risk assessment, method statements, making sure that everything is done safely."

Although Gomes' current role is more academic than construction, she still loves the industry – and may return to it when the right opportunity arises. "I don't want to sugar-coat it: it's hard. Even in 2022, you can still walk into a room and feel uncomfortable. But it's also rewarding." ●

“When it comes to research, everything is new. It's what makes my role challenging. I have to work with the academic team, making sure that everything is done safely

Jessy Gomes, UCL





WWW.JAMESBASTABLE.CO.UK

Preparing for a new era

Marisa Firkins, managing director, Safety Forward

There can't be many health and safety consultants with the same background as Marisa Firkins. Now managing director of consultancy Safety Forward, Firkins was previously an investigator with the Serious Organised Crime Agency.

Some 12 years into her health and safety career, and now employing six people in a business she started in 2014, Firkins firmly believes that the industry needs people with different backgrounds.

"One of the best things about my job is bringing new people into the health and safety industry, particularly

into construction," she says. "I think it's been recognised as a career that you can do without having to have had 25 years of experience... you can come in as a fresh person. It's time for a change."

As an ambassador for Women in Construction, Firkins relishes the chance to bring more women into the male-dominated sector. In fact, if you look at her team line-up, there is just one man on the staff.

Firkins made the switch from investigator to health and safety adviser due to personal reasons: her husband was ill and she wanted to

"I was risk assessing everything from people scaling down buildings, dealing with pirates to working on construction projects on our estate

Marisa Firkins, Safety Forward

CV

- **Founded consultancy Safety Forward in 2014, which now employs six people**

- **Health and safety adviser at National Crime Agency for four years**

- **Between 2003 and 2010 she was an intelligence officer with the National Criminal Intelligence and then an Investigator at the Serious Organised Crime Agency**

reduce the travelling her role required. Having trained for her NEBOSH general certificate at night school, she applied for a new role that came up with the agency which required the rare combination of operational experience and health and safety competence.

It was a varied role. "I was risk assessing everything from people scaling down buildings, jumping into ships, dealing with pirates to people working on construction projects on our estate," she says.

After five years, she was able to take redundancy. A chance conversation with a friend in the pub encouraged her to set up on her own as a consultancy.

Today her job is a real mixture: managing and mentoring the people on her team, visiting clients to advise them on strategy, delivering events or training for clients.

"When we bring a client on board, I talk to them about what they are hoping to achieve, what their goals are," says Firkins. "We could be working out an improvement plan to improve things like the safety culture or putting management systems in place."

The Covid pandemic, of course, brought lots of work Safety Forward's way. It also shone a bright light on companies' real attitude towards their people, says Firkins.

"I don't think there's ever been a time when employers had such a chance to show their duty of care," she says. "It sorted the wheat from the chaff."

Greater responsibility and strong governance will be a strengthening theme for companies in coming years, predicts Firkins.

"A lot of company directors or owners, there is a lack of accountability around health and safety," she says. "It's delegated down the line, diluted. Changes ahead, off the back of Grenfell, will mean that people are held more accountable for leadership and decision-making in their businesses around health and safety." ●

Reducing risk through drug testing

Should construction projects test for drugs? And what are the options if they do? By **Kristina Smith**



As the government announced a crackdown on drug dealers and users in December last year, Solihull firm Hayfield Homes was preparing to start random drug testing. The first batch of tests took place in January on the first day back after Christmas.

"We have a duty of care, not only to our own employees, but to everyone who works on site, our customers and people who visit," says Hayfield's head of health and safety, Andy Green. "We want to ensure that our sites are as safe as possible."

There's a financial incentive too, says Green: "It brings down our insurance, although not by a massive amount."

Though historically only certain sectors of the construction industry – rail, aviation, nuclear – have carried out drugs and alcohol testing, more mainstream companies like Hayfield are now considering it too.

"Interest has increased massively in the past 12 months," says Suzannah Robin, sales and training director at AlcoDigital, which provides advice, training and equipment for drugs and alcohol testing.

There are several reasons why companies could be more likely to consider testing, including the influence of large projects such as HS2, encouragement through industry accreditation schemes such as the Fleet Operator Recognition Scheme (FORS), an increasing focus on wellbeing – and the introduction of easier and cheaper tests.

Fear of litigation will also be a factor, says Robin: "There is more and more of a suing culture. That's going to be the thing that makes companies need to protect themselves."

Ongoing problem

Recreational drug use is widespread in the UK. Government statistics on drug use in England and Wales for the year ending March 2020 show that one in 11 adults aged 16 to 59 had taken drugs in that period, rising to one in five for 16 to 24-year-olds.

The statistics also show that the lowest earners tend to be the most prevalent drug users, with use rate in 16- to 59-year-olds rising to one in seven. "The demographic and the mindset of people that work in the industry means that we find high levels of use," says Robin. Poor mental health and drug or alcohol abuse can often go hand in

9%

Government statistics on drug use in England and

Wales for the year ending March 2020 show that one in 11 adults aged 16 to 59 had taken drugs

hand and some studies have suggested that Covid has increased drug use among those already struggling.

The law does not require construction projects to test for drugs or alcohol, although employers do have a duty under the Health and Safety at Work etc Act to ensure that workplaces are safe. And from 2015 it has been illegal to drive under the influence of drugs in England and Wales.

A 2016 survey by the Considerate Constructors' Scheme showed that 59% of the 1,200 respondents thought the industry had a problem with drug and alcohol misuse, 35% had noticed colleagues under the influence of either and 25% admitted it had affected them at work.

Although it seems obvious that someone who is under the influence of recreational drugs or even high levels of certain prescription drugs, such as codeine, is more likely to take risks which could lead to accidents, evidence to back this up seems thin on the ground. "Random testing normally finds more drugs misuse than testing following an accident," says Green, who joined Hayfield two years ago.

However, introducing testing is likely to deter some people from using drugs recreationally – or encourage them to move on. "Workplace testing is about setting up an effective deterrent to people turning up to work not being fit for duty," says test provider Intelligent Fingerprinting's sales and marketing director Dr Paul Yates.

This has certainly been the case for Hayfield, says Green: "We have had in the past two employees that we suspected had drug use issues. Both left of their own volition when it was mentioned we would bring in an external tester."

Advances in technology

Where once drug testing required qualified medical staff to take blood samples and laboratories to analyse it, recent developments mean in-house testing is possible – and much more affordable. According to Robin, drug tests conducted by a specialist provider can cost £300-£400 per test. Hayfield is using a system from Intelligent Fingerprinting which cost between £4,500-£5,000 for equipment and tests that will last at least 12 months.

Introducing a new regime should involve communication and consultation with the workforce, says Robin. That should also allow people to come forward and self-declare if they are abusing a prescription drug.

There are various options for the timing and type of testing. Screening new employees or new starts sends out a strong "zero tolerance" message, says Robin, with random testing among the workforce reinforcing that message. Companies should also consider testing after an incident to check whether drugs or alcohol played a part, she advises.

Then there is the slightly trickier area of cut-off levels. For alcohol, there could be different limits depending on job roles. For drug tests, different types of test detect different windows of drug use.

Urine and saliva tests are the most commonly used for workplace testing. Urine tests can show drugs taken over the past few weeks but don't show any drugs taken in the previous two to four hours, as they take time to work through someone's system, explains Robin. Saliva tests show what's in someone's system at that time, and up to 48 hours before.

The newer technology of fingerprint testing launched in 2018 by Intelligent Fingerprinting (see box) also shows what is in someone's



“We have a duty of care, not only to our own employees, but to everyone who

works on site, our customers and people who visit

Andy Green, Hayfield Homes



“Workplace testing is about setting up an effective deterrent to people turning

up to work not being fit for duty

Dr Paul Yates, Intelligent Fingerprinting



“There is more and more of a suing culture. That's going to be the thing that

makes companies need to protect themselves

Suzannah Robin, AlcoDigital

system at the time, but has a shorter 16-hour detection period which appealed to Hayfield. "What we don't want to be doing is targeting somebody whose recreational drug use is more than 16 hours before they come to site. You have got to be fair and reasonable," says Green. "If someone goes out for Sunday lunch and has four pints, the alcohol will be out of their system before they start work on Monday."

As for what to test for, the usual suspects are: cocaine, cannabis, opiates such as heroin and methamphetamines including ecstasy. And if any should be detected, a company's policy should set down clearly what will happen afterwards. Hayfield would work to rehabilitate them through its health provider, Axa, says Green. "It's not adversarial, it's to find out where people are at, and how to help them," he says. ●



What else could a fingerprint tell us?

This was the question that Professor David Russell asked himself over a decade ago. Russell first experimented on his students at the University of East Anglia, successfully detecting which of them were smokers because they had cotinine – produced when the

body metabolises nicotine – in their fingerprints.

From these initial experiments, the company Intelligent Fingerprinting was born. In 2018, it launched a type of lateral flow test that detects for recreational drugs: users press their fingers onto

a pad and if any drugs or their metabolites are present, the tell-tale line will appear.

Looking into the future, the company's aspiration would be to use a similar test to screen for more general health issues such as cancer or heart disease biomarkers.

Can mixed reality improve site safety?

Bachy Soletanche is using mixed reality to bring safety expertise to its major projects around the world. But new technology can bring new safety challenges too. By **Kristina Smith**



According to Stuart Brooks, HSSE manager for Bachy Soletanche International, visibility on site is a core ethos.

“We spend a significant amount of time on projects with the teams,” says Brooks.

With projects that range from deep metro stations to major rail projects to ports to dams, Bachy Soletanche’s teams are invariably working with contractors from multiple countries – all with a different safety culture. The impact of this dynamic is difficult to assess from afar, explains Brooks. However, when Covid-19 pandemic put paid to international travel, site visits became an impossibility.

Brooks turned to technology: ‘extended reality’ headsets which would allow managers from anywhere in the world to visit sites virtually. The sets are already proving useful from a safety perspective – and Brooks hopes that they will provide other benefits too.

The tech

Bachy Soletanche purchased eight RealWear HMT-1 headsets which it distributed to sites in New Zealand, Singapore, Canada, US and Ecuador – as well as retaining two within the safety team.

The headsets combine a camera and microphone on a horizontal headband that fits round a hard hat, with a small screen at

“The wearer can see what they are transmitting on the small screen, and by voice command can change the view to display the screen of the person they are communicating with

The RealWear HMT-1 headsets allow managers to visit sites virtually

A headband with a camera and microphone is fitted to the user's hard hat, with a small screen attached at the end of a boom



the end of a boom which sits on the cheek below the user's dominant eye. The wearer can see what they are transmitting on the small screen, and by voice command can change the view to display the screen of the person they are communicating with.

Introducing new tech in lockdown meant that training and persuasion had to be done from a distance too – rather than in person. “We have had to identify specific champions and train them remotely,” says Brooks. “It’s a battle to get people to change. They automatically put barriers up.”

Bachy Soletanche also faced technical problems, mainly with connectivity which varies hugely from site to site; some of the projects are in very remote locations. At first, they used Teams with the headsets but the quality of calls was intermittent, says Brooks.

He turned to SimplyVideo. “They have a tool which can work with different levels of bandwidth, depending on the quality of the call,” he explains. SimplyVideo also advises on points of presence (POPs) – which satellites or device the teams should be using to communicate between themselves with.

Now that Bachy Soletanche is beginning to get a handle on the connectivity challenge – with support from SimplyVideo – managers from around the world can drop in virtually on the company’s international sites. Calls can be recorded and aspects of them shared with other people to ask for feedback or advice, says Brooks. For instance, the tender managers based in Bachy Soletanche’s Paris office have huge levels of experience which can now be transferred to teams wherever they are in the world.

There have already been safety wins, says Brooks. He gives the example of a site in Singapore where the rebar cages for piles were being spliced from an elevated platform. Although the platform had good edge protection, there were no toe boards which meant that there was the risk of toes being bashed by the cages as they were lowered down. This was spotted by someone remotely and rectified within hours.



“We have had to identify specific champions and train them up remotely. It’s a

battle to get people to change
Stuart Brooks, Bachy Soletanche

New hazards?

Just as talking in the car, even on hands-free, is distracting, surely walking round site in a headset puts the user at risk? Experiences from the manufacturing sector certainly suggest that this is the case (see box).

With the screen for the RealWear headset below the wearer’s line of sight – as opposed to right in front of one’s eyes, as in a HoloLens headset or similar – Brooks assesses the risks related to using the headset on site as similar to those of walking round using a mobile phone. Users have to be aware and responsible, he says.

“Yes, there are risks but, as in every aspect on site, they can be managed effectively with simple initiatives at site level,” he says.

Brooks hopes that the use of the technology for virtual site visits will soon expand. From a safety perspective, it could be used to reinforce Bachy Soletanche’s 20-20-20 fatal risk reviews for dangerous environments such as tunnels: every 20 minutes, stop for 20 seconds and assess any risks within 20 feet. He also thinks that local teams will start to find new uses which demonstrate very tangible returns on investment:

“We are at the start of our journey,” he says. “I can see the tool developing into a mentoring tool or an operational tool that can be used by the plant and equipment managers, or a quality control and assurance tool for the quality team.” ●

Lessons from aerospace

Research and experiences from manufacturing show that the use of mixed-reality headsets can distract users

Michael Lewis, now director of engineering at virtual reality (VR) training provider Edify, researched the impact of mixed reality when he was at Sheffield University, looking at how workers on a standard assembly process performed with and without Microsoft HoloLens headsets.

“We did find that there was a difference between those wearing the HoloLens and those that were not,” says Lewis. “It makes a difference to how people perceive the environment around them.”

Lewis flags up the experience of Boeing, which is well advanced with the use of headsets and mixed reality in its BARK (Boeing Augmented Reality Kit) programme. Boeing has set up its system so that its augmented reality devices switch off as soon as the user starts to move.

“We turn all the displays off whenever the user is walking, especially on head-worn designs. You don’t want any distractions in a factory environment where there could be hazards around,” says Paul Davies, technical fellow – immersive technologies at Boeing, in a YouTube video.

The same logic must apply to a construction site – perhaps even more so, since hazards move and change.



Temporary works: not just the contractor's issue

In the first of a new series of CPD articles, **David Thomas** takes us through temporary works: who is responsible for what?

Temporary works are not purely something that a contractor must address. Permanent and temporary works designers must communicate to ensure that structures and buildings can be constructed safely.

This is not a new message. Nearly 50 years ago, the Bragg Report on falsework, commissioned by the government in 1973 and published in 1976, was saying just that. Here's an extract:

"It is obviously essential that good communications are established as quickly as possible between the designers of the permanent works and those designing the temporary works. This will ensure that time is not wasted in devising a method

of construction that is subsequently found unacceptable.”

Bragg’s observations could be summed up in the ‘3Ps’ – people, process and product.

Although the contractor, through the contract, is responsible for the construction itself, the role of the permanent works designer is vital – as is the role of the contractor’s temporary works coordinator and the principal designer (PD), who should be playing a central role.

What are temporary works?

In simple terms, temporary works can be said to be those parts of a construction project that are needed to enable the permanent works to be built.

BS 5975: 2019, *Code of practice for temporary works procedures and the permissible stress design of falsework* (2019), is the nationally accepted standard for the procedural control to be applied to all aspects of temporary works. It represents ‘contemporary good practice’.

The code of practice does not contain a concise definition of temporary works, but states that it can be described as providing an ‘engineered solution’ that is used to support or protect either an existing structure or the permanent works during construction (Clause 5.1.1.1).

The management of temporary works to BS 5975

BS 5975: 2019 gives recommendations and guidance on the procedural controls to be applied to all aspects of temporary works in the construction industry. It provides three fundamental principles for controlling temporary works (Clause 5.1.1.10):

- All organisations have a duty to manage and control their work – and not just contractors. A senior person should be appointed, defined by the term ‘designated individual’, who should be appointed to prepare and manage the organisation’s procedures.
- The contractor is responsible for building the permanent works, and that includes any associated temporary works needed to construct the project.
- One person should take overall responsibility for managing the temporary works – the temporary works coordinator. First established in the Bragg Report, they should be appointed by the principal contractor (PC) and are referred to as the PC’s temporary works coordinator.



David Thomas,
Temporary Works
Forum (TWf)

Control measures

BS 5975: 2019 also gives a very useful summary of the control measures that should be used to ensure safety for all temporary works (Clause 5.1.2), summarised in the following paragraphs:

Every organisation that has an involvement with temporary works should appoint a senior person to prepare, maintain and implement the organisation’s procedure for the control of temporary works – known as the designated individual. The PC’s designated individual should appoint a temporary works coordinator (the PC’s temporary works coordinator), responsible for all temporary works on the project.

There are additional recommendations, depending on the size of project. For example, on large or complex sites, there may be more than one PC’s temporary works coordinator. In this case, each PC’s temporary works coordinator should be responsible for a distinct, well-defined area of work. Where there is more than one PC’s temporary works coordinator and/or temporary works coordinator, the limits of responsibility, interfaces and boundaries should be recorded in writing.

Any subcontractor to the PC or another contractor – for instance, one working directly for the client – who is contracted to manage their own temporary works and who is working within a PC’s temporary works coordinator’s area of responsibility, should appoint a temporary works coordinator. Note that this temporary works coordinator, who should be appointed by the contracted

**All parties
should appoint
a designated
individual**



“Where there is more than one principal contractor’s temporary works coordinator, the boundaries should be recorded in writing

organisation’s designated individual, should report to the relevant PC’s temporary works coordinator for the area in which they operate.

The PC’s temporary works coordinator and the temporary works coordinator should have the same level of management training. Their technical and practical knowledge should be commensurate with the complexity of the work. Where required, the PC and contractor may appoint temporary works supervisors who report to their temporary works coordinator.

Except for very low-risk temporary works, a design brief should be prepared for the temporary works by the site team and issued by the temporary works coordinator to the temporary works designer. Where the category of design check has not been specified, the temporary works designer, in consultation with the relevant temporary works coordinator, should confirm the category and prepare the necessary design output.

The temporary works design checker should carry out the design check of the temporary works, and in certain categories without reference to the temporary works designer’s calculations, before issuing a certificate confirming the design is satisfactory.

Once the site team has constructed the temporary works in accordance with the certified design, the temporary works coordinator or temporary works supervisor, as appropriate, should issue a permit to proceed, confirming the temporary works have been erected in accordance with the certified design and any agreed revisions.

Classifying risks

BS 5975: 2019 (Clause 6.1.3) recommends that the implementation risk for each item of temporary works should be classified. The implementation risk comes from combining the execution risks, associated with workmanship, materials and experience, with the consequence of failure risks – where ►

Viega cold-press technology
Makes piping smarter.



Work smart – discover the Viega advantage

No need for heavy machinery or hot-works measures: connect pipes much safer and faster. With 100 % efficiency, 0 % fire risk and just a Viega Pressgun in your hands. **Viega. Connected in quality.**

viega



“ Permanent works designers should identify and make provision for any temporary works and temporary conditions required by their design

the temporary works are and what could be affected if they fail.

The classifications should be taken from BS 5975: 2019, Table 1, which sets out the class of implementation risk – very low, low, medium or high – along with the permits required and other control measures needed. Note that mitigation of risks associated with design should be addressed through the category of design check (Clause 13.7) which should not be confused with the implementation risk.

Construction (Design and Management) Regulations 2015

HSE guidance on the CDM 2015 regulations states: “When preparing or modifying designs, a designer must take account of the general principles of prevention, and the pre-construction information provided to them, with the aim, as far as reasonably practicable, of eliminating foreseeable risks.

“Where this is not possible, they must take reasonably practicable steps to reduce the risks or control them through the design process and provide information about the remaining risks to other dutyholders.”

Despite this, there has been – and continues to be – much discussion over many years on this aspect of legislation. Bookcases groan under the weight of published tomes of guidance, yet there is still no consensus on design risk management. ►

Useful guidance on temporary works

A selection of useful best practice guides and templates for managing temporary works

From the Temporary Works Forum:

● *Principles for the management of temporary loads, temporary conditions and temporary works during the construction process*

This guide explains how many failures occur because it is assumed that structures, excavations, stockpiles and other features on construction sites will stand up on their own, at every stage of construction, when in fact they won't and engineering analysis is needed to back up such judgements.

● *TWf Information Sheet No 6, The safe management of temporary works*

This sheet provides advice on how to manage temporary works safely. It is aimed at those managing temporary works in small and medium-sized enterprises (SMEs) and is based around CDM 2015 and advice from BS 5975: 2019.

● *Temporary Works Procedure: Sample*

This free-to-download template is intended as guidance for small-to-medium-sized contractors which are managing small projects that involve them in temporary works. The sample aims to ensure that the main elements of BS 5975: 2019 have been addressed. It does not set out to be prescriptive and should be amended to suit individual company operations and preferences.

● *Constructability: A guide to reducing temporary works*

The aim of this guide is to raise awareness of the importance of 'constructability' to clients, architects, permanent works designers, temporary works designers and contractors. Constructability is an iterative process and should be reviewed at stages throughout the design. The guide includes examples of projects where the benefits of this approach have been achieved.

From the Institution for Civil Engineers (ICE):

● *Guidance for design risk management*

This is a guide to a risk-based management process for design which covers issues including competency, clarity of responsibility, supervision and review. It is the ICE's view on what designers need to do to discharge their duties under the CDM 2015 regulations and should also be useful for principal designers, contractors and clients too.

● *Designing a Safer Built Environment: A complete guide to the management of design risk*

Published in 2021, and written by design risk management consultant John Carpenter, this book aims to address “long-standing uncertainties and challenges faced by designers, highlighted by recent events such as the Grenfell Tower fire”. It is well worth a read, particularly in relation to the consideration of soft hazards.



architectural acoustic finishes

SonaSpray K-13 in world famous film studios

Over 100,000m² of SonaSpray K-13 black applied directly to profiled steel soffit throughout a world famous visitor attraction and international film studios. SonaSpray absorbs sound energy instead of reflecting it, reducing reverberation times to an optimal level for filming, whilst the black finish provides ideal conditions for lighting control.

We are Britain's leading provider of fire rated architectural acoustic finishes for the control of noise reverberation in buildings. Having the most extensive range, enables us to offer a product for every project, design and budget.



OSCAR
acoustics



A recent survey on design risk management within the Temporary Works Forum (TWf), 25 years after CDM was first introduced, identified findings that are deeply concerning. Shortcomings and barriers include a lack of constructability knowledge among many permanent works designers, fee-driven constraints, perceived liabilities, lack of leadership and a conflict between contract and statute over the manner of project management.

The role of the principal designer should be central to successful design risk management, but it seems that many PDs are failing in their responsibilities, according to TWf members.

As part of a 2021 survey commissioned by the HSE to broaden understanding of the CDM 2015 principal designer role, answers from TWf members reported that they had not noted any improvement in the management of temporary works since the introduction of the PD role – which is seen as a failed role like the planning supervisor and CDM coordinator before them.

TWf members also reported that few PDs are involved actively with temporary works designers. Many are “detached” and “one step removed”.

However, there are some indications that on larger jobs with “intelligent clients” the role is discharged more effectively, demonstrating the influence of the client.

BS 5975: 2019 reminds dutyholders that permanent works designers should address the buildability of the permanent works and identify and make provision for any temporary works and temporary conditions required by their design and their assumed method of construction.

This should include a proposed method and sequence of construction which should have no adverse effects on the permanent works (Clause 8.3.1).

Design risk management is a means by which designers can demonstrate that their designs can be built, used, maintained and eventually demolished without negatively affecting the safety, health and wellbeing of those involved in the construction process or those who may be impacted by the structure. There is useful guidance on design risk management (see box, p23) which applies equally to temporary works designers and permanent works designers. ●

David Thomas is director and secretary of the Temporary Works Forum (TWf).

Competence to manage temporary works should match the complexity of the work

CPD Questions

1) Who should appoint a designated individual?

- a) The client or client's representative
- b) The principal contractor
- c) Any organisation that is involved in temporary works

2) Who appoints the subcontractor's temporary works coordinator?

- a) Their company's designated individual
- b) The principal contractor's temporary works coordinator
- c) the temporary works designer

3) Who should issue a permit to proceed to confirm temporary works have been erected according to the design?

- a) Temporary works coordinator?
- b) Temporary works supervisor?
- c) Could be either

4) What is an implementation risk?

- a) Mitigation of design risk
- b) Execution risk
- c) Combination of execution risks and consequence of failure risks

5) Which document sets out the duties of the permanent works designers with respect to temporary works?

- a) BS 5975: 2019
- b) The Construction (Design and Management) Regulations 2015
- c) Both

To test yourself on the questions and collect CPD points, go to: projectsafetyjournal.com

Useful websites

Collaborative Reporting for Safer Structures (CROSS): www.cross-safety.org.uk

Health and Safety Executive (HSE): www.hse.gov.uk/construction/faq-temporary-works.htm

Temporary Works Forum (TWf): www.twforum.org.uk/home

Further reading

- *TWf Yearbook 2021/2022*
- *TWf Information Sheet No 12, Competence of the Designated Individual (DI)*
- *TWf Information Sheet No 13, PAS 91, Construction prequalification questionnaires – Supplementary questions specific to temporary works*

● *Setting the bar: A new competence regime for building a safer future, Construction Industry Council (CIC)*

● *In plain sight: Assuring the whole-life safety of infrastructure, ICE (2018)*

● Look out for the forthcoming *APS Practice Note on Temporary Works*

An icy lesson in Ayrshire

Following the shocking death of a construction security guard at a windfarm site in Scotland, **Chris Walker** looks at the health and safety lessons from the incident

In November 2021 two companies were fined for breaches of health and safety legislation, following the death of a 74-year-old security guard. He was found lying face down and hypothermic in deep snow at Afton Windfarm, a remote site near New Cumnock in East Ayrshire, Scotland.

What happened?

According to the prosecuting authority's description of events, Ronald Alexander had been working as a security guard for Corporate Service Management, and had been deployed to the windfarm after the firm was contracted by Northstone (NI) to provide security for the site.

At midday on 21 January 2018, as forecasted, weather conditions deteriorated rapidly. This resulted in deep drifts on both the key road into the windfarm and the road between the gatehouse where Alexander worked and the compound where a colleague was stationed. Although mobile phone communications were known to be poor and inconsistent at the site, there was no landline for Alexander to use in order to call for help. Two-way radios were available, but these could only be used for the guards to speak with each other and did not reach offsite.

At around 5pm, Alexander's colleague managed to obtain a signal on his mobile phone and reported to Corporate Service Management's control room that not only had his generator failed, but the only means



Chris Walker
Head of health and safety,
Napthens Solicitors

of transporting the men offsite – a 4x4 vehicle – had become trapped in the deep snow at the site compound. Despite being made aware of this, Corporate Service Management did not call the emergency services until after 9pm, more than four hours later.

Police Scotland's Mountain Rescue Team was deployed soon after, but it was not until just after midnight on 22 January that Alexander was found unconscious, face down in the snow. He died later that day, having never regained consciousness.

What failings led to the incident and what action was taken?

What makes Alexander's death most tragic is that it was entirely avoidable. As affirmed by the prosecution report and subsequent action, there was a series of health and safety failings in the lead-up that should have been addressed – the majority of which could have been solved through implementation of a robust and tested emergency plan.

While Northstone (NI) had an emergency weather plan in place, it failed to address a catalogue of issues. It did not accommodate for times when nobody from the company would be present at the site, there was no back-up generator at either of the guards' locations should the main generator fail – despite this having occurred on several occasions previously – and the guards had no reliable means of calling for help. The existing plan relied heavily on there being effective communication between the guards and their control room. However, both companies failed to provide an effective solution to ensure this.

At the hearing, both companies pleaded guilty to separate breaches. Northstone (NI) pleaded guilty to breaching Section 3(1) of the Health and Safety at Work etc Act 1974, which states: "It shall be the duty of every employer to

The case:

A security guard employed by Corporate Service Management, contracted by Northstone (NI) to provide security for the Afton Windfarm site in East Ayrshire, was found lying unconscious and hypothermic in deep snow by Police Scotland. The guard did not regain consciousness.

The outcome:

- Northstone (NI) pleaded guilty to breaching Section 3(1) of the Health and Safety at Work etc Act 1974 and was fined £768,000.
- Corporate Service Management pleaded guilty to breaching Section 2(1) of the Health and Safety at Work etc Act 1974 and was fined £100,800.

conduct his undertaking in such a way as to ensure, so far as is reasonably practicable, that persons not in his employment who may be affected thereby are not thereby exposed to risks to their health or safety." The company was fined £768,000.

Corporate Service Management pleaded guilty to breaching Section 2(1) of the Health and Safety at Work etc Act 1974, which states: "It shall be the duty of every employer to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all his employees." It was fined £100,800.

When it comes to calculating these fines, while the exact methodology has not been published for this case, they will have been determined through analysis of the severity of the incident, level of culpability and size of each organisation.

Northstone (NI)'s fine is especially high due to the size of the organisation and the catalogue of failings, identified by the prosecuting authorities, that were allowed to happen on its estate.

“The existing plan relied heavily on there being effective communication between the guards and their control room. However, both companies failed to provide an effective solution to ensure this



Security guards on the remote site had no reliable means of calling for help

What lessons can be taken?

There are many lessons that can be taken from the situation – not least that emergency plans must not be based on best-case scenarios, should be field-tested and need to be more than a tick-box exercise. Put simply, businesses need to put in place a plan that will work in a real-life scenario. An effective failsafe designed for the worst-case scenario can quite literally be the difference between life and death.

Another lesson that many business owners and directors should take from this scenario is responsibility for a health and safety failing that may lead to injury, or even death, cannot simply be outsourced to a third-party provider. As demonstrated in this case, both companies were found responsible for failings and the blame was not shifted solely onto Alexander's direct employer. Organisations are responsible for the health and wellbeing of everyone on their estate. They have a responsibility for everyone on site, whether an employee, contractor, customer or visitor.

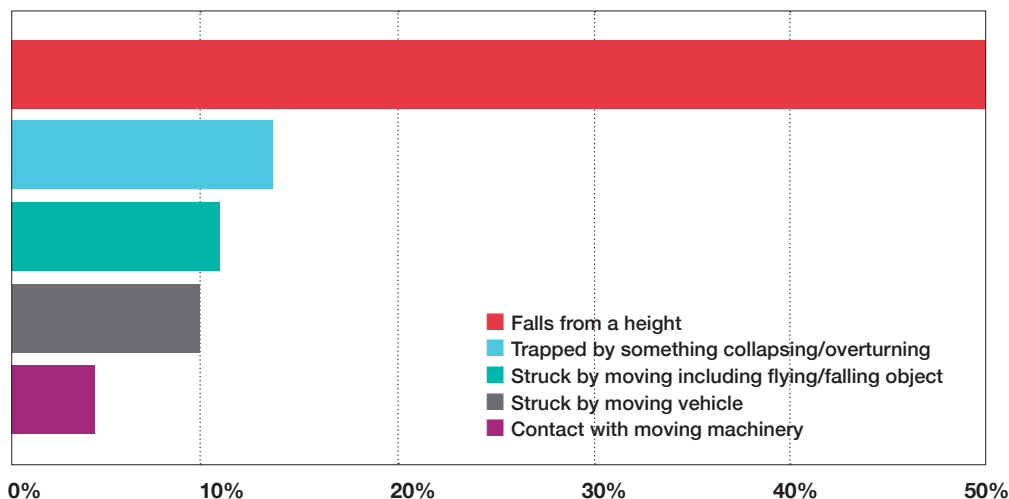
While threat of a fine is intended to inspire action, it should not be a business's key driver for keeping its people safe – and putting in safeguards will help to facilitate a culture of best practice across the organisation. In the event of serious failings, it is possible for penalties to be imposed on individuals and directors who have contributed to those failings.

Organisations that are serious about ensuring the safety of their employees should carefully review existing safety documents, such as emergency plans and risk assessments, to ensure they are fully up to date and applicable to the present situation. Seeking the support of a qualified health and safety professional is a legal requirement, and businesses should pay close attention to their advice and guidance from relevant authorities. ● **Chris Walker is head of health and safety at Napthens Solicitors.**

Annual statistics: worrying trends beyond headline figures?

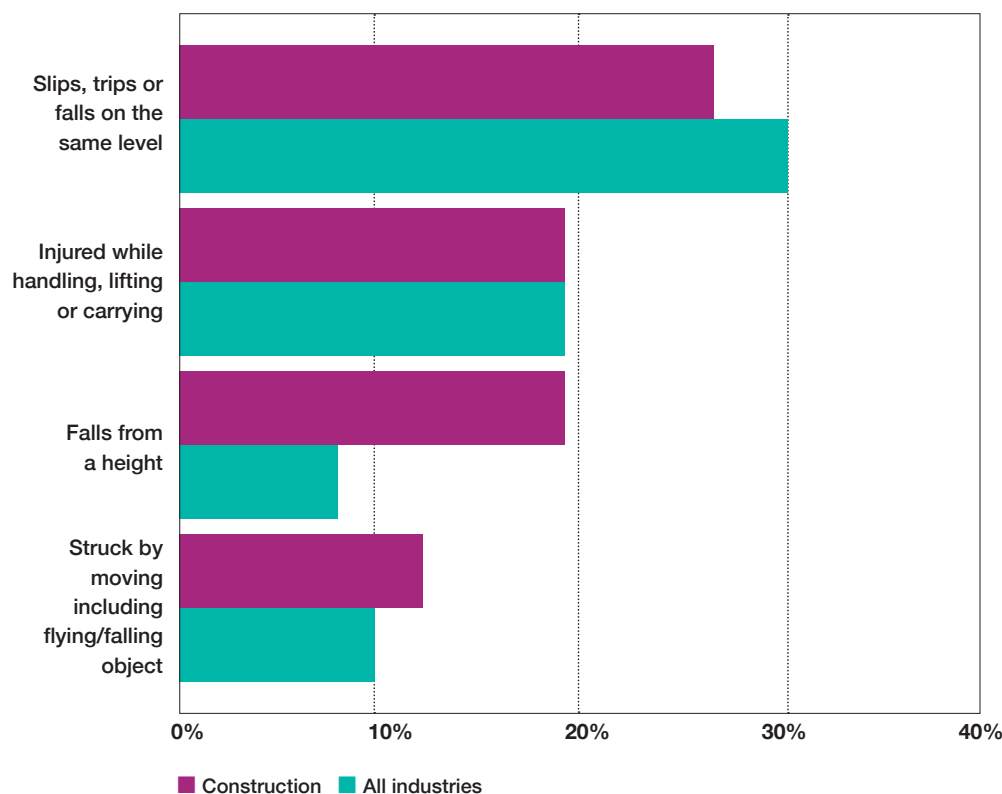
The industry can learn from digging deeper into the HSE's statistics for work-related accidents, ill health and enforcement actions

Fatal accidents over the past five years



Source: RIDDOR, 2016/17-2020/21. Accident kinds are shown for the top five causes of fatal injury.

Non-fatal injuries over the past three years



Source: Non-fatal injuries reported under RIDDOR 2018/19-2020/21.

On 16 December 2021, the Health and Safety Executive (HSE) published its report of work-related accidents, ill health and enforcement actions in construction to the year ending March 2021.

Despite this being the first year of the Covid-19 pandemic, the headline accident and health figures do not reveal any Covid-related trends, says the HSE. However, Steve Coppin, chair of the Chartered Institute of Building's (CIOB's) health and safety special interest group, urges the industry to dig deeper into other HSE data.

"Data regarding dangerous occurrences are only found separately in other reports and tables, which are categorised as general, rather than focusing on the construction sector," says Coppin. This data – and data on electrical incidents – reveals some potentially worrying trends, he says.

The construction-specific statistics show that there were 39 fatal injuries to workers in 2020/21, which is in line with the five-year annual average of 36. The report doesn't break down the cause of deaths for 2020/21 but instead classifies them for the last



“These high numbers demonstrate that we, as an industry,

must do more to share lessons learned, so that the causes of these incidents can be prevented

Steve Coppin, risk management consultant

five years, between 2016/17 and 2020/21 (see chart top left). Falls from height dominate, accounting for 50% of deaths, being trapped or collapsing make up 13%, struck by moving or falling object 11%, struck by moving vehicle 10% and contact with moving machinery 4%.

There has been an average of 61,000 non-fatal injuries over the three years to 2020/21 (see chart bottom left). Slips, trips and falls were most common, accounting for 26%, lifting or handling injuries and falls from height were each responsible for 19% and 12% of accidents were due to being struck by moving or falling objects.

Looking at safety-related electrical incidents reported to the HSE, Coppin notes significant increases in some of the categories.

Fatalities increased from four in the previous two years to 13 in 2020/21 and, although serious but non-fatal injuries fell, there were an additional 500 'other events' in 2020/21. (See www.hse.gov.uk/statistics/tables/esqcr.xlsx).

And among another data found in the government RIDDOR statistics for 2020/21, there are reports of 80 collapses or partial collapses of a building or structure and 14 collapses of falsework (See www.hse.gov.uk/statistics/tables/riddo.xlsx).

"Given the culture of possible under-reporting, these figures are quite concerning," comments Coppin. "These high numbers demonstrate that we, as an industry, must do more to share lessons learned so that the causes of these incidents can be prevented by all who are responsible for risk."

One area where the impacts of the Covid pandemic can be seen in the statistics is in the number of notices issued by the HSE. This fell to 1,260 in 2020/21 from 1,995 in 2019/20 with a fall in prosecution cases and convictions too. ●

39

Statistics show that there were 39 fatal injuries to workers in 2020/21

61,000

Non-fatal injuries averaged over the three years to 2020/21. Slips, trips and falls were most common, accounting for 26%

50%

Falls from height dominate, accounting for 50% of deaths

80

There are reports of 80 collapses or partial collapses of a building or structure

In the dock

Here are the heftiest fines given by the courts over the past quarter

Serious burns result in suspended sentence

While installing a post for an automatic number plate recognition camera in Twyford, Berkshire, a worker hit a 415v power cable with a 110v mechanical electric breaker and received serious burns to his hand and arm.

High Wycombe Magistrates' Court fined principal contractor CLC Contractors of Southampton £400,000 and ordered it to pay costs of £5,300. Paul Gale, company director of PAG Building Services of Southampton, was sentenced to 14 months' imprisonment suspended for 24 months and 150 hours of community service. HSE was awarded costs of £7,200.

Ladder fall

While removing beading from an external first-floor window frame at a residential home, a worker fell 3m from a ladder, suffering serious injuries including four fractured vertebrae.

Teesside Magistrates' Court fined Thirteen Housing Group of Stockton-on-Tees £50,000 and ordered it to pay costs of £7,327.

Partial building collapse

Iproject Cheshire was refurbishing a residential building in Didsbury when workers undermined the foundations, causing a partial collapse of the

building. There were no injuries or fatalities, but the incident was deemed a risk to life.

Manchester Crown Court fined the Stockport contractor £31,500 and ordered it to pay costs of £13,500.

Hefty fine for repeated failures

When HSE inspectors visited Abercorn Construction's Tobacco Warehouse site in Liverpool, they discovered a catalogue of health and safety failings including electrical risks and insanitary conditions inside a welfare cabin and multiple issues on site including electrical hazards, insufficient safety equipment and numerous unprotected edges and openings. And this wasn't the first time the HSE had visited site and found things wanting.

Liverpool Magistrates' Court fined Abercorn Construction, of Belfast £77,000 and ordered it to pay costs of £2,025.

Six metre fall

A worker was replacing broken roof sheets using crawling boards to traverse the roof, when his foot slipped from the board and he fell through the fragile roof material, sustaining serious injuries including neck fractures, a collapsed lung and a bleed on the brain.

Swindon Magistrates' Court fined Trevor Cook Construction of Marlborough, Wiltshire £63,278 and ordered it to pay costs of £6,721.



“The summer webinar season will take a look at infrastructure, as APS is well aware that many of you are often engaged on public framework projects

Expanding our online events programme

The association will run its annual conference online again in 2022 and is running an increasing number of engaging webinars

The Association for Project Safety was founded on the guiding principle that the association would help members – and colleagues across the construction sector – shape and share good practice. APS's CPD has always been one of its strong points but, recently – and certainly since the advent of the Covid pandemic, we have been working hard to put on an increasing number of engaging webinars and online events.

Online events

So it is easier for you to plan, APS's online events will now run on a regular cycle.

There will be three seasons of webinars: spring, summer and autumn. Each season will be 11 weeks long, with a feature topic as well as health and safety topics – and will start off with a panel discussion.

APS kicked this off in spring with a look at diversity, equality and inclusion and how

the construction sector is all the better for bringing in all the skills, experiences and insights gained from people from differing backgrounds. If you missed any of these sessions it is not too late to catch up – just log in at www.aps.org.uk/past-events and you will find everything there.

The summer webinar season will take a look at infrastructure. We decided to consider this specifically as APS is well aware that many of you work on major projects and are often engaged on public framework projects. All our forthcoming events can be found at www.aps.org.uk/events.

Regional activities

APS has always drawn on the skills and experience of expert regional committees, which have long put on brilliant events around the country. One of the benefits – and, yes, there have been some – of Covid is that the association has been able to share local

events with colleagues across the four nations. We are going to keep on with this as it has helped to create a real community and allowed colleagues to share their stories with members who, in other circumstances, would never have had a chance to meet one another.

Networking

APS always puts safety first so we have not been encouraging people to meet face-to-face over the last couple of years. But we know you have missed being able to meet each other. While we have found new ways to meet up – and we will be building on our online experiences – we are well aware that many of you have missed the company of colleagues.

APS is going to be bringing back a limited number of networking events when we feel confident that we can manage these safely. We will be taking the APS show on the road around the country so you can all have the opportunity to meet each other and simply have a chat with people whose experiences you may share. Watch out for more about this coming in the latter part of the year.

New staff

Anna Lewis has joined the communication and events team concentrating on getting the APS message out, member communication and the association's social media. Anna is a new graduate and is already making a big difference. ●

Spring Conference

Wednesday 11 May 2022

APS knows, from our membership survey, that many of you believe changes heralded by the Building Safety Bill will, for the foreseeable future, have a huge impact on your lives. APS is committed to bringing you all the information and training you will need.

We know you are keen we get down to business now. APS will be hosting a one-day conference on Wednesday 11 May 2022 to examine the Bill. We will look at what it means and what we can expect over the coming months.

There will ample time to talk to the experts and to raise your concerns.

But, remember, the Bill is just the first step. The industry will still need to wait for the regulations that will drive how work must be undertaken. APS will need to think about what the association says to legislators so we can pull together to make the rules as sensible, proportionate and workable as possible.

Annual Conference

Wednesday 7 September 2022

APS will be hosting its annual conference online on Wednesday 7 September 2022. We will be looking at what is needed to help the industry bounce back after Covid and how it can rise to the challenge of delivering improved infrastructure, renewing services and building affordable homes.

BBRS.TM

Business Banking
Resolution Service

Unresolved business banking complaint?

We can help settle disputes dating back to December 2001.

The BBRS is a free, independent service helping SMEs settle unresolved banking complaints.

See if our dispute resolution specialists can help you.

thebbrs.org/property



Synergie Training is one of the leading Construction, Infrastructure and IT Training Companies in the UK

Synergie Training specialises in the **APS Accredited Principal Designer** course which we provide as both onsite closed company courses and as public courses throughout the UK. We have successfully accredited over 2,000 individual Principal Designers with a 95% pass rate. We now also provide the **APS Accredited CDM Client** and **APS Accredited CDM Principal Contractor** courses along with CDM Overview, Domestic Client, Construction Safety through Design and customised CDM training.

VIRTUAL TRAINING

Due to the uncertainty of COVID-19 we are still running the majority of our CDM courses virtually via live trainers. These courses have been a great success having trained over 1000 delegates on our virtual APS CDM PD course.

Upcoming Dates include:

7 Mar	*VIRTUAL* – CDM 2015 Overview	Online - Remote	£195
8 Mar	*VIRTUAL* – APS Accredited – CDM 2015 for Principal Contractors	Online - Remote	£250
9 Mar	*VIRTUAL* – APS Accredited – CDM Client	Online - Remote	£295
23 Mar - 24 Mar	*VIRTUAL* – APS Accredited – The role of the Principal Designer under CDM 2015 (2 Day)	Online - Remote	£595
5 Apr - 6 Apr	*VIRTUAL* – APS Accredited – The role of the Principal Designer under CDM 2015 (2 Day)	Online - Remote	£595
11 Apr	*VIRTUAL* – CDM 2015 Overview	Online - Remote	£195
12 Apr - 13 Apr	APS Accredited – The role of the Principal Designer under CDM 2015 (2 Day)	Leeds	£595
12 Apr	*VIRTUAL* – APS Accredited – CDM 2015 for Principal Contractors	Online - Remote	£250
19 Apr - 20 Apr	APS Accredited – The role of the Principal Designer under CDM 2015 (2 Day)	London	£595
25 Apr - 26 Apr	*VIRTUAL* – APS Accredited – The role of the Principal Designer under CDM 2015 (2 Day)	Online - Remote	£595
27 Apr	*VIRTUAL* – APS Accredited – CDM Client	Online - Remote	£295
4 May	*VIRTUAL* – CDM 2015 Overview	Online - Remote	£195
5 May	*VIRTUAL* – APS Accredited – CDM 2015 for Principal Contractors	Online - Remote	£250
9 May - 10 May	*VIRTUAL* – APS Accredited – The role of the Principal Designer under CDM 2015 (2 Day)	Online - Remote	£595

Please quote **APS-FEB-10** for a **10% discount** on any of the above public courses.

Please visit: www.synergietraining.co.uk/course-schedule to view additional public course dates.

Synergie Training is an approved APS, CITB & IEMA Accredited Training Centre and holds ISO: 9001, ISO: 14001 and ISO: 45001 quality standard accreditations.

Website: www.synergietraining.co.uk

E-Mail: enquiries@synergietraining.co.uk

Tel: 01463 227580