

Health and Safety Executive Board		HSE/11/52	
Meeting Date:	17 August 2011	FOI Status:	Fully open
Type of Paper:	Above the line	Exemptions:	
TRIM Reference:	2011/414324		

## An update on the work of Construction Division

### Purpose of the paper

1. This paper provides an update on the work of HSE's Construction Division (CD) and considers future priorities. The Board is asked to note its contents.

### Background

2. The economic environment in the construction industry remains challenging. The recovery from the downturn in industry output in 2008/09 is fragile and industry statistics paint an inconsistent picture of the degree of recovery. **Annex 1** provides details, but in summary:
  - a) although overall output grew significantly during 2010, there was a 4% drop in q1 2011 and current forecasts are that growth will not resume until 2013;
  - b) average direct employment is estimated to be around 2 million, the industry having employed over 2.8 million in 2007 when activity was at its peak.
3. Progress in reducing injuries and ill-health arising from construction work is mixed. **Annex 2** provides details, but in summary:
  - a) There were falls in the numbers and rates of fatal, major and over 3-day injuries to workers recorded for the year 2009/10 (all were the lowest on record). The provisional numbers for fatal injuries in 2010/11 show a disappointing rise to 50 from 41 the previous year, these figures include three incidents involving multiple fatalities and equate to a rate of 2.4 deaths per 100,000, this compares to an average rate of 2.8 for the previous five years;
  - b) there is little sign of a permanent fall in the prevalence of occupational ill-health according to the latest Self-reported Work-related Illness (SWI) module of the Labour Force Survey, this estimated that in 2009/10, 82,000 people whose current or most recent job in the last year was in construction suffered from an illness which was caused by or made worse by their work. While this represents a reduction from 93,000 in 2008/09, the associated prevalence rate of 3.7% is not statistically different to the rates for previous years. The survey estimates that in 2009/10, 2.6 million working days were lost due to ill-health (up from 2.4 million the previous year). This compares with 0.6 million days estimated to have been lost as a result of workplace injuries.

### Argument

#### Operational Activity

4. Enforcement remains a key element to CD's work in regulating the industry. Provisional figures for 2009/10 show that construction accounts for over one

third of all enforcement activity across HSE with a similar level of activity anticipated in 2010/11. **Annex 3** provides detail of the number of enforcement notices issued and informations laid between 2005/06 and 2009/10, plus examples of recent prosecutions.

5. Concerns remain about the performance of the refurbishment sector and a fifth annual intensive inspection initiative targeting refurbishment nationally was carried out in early 2011. The initiative placed particular emphasis on small sites. As in previous years, inspectors focused on work at height, good order, and the risk of exposure to asbestos. Standards were found to be as poor as in previous years and at 475 sites, standards were so far below those required by law that formal enforcement notices were issued, with 735 notices issued in total. Details of the numbers of inspections and enforcement notices issued during CD's annual inspection initiatives since 2007 are set out in **Annex 3**.
6. Other significant operational interventions reflecting national and sometimes local priorities were delivered in the last 12 months, these include:
  - a) A significant increase in the number of visits to licensed asbestos contractors in 2010/11. 1873 visits were carried out, a 67% increase on 2009/10;
  - b) The development and delivery of successful intervention strategies for the 2012 Olympic Games, the Glasgow 2014 Commonwealth Games, Crossrail and new nuclear build (Hinckley Point C). The emphasis in each is on early intervention and focus on a core agenda of leadership, competence, design and planning, management of contractors and coordination;
  - c) Support provided by Outreach workers to encourage migrant workers to speak freely with providing, crucial information for Inspectors that would not otherwise have been available. This has been crucial in gaining access to witnesses and securing statements.
  - d) Proactive targeting of tight-knit groups of dutyholders, e.g. contractors in London carrying out basement excavations on domestic properties where there have been a number of serious incidents in recent years, and small clients in Cardiff carrying out refurbishment of student properties over the summer period where very poor standards had been identified.

#### Other Work

7. CD's sector and policy teams continue to deliver a wide range of other work in support of front-line delivery. **Annex 4** provides detailed examples of this work and associated operational activity. A consistent theme running through this work is engagement with other Government Departments and partnership work with the industry, reflecting the mature nature of the relationship with many stakeholders. Highlights of this work include:
  - a) The development of simple, tailored guidance for small and micro-businesses ('Busy Builder' guidance sheets) with supporting presentation material for use at safety and health awareness events;
  - b) Working in partnership with the Strategic Forum for Construction Plant Safety Group to produce much-needed guidance on mobile elevating work platforms and telehandlers;
  - c) The delivery of cross-industry partnership work to improve industry control of hazardous dusts, and reducing noise and vibration;

- d) The evaluation of the Construction (Design and Management) Regulations 2007 (CDM). This work has involved the industry very closely both through a working group established under the Construction Industry Advisory Committee (CONIAC) and a substantial external research project. The review is now complete and key conclusions will be developed to present recommendations to the Board later in the year;
- e) The signing of a formal agreement between HSE and the Building Control Alliance, which includes arrangements for Building Control Professionals to report to HSE serious health and safety concerns identified during their work.

### Resources

8. The level of permanent frontline resource was broadly maintained over 2010/11. For the remainder of 2011/12 and beyond it is expected that the number of permanent frontline inspectors and visiting officers, regulating construction will broadly remain unchanged by comparison to lower priority sectors. From June 2009, the numbers of substantive CD inspectors were temporarily boosted by the appointment of 24 Inspectors of Construction (IoCs) on two-year fixed-term contracts. This was always intended to be a temporary measure and all IoCs have now left CD.

### Construction Programme 2011/12 and beyond

9. Last year CD undertook a detailed review of the Construction Programme to ensure it remained fit for purpose. The review included a detailed analysis of accident and ill health data, industry progress in managing health and safety over the last 10 years, stakeholder views on priorities, current and future changes in the industry and the implications of Government initiatives and policy.
10. A number of key issues were highlighted, including the emergence of an increasingly 'two-tier' industry: risks on large sites continue to be better managed, whereas similar improvements are not observed on many smaller sites. There is minimal evidence to show that improvements on larger sites have trickled down to smaller ones, 60-70% of fatal accidents currently occur on small projects (less than 15 workers) whereas 10 years ago the reverse was true. The challenges remain broadly similar and include:
  - sustaining industry improvements post-recession;
  - developing new ways and improving existing ones of reaching those involved on small sites;
  - continuing to seek improved management of work-related health risks;
  - improving strategic engagement with larger dutyholders;
  - responding to the implications of the low carbon economy from micro-generation to nuclear new build;
  - developing a competent workforce;
  - focussing the industry on a sensible approach to health and safety.
11. The Construction Plan of Work outlines the operational priorities for delivering the Construction Programme in 2011/12, these include:
  - asbestos licensing (licence approval and removal work);
  - small sites/projects;

- refurbishment; and
  - major projects.
12. In focussing on smaller sites five generic risks will be considered at all site visits: asbestos; work at height; respiratory risks; welfare; and good order. Operational teams will also be taking forward a range of local initiatives, these will involve working with Working Well Together Groups, Local Authorities and other stakeholders to deliver 'educational' work, targeting particular activities (e.g. loft convertors) or targeting poorer performers who require specific attention to improve their health and safety performance. CD will also continue to look at what more can be done to tackle health and safety on smaller sites whether it is challenging larger organisations to play a greater support role or developing new approaches to particular sectors.
  13. In 2011/12 CD plans to evolve the regulation of the largest contractors so a more coordinated and structured approach is taken to those who are managing risk effectively, freeing up resource for where risk is not being managed so well. This approach will involve less site inspection of large contractors but challenging them at board level on issues including leadership, worker involvement, managing health risks and competence. Site interventions will continue but these will be focussed on where there is a good reason to do so (e.g. for investigatory or asbestos work).
  14. The Plan of Work was discussed at CONIAC's March meeting; members agreed that tackling higher risk activities and where health and safety risks were generally poorly managed were the right targets. The proposed work with larger contractors was seen to be consistent with these principles and members were keen to see how this work will progress. Further discussion and dialogue has taken place with industry to progress this work.
  15. Alongside the operational priorities CD will continue to engage with industry stakeholders and other Government Departments, in particular BIS, CLG and Cabinet office to ensure appropriate influence is exerted on a range of policy initiatives including the 'green deal', the review of the Building Control regime and the Government's recently published Construction Strategy. The strategy's objectives of promoting growth and competitiveness will have profound effects on how the public sector procures construction work.
  16. More specifically, CD must play its part in the developing debate within the industry around the area of worker competence. Joint Construction Skills/HSE research published in late May demonstrates a growing level of concern over how the industry meets its statutory responsibilities to ensure its workers are competent. There is a key role for HSE to play in facilitating industry to address these challenges.
  17. Although both CD and the industry it regulates face change and new challenges, CD is well placed to adapt to the future. It has a well-developed intelligence function which allows it to adapt quickly where a change of approach is needed and a mature working relationship with the industry. Together, these should equip it to continue to deliver improvements in industry health and safety performance in the years ahead.

**Action**

18. The Board is invited to note the contents of this paper.

**Paper clearance**

19. This paper was cleared by the SMT on 6 July.

## Current state of the construction industry and future prospects

### The industry during the recession

1. The latest data available for the construction industry comes from the Office for National Statistics (ONS) Annual Business Survey (ABS). The following data is taken from the ABS 2009 revised results published in June 2011.

<b>Construction industries</b>	<b>2008 (£ billion)</b>	<b>2009 (£ billion)</b>	<b>Percentage change</b>
<b>Turnover</b>	223	190	-15.2
<b>Purchases</b>	138	115	-16.5
<b>Approx. Gross Value Added (GVA)</b>	85	71	-16.8
<b>Output</b>	107	95	-11.3

2. Since its peak in 2007 when output was over £108 billion, the industry has suffered substantially in the economic downturn. Between 2008 and 2009, significant decreases in turnover, purchases and GVA were experienced, and output dropped by over 11%. In this period, all sectors of the industry suffered dramatically, with new housing work being the hardest hit showing a decrease in output of 17.5% in 2008, followed by a further 20% decrease in 2009. However, latest ONS data shows that overall output rose in 2010 to just over £100 billion. All sectors saw an increase in output in 2010 apart from non-housing repair and maintenance, which suffered a further drop of 13% after seeing a drop of 11% in 2009.

### Future recovery

3. The industry's future recovery should be viewed as fragile. The upturn in output in 2010 needs to be treated with caution. In the first quarter of 2011, construction output decreased by 4.0%, while the UK economy overall increased by 0.6%. Current predictions are that this drop in output is set to continue. The latest Construction Products Association (CPA) forecasts predict a 0.8% fall in 2011 and 2.0% in 2012, before a 0.5% growth in 2013. Output growth will then accelerate to 2.3% in 2014 and 3.9% in 2015. After a 4.1% rise in 2010, private sector work will continue to rise throughout the forecast period (2011-2015), whereas publicly funded work is set to decline from 2011 with a large fall of 11.3% anticipated in 2012. The CPA view is that the pace of a private sector revival compared to the speed and extent of fiscal consolidation measures will determine the fortunes of the industry.

### Industry workforce

4. ONS data shows that there were just over 273,000 enterprises in construction in 2009, down from nearly 293,000 in 2008. The average direct employment in the industry is just over 2 million, having employed over 2.8 million during its peak, including some 600,000 in the informal economy.

5. Despite falling output, employment is forecast to increase up to 2015. ConstructionSkills predict that close to 50,000 construction workers will be required per year over the next four years (allowing for replacement as well as new jobs, in line with workforce turnover). This reflects a shift in the type of work available in some areas from high-value infrastructure projects to more labour-intensive but lower value work in housing.

6. Whilst employment in the industry is expected to rise, there will be a serious skills shortfall due to its ageing nature. Despite 20% growth in the construction workforce since the early 1990s, the expansion has been uneven across different age groups. A major concern is the lack of young entrants into an ageing workforce, with numbers of older workers (aged 60 and over) in the industry having doubled in recent years, while the number of those aged 24 and under has fallen by 27%. While the increasing age profile is most pronounced in the manual workforce, professions such as architecture, mechanical and civil engineering could also lose 20% of their workforce to retirement in the next 10 years.

## State of health and safety in the construction industry

### Safety

1. Tables 1 and 2 show that the numbers and rates of deaths, major injuries and over 3-day injuries all fell in 2009/10 to their lowest on record. However, provisional figures show a rise in the number of fatalities to construction workers in 2010/11 from 41 in 2009/10 to 50. These fatalities included three incidents where there were multiple fatalities: one where 4 workers died and two where 2 died. The corresponding rate per 100,000 workers also show an increase from 1.9 to 2.4.

**Table 1: Numbers of death, major injuries and over 3-day injuries suffered by workers and members of the public following construction accidents 2005/6 to 2010/11**

Year	Deaths			Major Injuries		Over 3-day Injuries*
	All Workers	MoPs	Total	Employees only**	MoPs	Employees only**
2005/6	60	4	64	3706	200	7555
2006/7	79	7	86	3730	191	7161
2007/8	72	3	75	3710	195	7483
2008/9	52	4	56	3307	195	6815
2009/10	41	4	45	2585	161	5651
2010/11(p)	50	2	52	Not yet available		

\* = over 3-day injuries only apply to workers

\*\* = Self-employed statistics omitted due to known under-reporting

p = provisional statistics

**Table 2: Rates of reportable injuries per 100,000 construction workers\* 2005/6 to 2010/11**

Year	Deaths	Major Injuries	Over 3-day Injuries
2005/6	3.0	305.8	623.4
2006/7	3.8	299.1	574.2
2007/8	3.4	296.2	597.3
2008/9	2.5	266.7	549.5
2009/10	1.9	230.0	502.9
2010/11(p)	2.4	Not yet available	

\* = for major and over 3-day injuries, the rate is per 100,000 employees only

2. The rise in deaths recorded last year should be seen in the context of a longer term decline in numbers and rates of injury. For example, ten years ago there were 105 deaths with a fatality rate of 5.9 per 100,000 workers. Even four years ago 79 workers were killed (3.8 per 100,000 workers). This provides evidence of the improvements the industry has made over a longer time frame.

3. A rise in fatal injuries for 2010/11 may also see an increase in major and over 3-day injuries for the same period. We will not know until statistics are available in October 2011, but the rise in numbers of deaths in 2010/11 may be explained, at least in part, by the upturn in activity experienced by the industry in 2010.

## Health

4. Progress in reducing the numbers suffering ill-health continues to be limited. Table 3 shows figures for the prevalence of work-related ill-health in construction since 2005/6 taken from the self-reported work-related illness module of the Labour Force Survey (SWI). The associated prevalence rates show no significant trend and are of a similar order (not statistically significantly different) to the rates for previous years.

**Table 3: Estimated prevalence and rates of self-reported illness caused or made worse by the current or most recent job in each of the years in construction 2005/6 to 2008/9**

<b>Year</b>	<b>Estimated prevalence</b>	<b>Rate per 100,000 employed in the year</b>
2005/6	86,000	3760
2006/7	90,000	3870
2007/8	88,000	3640
2008/9	93,000	3720
2009/10	82,000	3700

5. Ill-health and occupational disease deaths statistics continue to far outweigh those attributed to safety incidents and fatal injury. Work-related illness accounted for an estimated 2.6 million working days lost (full-day equivalent) in 2009/10, with a corresponding rate of 1.3 days per worker. This compares with an estimated 0.6 million working days lost as a result of workplace injuries.

6. More than 4000 people die each year from asbestos and 500 from silica related disease. More than 50% of all occupationally acquired cancers occur in construction workers.

### Construction Division's enforcement activity

1. Tables 4 and 5 provide information about the level of formal enforcement activity carried out by CD in the context of overall HSE enforcement activity in each of the years 2005/6 to 2010/11. Table 6 sets out detail of CD's inspections and enforcement activity during its annual intensive inspection initiatives.

**Table 4: Enforcement Notices (Improvement, Deferred and Immediate Prohibition) served on the construction industry and all industries 2005/6 – 2010/11**

Year	Construction Industry (% of all industries total)	All Industries
2005/6	1846 (28%)	6576
2006/7	2343 (28%)	8274
2007/8	2539 (33%)	7758
2008/9	2428 (30%)	8079
2009/10(p)	3511 (37%)	9575
2010/11	Not yet available	

(p) = provisional

**Table 5: All Informations laid by HSE – for the construction industry and all industries 2005/6 – 2010/11**

Year	Construction Industry (% of all industries total)	All Industries
2005/6	453 (43%)	1056
2006/7	441 (42%)	1051
2007/8	433 (41%)	1060
2008/9	419 (38%)	1099
2009/10(p)	384 (37%)	1026
2010/11	Not yet available	

(p) = provisional

**Table 6: CD's Intensive Inspection Initiative Results 2007 – 2011**

Year	Nos. of Inspections and (Improvement and Prohibition) Notices Issued				
	Sites Inspected	Contractors Inspected	WAH Notices*	Good Order Notices	'Other' Notices**
2007	1295	1586	246	37	143
2008	1108	1419	227	30	138
2009	1759	2145	282	23	186
2010	2014	2414	370	29	292
2011	2128	2526	403	37	295

\*WAH = Work at height

\*\*'Other' = Other serious areas of concern including fire and asbestos

2. The following is a selection of the wide range of successful, completed prosecutions since September 2010:

#### **Construction firm fined after electric explosion scars worker for life**

Kent-based construction and engineering company, Dwyer Engineering Services Ltd was fined £20,000 and ordered to pay costs of over £14,000 after an employee suffered severe burns when his jack hammer touched unexposed underground electricity cables. The worker suffered 62 per cent burns to his upper body, face, neck and arms when he inadvertently struck the 11,000 volt cable while working at a construction site in Maidstone.

#### **Firms sentenced after Bolton steeplejack falls to death**

Two companies were fined a total of £85,000 after a steeplejack fell 50 metres to his death from an Edwardian chimney in Bolton, and a colleague was left clinging on for his life. The deceased and another worker were at the top of the disused chimney when the scaffolding they were on collapsed. The 40-year-old was pronounced dead at the scene but his colleague survived by clinging to a ladder on the outside of the chimney.

Bailey International Steeplejack Company Ltd, hired to carry out repairs to the brickwork, admitted breaching Section 2(1) of the Health and Safety at Work Act (HSWA) and fined £75,000 with costs of £80,000. Ken Brogden Ltd, hired to repair damaged scaffolding from previous use pleaded guilty to breaching Section 3(1) of the HSWA and fined £10,000 with costs of £16,000.

#### **Landmark corporate manslaughter conviction**

Cotswold Geotechnical Holdings became the first company to be convicted of the new offence of corporate manslaughter. The prosecution involved the tragic death of a geologist who was carrying out work in a 3.5 metre-deep trench on a development plot in Stroud, when it collapsed and killed him.

The case was investigated by the Police, supported by HSE, and prosecuted by CPS. After a three-week trial the company was sentenced and ordered to pay a fine of £385,000, to be paid over 10 years. Charges of gross negligence manslaughter and offences under the HSWA against a director of the company were dropped.

#### **Contractors exposed to asbestos at former nightclub site**

Property developer Michael Murton who put his workers at risk by failing to identify the presence of asbestos before allowing them to start work on a nightclub in Wrexham was given a suspended sentence of eight months for breaching the Control of Asbestos Regulations. In a joint prosecution with the Environment Agency Wales, he was also given a 12 month suspended sentence for breaching the Environmental Protection Act 1990, an eight months suspended sentence for breaching the Hazardous Waste Regulations 2005, and ordered to carry out 200 hours of community service and to pay costs of £10,000 over two years. He pleaded guilty to all charges.

#### **Property firm fined after worker's scaffold fall**

Property development company Nabiganj Investment Company Limited was fined £37,500 and ordered to pay £5,458 costs after a Chinese migrant worker suffered life-threatening injuries to his head, pelvis and spine when he fell more than five metres from an incomplete tower scaffold at a Hackney warehouse. The company had previous enforcement action imposed on it relating to other sites.

## Other work of Construction Division

1. The following sets out in detail other work carried out by CD. For ease, the Strategy goals towards which the work contributes are indicated in each heading.

**CONIAC and its Working Groups** – *Strategy Goals: safer, healthier workplaces, worker involvement, support for SMEs, competence and leadership*

2. The reconstitution of CONIAC was completed in 2010. The Committee meets three times per year, and all meetings were open to the public, who continue to attend in significant numbers. Membership has expanded, including broadening Trade Union representation to GMB as well as UCATT and Unite, and membership of the Recruitment and Employment Confederation, reflecting the fact that regulating health and safety in construction with its diverse labour supply practices brings particular challenges.

3. There has been substantial activity within the various working groups (WGs) – all aligned with HSE’s broader strategy goals. The WGs are the:

- Health Risks WG - (see paragraphs 6 - 8 for further detail);
- Safety WG, which has in the latter part of the year, refocused its work on developing a longer-term strategy for addressing work at height (see paragraphs 9 - 15);
- Working Well Together (WWT) Steering Group provides leadership for the various regional WWT groups (see paragraphs 17 - 18); and
- CDM evaluation WG - (see paragraphs 20 – 22).

4. CONIAC also established a working group to take forward the findings of an HSE research report into major accident potential in construction (see paragraph 33). The group will review the report, particularly the findings and conclusions, develop an industry-wide response, and report to CONIAC on progress.

**Health Risk Management** – *Strategy Goals: healthier workplaces, competence, securing justice, worker involvement and support for SMEs*

5. Much has been achieved by working across HSE and in partnership with stakeholders to help develop control solutions for dealing with health risks in construction. Efforts are prioritised to get health treated in the same way as safety, so changing behaviours and working practices now. Highlights include:

### The Health Risks Working Group (CONIAC)

6. Re-established in July 2010, its statement of purpose is *‘to provide leadership and guidance to the construction industry and the HSE on how to reduce the numbers of people whose health is made worse by working in the construction industry. To work with other industry groups as and when appropriate.’*

### Supply chain work

7. Following publication of independent evaluation of the supply chain approach, a project is now being undertaken addressing all health risks associated with road, paving and highway work, this will directly tackle respiratory dust, noise, vibration, manual handling and skin exposure risks.

## Hazardous construction dusts

8. Work is being undertaken in conjunction with Long Latency Health Risks Division on dust-related issues. Cross-industry partnership stakeholder representation is being taken forward with clear objectives of:

- targeting hazardous construction dusts, particularly respirable crystalline silica as the most significant risk;
- improving the industry's awareness of the risks of developing lung disease due to the inhalation of these hazardous dusts;
- identifying those tasks that give rise to the greatest risk to workers developing such conditions;
- working together to agree and promote proportionate controls to minimise the risks from these high-risk tasks.

## **Safety – Strategy Goals: safer workplaces, competence and securing justice**

9. Plant and equipment issues dominate this area of work. Much of the work has been carried out in partnership with the Strategic Forum for Construction Plant Safety Group (PSG), which draws its membership from across the construction supply chain. PSG reports its work to the CONIAC Safety WG.

10. HSE steers the PSG agenda and participates in individual working groups. HSE's objective is to agree and badge PSG guidance. This is proving a very effective means of working to address emerging problems quickly and produce authoritative guidance far more efficiently than HSE could do alone. All guidance is available to download free of charge from the PSG pages on Construction Plant Association's (CPA) website. The model is tried and tested and maturing.

## Tower Cranes

11. Work in this area has included:

- the Notification of Conventional Tower Crane Regulations 2010 which came into force in April 2010. No major problems have been reported in implementing these Regulations and the associated Register;
- dealing with a significant problem involving a particular type of spigot used in mast sections, which could result in a catastrophic failure without warning. Significant resource was used to identify cranes that might contain the affected spigots and secure remedial action. A safety alert was issued;
- a continuing programme of field visits to check Principal Contractors' management of the installation and use of tower cranes. Inspectors found adherence to PSG's guidance but the construction and management of tower crane bases remains an area for further work;
- continuing work with the PSG and the Tower Crane Interest Group of the CPA. This has, in particular, succeeded in persuading the industry to commit to competence standards for those erecting and dismantling tower cranes, implementing the standards by 31 December 2010 and publish updated guidance in January 2011.

### Quick hitches

12. Following the voluntary ban on the supply of new semi-automatic quick hitches in October 2008, work challenging the standard (BS EN 474 – 1 Annex B) for such equipment has continued. Although HSE is still awaiting an official decision on the challenge, a review (led by CD) of the BS EN is underway and a new international standard (ISO) is also in preparation. CD has worked closely with the review, undertaking market surveillance visits to manufacturers to consider whether/how their newer automatic quick hitches meet the existing standard and the proposed changes. The challenge to the standard and the proposed changes have exposed ambiguities and areas of confusion, which CD has taken the lead in resolving.

### Mobile Elevating Work Platforms (MEWPs)

13. There have been a significant number of serious and fatal accidents in recent years involving MEWPs where operators have become trapped between machine guard rails or control panels and external obstructions such as steelwork or ducting. CD has continued to work with the industry to address this issue, this has involved:

- in liaison with PSG, publication of best practice guidance on avoiding crushing and entrapment accidents and promulgated it alongside a further HSE safety alert to bring it to duty holders attention;
- continuing work with designers and manufacturers encouraging the development of solutions for both new and existing machines; and
- research undertaken by HSL considering the human factors elements during the use of MEWPs. This will help identify deficiencies in the design of some machines and concerns about psychological aspects of machine control.

### Telehandlers

14. Comprehensive authoritative guidance on the use of telehandlers on construction sites was published by PSG in February 2011.

### Fire

15. To take account of changes in fire legislation and to reflect recent experiences of serious fires on construction sites, notably those in multi-storey, partially occupied and timber frame structures, HSE's guidance on preventing fire in construction has been reviewed. A revised version of HSG 168 guidance was published in October 2010. It deals with preventing and controlling fires as well as ensuring that people can escape in the event of fire.

**Supporting SMEs – Strategy Goals: worker involvement, competence, healthier, safer workplaces and support for SMEs**

### Small Sites Strategy (customising support for SMEs)

16. Building on the success of the first four 'Busy Builder' guidance sheets (over 40000 website downloads since their launch in February 2010), a second tranche of customised guidance for SMEs is being developed, together with supporting presentations for use at safety and health awareness events. These provide basic health and safety do's and don'ts on excavations, basements, and electricity.

### Working Well Together (WWT) campaign

17. In 2010/11, 74 events were delivered which engaged with over 7000 delegates face to face. The percentage of the hard to reach audience increased from 23% to

30% micro-SMEs (0-5 employees) and 48% SMEs (0-15 employees). These achievements are viewed as particularly encouraging given the economic downturn.

18. 12 events have already been delivered so far this work year (up to the end of May), with a further 45 events planned against a delivery plan target of 50. There are currently 15 active WWT Regional groups and work is ongoing towards creating a new group in the Hampshire area.

### **Construction (Design and Management) Regulations 2007 (CDM) – Strategy Goals: securing justice, competence and healthier, safer workplaces**

#### Embedding CDM

19. Work has included:

- Work with stakeholder organisations to identify and share good design practice, producing case studies that will be available on HSE's website. A recent initiative has brought together different elements of the design fraternity and interested parties to share and coordinate their activities and promote good health and safety practice; and
- A joint HSE/Royal Institute of British Architects (RIBA) research project into the health and safety teaching in undergraduate architectural courses, which is soon to be published. A symposium held as part of this project showcased some innovative approaches to health and safety learning through live projects and using regulation as a starting point for creative design.

#### CDM Evaluation

20. There has been good progress made with evaluation of the CDM Regulations 2007. A pilot study research report was published in March 2011. The draft of the main stage research report has been received for HSE comments and the CONIAC CDM evaluation working group has provided wider feedback.

21. The evaluation tested the extent to which CDM 2007 met HSE's original aims for the regulations. These were broadly: simplifying the regulations to aid clarity; maximising their flexibility; making their focus planning and management; strengthening the requirements for co-ordination and co-operation; and simplifying the assessment of competence.

22. Policy staff are involved in an on-going dialogue with European Commission (EC) officials over the implementation of the Temporary or Mobile Construction Sites Directive, this has included updating the EC on the evaluation of CDM 2007.

### **Competence – Strategy Goals: competence and healthier, safer workplaces**

#### Individual Competence

23. CD and ConstructionSkills jointly commissioned research into the routes to competence in the construction industry. The final report was published in May and work is underway to analyse the findings and assess the implications for HSE and the industry. A conference attended by Sector Skills Councils and industry stakeholders was held on 17 June to present the findings of the report and discuss its main messages.

## Organisational Competence

24. CD continues to support the work of the Safety Schemes in Procurement Forum (SSIP), which promotes the mutual recognition of prequalification schemes. HSE sponsored the International Register of Chartered Auditors to develop an accredited scheme for assessors employed by SSIP member schemes. The assessors training scheme was piloted at the end of 2010 and is now an integral part of the SSIP terms of reference.

25. The SSIP Forum has steadily increased to seventeen member schemes since its launch in late 2009, and the work of the scheme has been welcomed by the industry. Work continues to promote the use of SSIP to encourage the reduction in duplication, bureaucracy and improve health and safety compliance. Both SSIP and PAS 91, the Publicly Available Standard for Procurement which spells out agreed standards in all areas of prequalification, including health and safety, are aligned with the core competence criteria set out in the CDM Regulations.

### **Leadership and Worker Involvement – *Strategy Goals: worker involvement and support for SMEs***

26. A Leadership and Worker Involvement (LWI) toolkit was launched on 10 June following excellent feedback from user trials. The toolkit is aimed at contractors and their managers who wish to improve their health and safety performance. It provides practice derived from a study of many leading UK contractors, clients and consultants.

### **Local Authority Construction Engagement – *Strategy Goals: competence, healthier, safer workplaces, support for SMEs and taking a wider perspective***

27. The Local Authority Construction Engagement (LACE) project was set up to promote closer working relationships between CD and those local authority (LA) functions that could have an influence on construction health and safety standards.

28. A notable success in the last year was the signing of a formal agreement between CD and the Building Control Alliance (BCA - the umbrella body for the BC profession in England and Wales) in September 2010. The national agreement includes arrangements for BC professionals to report to HSE serious health and safety concerns identified during the course of their work. A number of local agreements were already in place with BC departments. The Agreement facilitates arrangements for cooperation between CD and BC locally and encourages more local agreements.

29. Visiting staff in CD have continued to work with LA BC departments to establish links from BC websites to a specially designed page on HSE's construction webpages providing targeted information to make it easier for hard-to-reach dutyholders, especially from smaller firms and clients to obtain relevant health and safety information.

### **Communication including Construction webpages and e-Bulletin – *Strategy Goals: worker involvement and support for SMEs***

30. A new communication and publication strategy has been developed and is aimed at delivering key messages and products through – and in partnership with – the industry. The Working Well Together campaign will be an increasingly important vehicle for delivering key messages.

31. The Construction pages on HSE's website have been redesigned to address the needs of small and micro businesses. The site is now more easily navigable by a wider audience, with information presented in a more accessible way. They continue to be the most popular industry webpages on HSE's website. In the year ending 31 March 2011, they attracted 609,823 visitors and 2,344,875 page requests.

32. CD's Infonet e-Bulletin continues to be highly successful, with over 48,000 subscribers, and positive anecdotal feedback regularly received. New software will allow subscribers to provide more details about themselves e.g. specific trade/SME status/region, which will help in targeting messages more effectively. CD will also be able to see what links are used to get to the website. This will improve the understanding of levels of demand for particular guidance and help us evaluate the effectiveness of different messages.

**Major Accident Potential in Construction** – *Strategy Goals: reduce likelihood of low frequency, high impact catastrophic incidents*

33. A research report 'Preventing Catastrophic Events in Construction' was prepared on behalf of HSE by the Construction Industry Research and Information Association (CIRIA) and Loughborough University (LU) and published in February 2011. It explores the types of catastrophic events that might occur in construction, the underlying factors that may lead to them occurring, the controls that exist to mitigate against potential future events and where the UK construction industry could improve further. CIRIA in association with LU has since launched its own guidance on the topic.

**Olympics Learning Legacy Programme** – *Strategy Goals: leadership and healthier, safer workplaces*

34. CD is supporting HSE's work with Olympics Development Agency's (ODA) Learning Legacy Programme. The aim of this Programme is to capture good practice during the main construction phase of the Olympic Park and other venues. In liaison with ODA and the Institution of Civil Engineers, CD is project managing a piece of research on the role of CDM dutyholders - one of a number of research projects in the health and safety work-stream of the Programme. This piece of research is due to be finalised in the summer. Together with the other pieces of research, its findings will feed into plans for disseminating the lessons learnt that ODA are currently developing with a view to the launch of the Programme in October.