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CDM 2007 – An Analysis

### Abstract

This paper discusses the CDM 2007 regulations promulgated by the UK government that came into effect in April 2007. The new regulations made several changes to the CDM regulations of 1994, however it can still be debated if these will be able to bring about a radical change to the health and safety condition in the UK construction industry, and this is specifically the question under discussion in this paper.

Keywords: Construction, CDM, UK

## 1. Introduction

The construction industry in United Kingdom employs about 7% of the country’s total workforce, but accounts for over 25% of fatal injuries and 16% of the major accidents (Bennett and Gilbertson, 2007). This makes improvements in health and safety conditions at the work place a priority for the government and the industry both. Health and safety requirements at construction sites are specified by the Council Directive 1992/57/EEC. Its management requirements were enforced in the UK through the Construction (Design and Management) Regulations 1994 (CDM 94) and its practical health, safety and welfare measures mainly by the Construction (Health, Safety and Welfare) Regulations 1996 (CHSW). Despite the enforcement of CDM 1994, there have been concerns that the regulations were only promoting wasteful bureaucracy and red-tape that put unnecessary burden on businesses and were actually failing to deliver on ensuring effective health and safety management. Several non-legislative remedies such as informal guidance from the Chief Inspector of Construction (through Nattrass Letter, 1995) and revision of CDM 94’s supporting approved code of practice in 2001 by the HSE (Health and Safety Executive) were used to rectify the situation but did not proved very useful (Anderson, 2007). In 2002, the industry’s attitude to the health and safety regime was gauged through a major consultative exercise. The feedback from the industry showed support for the principles of CDM 94 but revealed wide-spread dissatisfaction with their implementation procedures in the regulations which were perceived as difficult to understand and inflexible (Mann, 2007). The consultation identified the need of making the duties of clients more proportionate to their level of influence and argued that the role of Planning Supervisor has been ineffective in ensuring health and safety at the construction sites. It was acknowledged that the health and safety record of the industry was neither morally acceptable nor economically viable. The consultation stressed on taking the ownership and providing leadership along with setting ambitious targets from improvement. HSE promised to play its role by re-examining the legislation and its approach towards enforcing regulation to make sure that they reflected the objectives (Murphy, 2007). The following conclusions were drawn from the industry’s response on these issues:

* Earlier initiatives had not achieved the desired change in the industry’s approach;
* The CDM principles were generally supported, but the paperwork burden needed to be reduced as a lot of compliance effort was being wasted; and
* There was a desire for a set of clear, simple, unambiguous and practical legislation (and supporting guidance) for the industry, which should remain focused on the underlying objective of saving life, avoiding injuries and maintaining health (Bennett and Gilbertson, 2007).

In the light of these findings, proposals were developed to improve the CDM 94 regulations over a period of 3 years by HSE and an industry-working group established under the Health and Safety Commission’s (HSC) Construction Industry Advisory Committee (CONIAC). Widespread consultations were made and over 300 responses were taken into consideration to the formal discussion document issues in 2002 along with the HSE’s experience with the existing Regulations. 400 responses were also considered during the public consultation that occurred over 4 months during summer 2005 (Murphy, 2007). Following public consultation, the revised proposals were finally approved by CONIAC and by the HSC. These bodies represent all stakeholders including employer, employee and other interests (Anderson, 2007). Relevant Government Departments for example Prime Minister’s Panel on Regulatory Accountability were also consulted throughout and their agreement to the proposals was obtained by early 2005. New CDM regulations were therefore drafted together with the supporting Approved Code of Practice (ACoP), developed in line with Better Regulation principles. These aim to reduce construction accidents and ill health by:

* Being flexible and accommodating the wide range of contractual arrangements to be found in the construction industry;
* Emphasising the need to plan and manage work rather than the bureaucracy associated with it;
* Emphasising the communication and co-ordination advantages of duty holders working in integrated teams; and
* Simplifying the way duty holders assess competence (Murphy, 2007).

The new CDM regulations, known as CDM 2007 were enforced on April 6, 2007. The following section discusses they changes they brought to the CDM 94. It will be followed by the evaluation of their costs and benefits while the last section will conclude the paper.

## 2. CDM 2007

In April 2007, the Construction (Design and Management) Regulations 2007 (also known as the CDM Regulations 2007) replaced CDM Regulation 1994. The new regulations were applied to all construction and property contracts/projects held after 6 th April 2007 and started impacting the major health and safety issues and rules in construction (Manion, 2007). Some of the major insinuations for companies in property and construction business include:

* For ongoing projects few transitional provisions will be introduced.
* All the construction clients will be required to do such arrangements which insure health and safety.
* For all projects starting after 6 th April 2007 clients’ agent will not be allowed.
* Clients will make a declaration the Health and Safety Executive (HSE) of how long contractors will be given to plan and prepare for construction work;
* “ CDM co-ordinators” will replace planning supervisors
* The Client will be known as the principal contractor or CDM co-ordinator for time in which appointments have not been made of another person.
* Clients and “ duty holders” will have more responsibilities (Manion, 2007).

Here we discuss the key constituents of the CDM 2007 regulations and the changes these have brought to the Health and Safety and the role and responsibilities it assigns to different stakeholders.

### 2. 1 Notifiable or non-Notifiable projects

The differentiation between “ notifiable” and “ non- notifiable” construction projects still exist in CDM Regulations 2007. For all “ Notifiable” projects HSE should receive a notice of the project. In new regulation there is slight change in criteria for notification of a project. According to the Construction (Design and Management) Regulations 2007 a modifiable project is one which is involve more than 30 days and 500 person days of construction work. The current change is applicable on projects that will involve this amount of work however more marginal/smaller construction projects are subject to the full range of duties (Bennett and Gilbertson, 2007).

Another important point is that if a construction project has already been notified to HSE under the Construction (Design and Management) Regulations 1994, there is no need to give another notice under 2007 Regulations. The 2007 CDM Regulations also list the duties that apply to all projects, and additional duties that only apply to Notifiable projects.

### 2. 2 Duty holders

In the new CDM 2007 Regulations the duty holders will remain the same. The stakeholders will be:

* Contractors or sub-contractors for construction projects.
* Clients, this includes commercial purchasers of constriction, people involved in engineering works and other construction services.
* Designers, the people who prepare and modify the construction designs.
* Principal Contractors, normally the main contractors of construction project.
* CDM co-ordinators, previously known as planning supervisors (formerly planning supervisors) (Manion, 2007).

In some construction and building projects, it is possible that one duty holder performs more than one role e. g. design and build contractor can be the principal contractor, or a designer, or a CDM co-ordinator, or a commercial purchases.

### 2. 3 General Duties

Each stakeholder in a construction project require to follow a specific duty however the core duty of every party is to co-operate and co-ordinate with each other. Generally in relation to health and safety issues, every person involved in a particular project will co-operate with other duty holders involved in construction work on same or adjacent sites. In 2007 CDM Regulations the requirements of co-operating with duty holders working on adjoining sites are new and some time can be difficult to achieve. However the results expected are very good, therefore these should be follow (Anderson, 2007).

According to CDM 2007 each duty holder involved in a construction project is required to co-ordinate their activates from a health and safety perspective. At all duty sites, duty holders will be required to take into consideration the general principal of prevention. These principles include evaluating and battling risks at source, avoiding risks, adapting technical progress and giving collective protective measures priority over individual measures (Manion, 2007).

The general duties of each duty holder at construction site are:

#### 2. 3. 1 The Client’s Duties

New CDM Regulation 2007 has increased the emphasis on the client to ensure health and safety compliance. In many construction projects clients will use experience professional to help them perform their duties. Under the CDM Regulations 1994, clients were allowed to hand over their duties to an agent, however they will not be able to use the services any such agents for all new projects after 6 th April 2007. However if there is a construction site where a client is using agent to perform these services, under the transitional provisions/period, agents will still be allowed to continue in that role for existing projects until 5 April 2012 if the agent agrees to assume the duties of a client under the CDM Regulations 2007. However it is important that clients check all arrangements with their agents (Anderson, 2007).

Many developers have many subsidiary companies or do joint ventures with their partners or funders. In such cases there can be more than one duty holder fitting the description of client. According to new CDM 2007 Regulations one client should be nominated to fulfil the client duties and the nominee must meet the new requirements. These duties include:

* In-place the project management arrangements for health and safety.
* Check that for workers enough welfare facilities are in-place.
* Ensure that adequate time is given to the principal contractor to plan and prepare for work.
* Provide all the information related to health and safety in its possession.
* Ensure that the health and safety files and any information that should be kept under the asbestos regulation are revised regularly.
* To ensure that before the work starts the CDM Regulations complies with principal contractor construction phase plan. This replaces the health and safety plan (Topping, 2007).

According to new CDM 2007 regulations, whenever a building is sold client must provide health and safety file to the purchaser and ensure that purchases knows the nature of the purpose of the file. The health and safety files can relate to more than one project, site or structure, and is subject to the condition that the information relevant to each part project, site or structure can be easily identified (Manion, 2007).

#### 2. 3. 2 The Client Appointments

As soon as client knows sufficient about project to select a suitable person, and a feasible initial design or other preparation work has been commenced, the key responsibility of Client now is to appoint a CDM co-ordinator. This appointment should be in-writing and until the time these appointments are made the client is believed to fulfil this role. At many construction sites the planning supervisors are appointed much earlier than CDM co-ordinators. Clients also have responsibility to take reasonable steps to ensure that parties they appoint are competent enough to comply with the relevant duties (HOL, 2007). There are detailed guidance in ACOP for assessing competence. No party it ought to accept an appointment unless it is competent to handle it. In existing construction projects the planning supervisor will automatically become the CDM co-ordinator and the principal contractor remain in place unless different appointments are made. To comply with Construction (Design and Management) Regulations 2007 clients got time till 5 th April 2008 to check the capability of CDM co-ordinator and principal contractor and CDM co-ordinators and principal contractors also got the same time to ensure and improve their own competence in this field (Topping, 2007).

#### 2. 3. 3 The CDM co-ordinator

The CDM 2007 places the CDM Co-ordinator at the heart of the project to help to ensure co-operation and co-ordination and that all duty holders share the information required by the CDM Regulations. It is also responsible to advice and assist the client to discharge the client’s duties (e. g. advice on assessing competence and on the project management arrangements to be put in place). The CDM co-ordinator is responsible for preparing (if not done), reviewing and updating the health and safety file and submitting notices of the project to the HSE. It will be interesting to watch the interactions between the project manager and the CDM co-ordinator in terms of how each role is carried out in practice as the role of CDM co-ordinator is introduced only recently in the CDM 2007 regulations (Webb, 2008).

#### 2. 3. 4 Designers

The CDM 2007 does not radically change the scope of duties of the designers but expresses them in clearer terms. The role of designers is emphasised by HSE because they are involved in the project from early to final stages and their initial decision affect the health and safety during the construction phase and for end use of the structure. The main duty assigned to designer is to ensure avoidance of foreseeable risks to health and safety of any person carrying out construction work or using the structure/building post completion.

If designers appointed on a British project are foreign residents, the person commissioning the design is responsible for ensuring compliance with designer’s duties. Careful consideration should be given as to how to manage this risk when appointing a foreign designer or off-shoring design work (Dunne, 2007).

### 2. 3. 5 Principal contractors and contractors

As far as the contractors are concerned, the feedback obtained at the consultation sessions suggested that the principal contractor and contractor provisions worked well under the CDM regulations 1994, therefore HSE did not seek to radically depart from them. The regulations make principal contractor responsible for the health and safety during the construction phase of the project. This requires the principal contractor to co-operate and co-ordinate with others, provide welfare facilities, direct its contractors and to check that suitable site inductions, information and training is given to workers. The principal contractor is also obliged to inform its contractors of the minimum time which will be given for planning and preparation for construction work. The contractors’ duties largely complement those of the principal contractor so that health and safety requirements are observed throughout the contractual chain. The provisions requiring worker engagement in relation to health and safety matters are also increased in scope (Coulter, 2007).

The changes in the roles and responsibilities of all concerned have been discussed above, however the main focus in the CDM 2007 is to make those with the greatest control and influence over a project, namely the project team and the client, responsible for health and safety. The regulations also introduce a new role of co-ordinator in place of the planning supervisor who will be appointed by the client. The co-ordinator will be required to ‘ identify and extract’ all information required to secure the health and safety of anyone engaged in construction work. The other big change is that ultimate responsibility – and consequently, liability for health and safety – rests with the client for all construction projects. While the client can delegate the duties under the regulations, for example to the co-ordinator, it nonetheless retains liability for complying with the regulations (Anderson, 2008).

## 3. Discussion

The costs and benefits of enforcing new regulations need to be seen in the context of their social and economic effect on the society. In a Regulatory Impact Assessment done by HAS, the costs and benefits of CDM 2007 were discussed by examining the previous 10 years of accident data. The accident records of the industry are the basic unit used to benchmark the cost and benefits (Topping, 2007).

Table 1: Number of fatal injuries to workers and members of the public 1996/97 to 2004/05(Topping, 2007)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 96/97 | 97/98 | 98/99 | 99/00 | 00/01 | 01/02 | 02/03 | 03/04 | 04/05 |
| Employees | 66 | 58 | 47 | 61 | 73 | 60 | 56 | 52 | 56 |
| Self-employed | 24 | 22 | 18 | 20 | 32 | 20 | 14 | 19 | 15 |
| Members of the public | 3 | 6 | 3 | 6 | 8 | 5 | 5 | 4 | 8 |
| Total fatal injuries | 93 | 86 | 68 | 87 | 113 | 85 | 75 | 75 | 79 |

Table 2: Number of major injuries to workers and non-fatal injuries to members of thepublic 1996/97 to 2004/05(Topping, 2007)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 96/97 | 97/98 | 98/99 | 99/00 | 00/01 | 01/02 | 02/03 | 03/04 | 04/05p |
| Employees | 3, 227 | 3, 860 | 4, 289 | 4, 386 | 4, 303 | 4, 055 | 4, 031 | 3, 978 | 3, 760 |
| Self-employed | 627 | 4666 | 367 | 363 | 405 | 540 | 690 | 750 | 726 |
| Total major injuries to workers | 4, 054 | 4, 326 | 4, 656 | 4, 749 | 4, 708 | 4, 595 | 4, 721 | 4, 728 | 4, 486 |
| Members of the public | 405 | 339 | 378 | 403 | 316 | 381 | 263 | 180 | 201 |
| Total major injuries | 4, 459 | 4, 665 | 5, 034 | 5, 152 | 5, 024 | 4, 976 | 4, 984 | 4, 908 | 4, 687 |

The construction industry in UK is highly fragmented, has no entry threshold, itinerant and casualised. As mentioned before, the industry employs 7% of the working population and accounts for 8% of UK GDP, but accounts for 25% of fatal injuries and 16% of the major accidents. Construction work is inherently hazardous and the risks associated with these hazards are difficult to manage due to the constantly changing nature of the working environment. Tables 1 and 2 provide the number of fatal and non-fatal but major injuries in the industry from 1996 to 2005. The data is broken up by employees, self-employed and members of public affected by the incidents. The total present value cost of injuries and ill-health, including minor and non-injury accidents in the construction sector is estimated at £13. 8 billion to £17. 7 billion over the 10 year appraisal period (Topping, 2007). This means that any reduction in the number of incidents has direct impact on not only human but also on economic cost. Strict economic cost benefit analysis would however consider the savings gained through implementing CDM 2007 (by reducing the accidents) minus the costs incurred on enforcing/implementing CDM 2007 regulations. Here we therefore look into the costs associated with implementing CDM 2007 and the overall savings due to reduction in accidents (Webb, 2008).

The compliance with changed duties essentially requires two sets of costs to be incurred. Firstly, there will be a cost associated with familiarisation with the changed duties. Secondly, there will be costs associated with the carrying out of the changed duties (Thame, 2007). There are four main groups that will be required to familiarise themselves with the proposed Regulations: contractors, designers, co-ordinators and clients. However the whole exercise is intended to reduce the chances for accidents. The data gathered from various pilot projects where CDM 2007 was implemented demonstrated the pilot projects were:

* More predictable in terms of cost and time;
* More productive than the industry average;
* Safer;
* Had less impact on the environment; and
* Achieved higher customer satisfaction (Dunne, 2007).

If the whole construction industry (including non-notifiable projects) achieves the same results as the pilot projects then project costs could potentially fall by 6%. Improved client leadership, respect for people, measurement and monitoring of performance and greater supply chain integration are all key themes of the revised CDM 2007 package, and it is therefore likely that some of the productivity gains shown on the demonstration projects would be expected to accrue from the proposed changes in the Regulations. There is not an exact match between the changes in the Regulations and those trialled at the demonstration projects, and therefore it is not appropriate to assume that the full 6% productivity gains would flow from the changes. If it is assumed that implementation of the proposed Regulations leads to a 3% reduction in project costs for projects where there is currently insufficient attention by clients, designers and contractors to planning, managing and monitoring – then the present value cost saving from reduced project costs for all projects over the 10 year appraisal period is between £1. 0 billion and £2. 9 billion over the 10 year appraisal period. It is therefore quite clear that even by the measure of strict economic parameters, the benefits of CDM 2007 far out weigh its costs (Topping, 2007).

Therefore the CDM 2007 regulations have been well received by most stakeholders. The industry professional bodies, employees unions, employers, concerned government departments and general public (Brindley, 2007). Industry experts see it as a major change in health and safety regulations since 1994, as John Malins, associate at law firm Davies Arnold Cooper puts it:

“… (They are) the most radical change to construction health and safety legislation since 1994, the year when the existing CDM regulations came into effect,” he further adds:

“ Contractors, employers and designers would be wise to review their obligations now,” warns Malins. “ Any projects straddling the April 2007 effective date will be subject to the new regulations, which apply to all construction projects lasting more than 30 days or involving more than 500 person days of construction work.”

Another expert in construction law, Ken Salmon of Mace & Jones also suggests that new regulations have radically changed the way Health and Safety Executive decides who is responsible for the safe procurement and management of building projects and for accidents. The new regulations thus aim to reduce the number of accidents on building sites from around 4, 700 currently per year. The biggest impact of the Construction Design and Management Regulations 2007 is on companies or individuals (the clients) who commission new buildings, even if they have no direct role in the work. Before CDM 2007, if an accident happened, such as a crane toppling over on a building site, it was considered contractors, designers or managers responsibility, however with the new regulations, those who pay for the building works will also be in the frame (Anderson, 2008).

“ Many companies may mistakenly believe there is not much new in these revised regulations – but they would be wrong. Everything is different – the definition of construction, for instance, will change to include demolition and dismantling…. and most importantly, a client will not be able to hide behind its agent if something goes wrong. If he knows or should have known of deficiencies in the procurement, design, management or construction process, he will have a duty to do something about it and be at risk if he fails.”

Failing to comply or breaches of Health Safety & Welfare law is punishable following a conviction in the Crown Court with unlimited fine and up to two years imprisonment (Brindley, 2007).

Deansgate Law firm Pannone’s partner in the construction team, Sean McCay highlighted the costs of complying with CDM 2007, however he also believes that new regulations make it much more dangerous for the project team to start work without ensuring compliance with health and safety regulations and it therefore is a welcome change from the situation in the past:

“ Such enhanced regulation, and presumably scrutiny, is highly likely to come at a price leading to increased project costs as a consequence of, for example, the necessary legal and other professional support required to ensure the correct application and implementation of the Regulations. Under the new regulations the end-user client has many more responsibilities which cannot be delegated, and the practice of starting work prior to full planning, resourcing and documentation could become legally as well as physically dangerous for all concerned.” (Dunne, 2007)

However, despite its intended benefits, there has been some criticism on CDM 2007 as well as the whole approach of the government and society towards the health and safety at construction sites. It is argued that despite providing very comprehensive health and safety systems and referring to good codes of practice, CDM regulations have “ sucked” the feeling of responsibility away from individuals. The responsibility for ensuring health and safety should not be something imposed by the government, rather it should be something that all members of the society support and share as they all want to be able to about all aspects of their lives safely and productively. It therefore should even be important when no body is around to monitor. The Health and Safety Executive therefore should work more on creating awareness among the stakeholders and in general public and try to change the culture rather than producing plethora of documents on the issue. This point of view therefore emphasises on the change in culture where health and safety is not only seen as complying a code of conduct but is actually taken as a personal responsibility and of great human benefit (Coulter, 2007).

Another criticism is that the new regulations with enhanced responsibilities on client may take the focus away from the contractors. According to this argument the safety in construction begins and ends on site, and it is entirely the responsibility of the contractors’ management, therefore the designers should not be restrained by petty regulations. The kind of issues involved in safety on site such as falls from heights, adequate means of access, safe working platforms, tidiness, traffic and machine management, falling objects and so on, need not to be compromised by another impenetrable layer of bureaucracy and mountain of paper. The site safety adviser should spend 95% of his or her time on site, not form filling (Brindley, 2007; Coulter, 2007).

There are also some question marks on the actual implementation of regulations. The effective enforcement of the legislation on construction health and safety issues is as important as the law itself. It is perfectly obvious that it is of little worth having laws that no one knows about and that no one enforces. It might be a little less obvious that if the law is too complex, difficult to understand or even incomprehensible in layman’s terms then it might be, in effect, ignored. In occupational health and safety terms the one and only objective of any health and safety legislation is the prevention of accidents and cases of ill health within the work environment, and to that end there has to be good law backed up with effective, sensible and accountable enforcement (Anderson, 2008). The critics therefore suggest that despite changes in the law itself and to the process of its implementation, no changes have been made in the way it will be enforced and therefore some attention must also be given on ensuring that it is enforced across the board literally and in spirit.

## 4. Conclusion

The paper reviewed the changes to the CDM regulations with specific focus on changes to the Health and Safety regulations. It can be learnt from the above discussion that the changes in the policy include: simplified trigger for formal appointments and preparation of plans; clarification of designer duties;