# **CDM** and Construction Site Safety



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### **Current Position**

The Construction (Design and Management) Regulations 2015 (CDM) came into force on 6 April 2015 replacing the previous 2007 Regulations of the same name. The Regulations, like the previous Regulations, impose a management structure and a set of project management principles by identifying the key safety roles involved in construction projects and requiring that these key stakeholders undertake specified tasks. The full requirements of the 2015 Regulations have a much wider application than the full requirements of the 2007 Regulations. Between 6th April 2015 and 5th October 2015 there are some transitional provisions for some projects between the two sets of Regulations.

The process applies to all stages including concept, design, construction and final handover of the structure to the client or 'end user'. This integrated process provides a continuity of responsibility through duty-holders with emphasis placed on the checking of the skills, knowledge and experience and, if an organisation, the organisational capability of contractors and designers and the provision of adequate time and resources.

HSE studies reveal considerable insurance and other costs relating to injuries and damage linked to construction project performance. Poor planning, ineffective communication, inadequate resources and unsatisfactory levels of competence are cited as key failures leading to these losses. Such studies also indicate that the majority of fatalities occur on small construction sites with less than 15 employees.

This underlines that effective implementation of CDM is a business issue, as well as a legal and moral concern.

## Legal Requirements

The original Construction (Design and Management) Regulations came into force on 31 March 1995 to implement the design and management content of the EU Directive 92/57/EEC on health and safety arrangements at temporary or mobile construction sites. The Regulations applied in England, Wales and Scotland. A parallel set of measures covered Northern Ireland. The Regulations were revised in 2007 aiming to provide more effective co-operation and communication within a competent project team.

In 2014, the HSE consulted on new Regulations, which were implemented on 6th April 2015 and were aimed at simplifying the regulatory package and ensuring full compliance of the Regulations with the EC Temporary or Mobile Construction Sites Directive (TMCSD). The HSE have outlined the main changes associated with the introduction of the 2015 Regulations as:

- the removal of the ACOP and its replacement with a suite of sector-specific guidance aimed principally at Small and Medium Sized Enterprises (SMEs)
- the removal of the detailed requirements on competence and their replacement with a more generic framework
- the replacement of the CDM co-ordinator role with the Principal Designer
- addressing shortcomings in the transposition of TMCSD, with removal of the domestic client exemption and the alignment of the threshold for the appointment of co-ordinators and for formalised health and safety plans with that in the Directive.

The HSE have also indicated the need for proportionality in the implementation of the Regulations. However, many clients will notice major changes which result in much more far reaching obligations placed particularly on clients for work of a minor nature which many would not associate with construction at all.

One of the very major changes is that the 2015 Regulations will apply in full as soon as more than one contractor is involved irrespective of the scale or extent of the work.

The object of CDM is to provide a legal framework covering design, commissioning of work, and its planning and execution, which applies to all construction work likely to pose significant risks to workers and other parties. The underlying aim is to encourage information flow from the original conception, through the design and construction process, to the final users of the building - ultimately to minimise health and safety risks to all concerned.

Unlike the 2007 Regulations, there is no longer an Approved Code of Practice (ACoP) which has been replaced with an HSE guidance document (L153 2015 "Managing Health and Safety in Construction"). The previous ACoP and guidance L144 has been withdrawn. However, many health and safety specialists will wish to archive a copy of the previous ACoP as some of its content contains interpretations of provisions in the 2007 Regulations with identical wording to the 2015 Regulations which are not present in the revised guidance. A suite of sector specific guidance published by industry groups has been produced.

#### Scope

CDM 2015 applies to all construction projects, however minor, and in full (with the exception of notification) to any project of whatever scale, where there is more than one contractor. Notification of the project to the HSE, is required where a certain threshold relating to the scale of project is exceeded (see below). It is important to note that the requirement to notify the HSE of a project is now *completely unrelated* to the application of the remainder of the Regulations. The Regulations also apply to domestic clients (i.e. a private domestic householder not involved in a business in respect of their own residence or that of a family member). See below for the implications for organisations undertaking work for private domestic clients.

The practical effect is that all projects require:

clients to be assured of the skills, knowledge, experience
and, if an organisation, the organisational capability, to
ensure there are suitable management arrangements
for the project, and allow sufficient time and resources
for all stages. They must also make available to
designers and contractors pre construction information
and, where notifiable, notify the project to the HSE.
Clients are also responsible for taking reasonable
steps to ensure that Principal Designers and Principal
Contractors comply with their duties

- clients to ensure that the construction phase of a project does not start unless there is adequate construction phase plan and adequate welfare facilities in place
- designers to ensure clients are aware of their CDM duties, eliminate hazards and reduce risks due to design, and provide information about remaining risks so that they can be effectively managed and to ensure design for any workplace, complies with The Workplace (Health, Safety and Welfare) Regulations 1992
- contractors to ensure that Clients are aware of their CDM duties and to plan, manage and monitor their own work and that of workers. This includes checking the skills, knowledge experience and, for organisations, the organisational capability, of all their appointees and workers. Contractors must also provide training for their own employees; providing information to their workers on complying with the requirements for health and safety on the construction site; and ensure there are adequate welfare facilities for their workers
- for domestic clients, contractors take on the Client's duties under the Regulations unless there is a written agreement between the Client and a Principal Designer to take these duties
- contractors to ensure that there are adequate arrangements to prevent unauthorised access to the construction site
- all stakeholders to ensure their own skills, knowledge, experience and organisational capability; co-operate with others involved in the project; report obvious risks; take account of the general principles of prevention in planning, or carrying out, construction work; and to comply with health and safety requirements and other regulations for any work under their control.

#### **Projects with More than one Contractor**

Where there is more than one contractor (*irrespective of whether the project is notifiable*) there are the following additional requirements:

- commercial (ie non-domestic) clients to appoint a Principal Designer and Principal Contractor
- Principal Designers to assist the client with the
  provision of pre-construction information, co-ordinate
  design work; manage communication between client,
  designers and contractors; liaise with the Principal
  Contractor on ongoing design issues; prepare and
  update the Health and Safety File and where there
  appointment finishes before the end of the project to
  pass the information to the Principal Contractor
- designers to provide any information needed for the Health and Safety File
- Principal Contractors to plan, manage and monitor the construction phase in liaison with other contractors;

The full requirements of the 2015 Regulations have a much wider application than the full requirements of the 2007 Regulations

prepare, develop and implement a written construction phase plan (the initial plan to be completed before the construction phase begins); make sure suitable welfare facilities are provided from the start and are maintained throughout the construction phase; check the competence of all their appointees; provide site inductions; consult with the workers; liaise with the Principal Designers on ongoing design issues; and secure the site

- other contractors to confirm clients are aware of their duties to co-operate with the Principal Contractor and comply with the instruction of the Principal Contractor and Principal Designer in planning and managing work; provide any information needed for the Health and Safety File
- Principal Contractors to complete the Health and Safety File and hand it to the client where the Principal Designer's appointment has concluded before the completion of the construction phase.

It should be noted that Part 4 of the 2015 CDM regulations contain specific site safety requirements applicable to all construction work, most notably:

- good order and site security
- site welfare
- safety of access and egress
- · working at height
- avoiding danger from energy distribution installations
- traffic management and construction plant movement
- all groundwork's and civil engineering
- emergency exit routes, fire prevention, fire fighting and fire detection
- working near or above water
- protection of the public, including trespassers.

#### **Deciding Whether a Project is Notifiable**

A project is notifiable when these criteria are met:

- the construction phase is likely to involve more than 30 days of construction work to complete and involve more than 20 persons working in construction work at any one time. See below the definition for construction work: or
- the work is likely to involve more than 500 person days of construction work.

A project is not notifiable unless the above criteria are met. The responsibility for notification rests with the Client (other than a domestic client (ie private domestic householder

undertaking work unrelated to a business on their own private dwelling or that of a family member) where the duty falls on the contractor undertaking the work)

### Information

It is essential to the success of the process (not to mention legal compliance) that all duty-holders are appointed in good time and that they demonstrate that they have sufficient, skills, knowledge and experience and, if an organisation the organisational capability to undertake the role. The HSE guidance indicates that organisational capability means the policies and systems an organisation has in place to set acceptable health and safety standards which comply with the law, and the resources and people to ensure the standards are delivered.

Anyone appointing a contractor or designer (including the Client) is legally obliged to take reasonable steps to satisfy themselves that those to be those appointed fulfil the above requirements. The steps taken need to be proportionate to the scale of the work involved.

If there is to be more than one contractor involved in the project, then a Principal Designer must be appointed at the stage of concept/feasibility appraisal. However, clients are sometimes reluctant about incurring costs at a stage where work may become abortive, or may not even be aware of their statutory obligations.

Clients should note for projects involving more than one contractor that, if they do not appoint a Principal Designer and a Principal Contractor, then under the provisions of the Regulations, they take on, by default, the statutory obligations which would apply to either or both roles and as they, as a Client, are unlikely to be able to adequately fulfil the obligations of these roles then they will commit a number of offences.

#### **Notification and Display of Notification**

Where a project is notifiable (see threshold above), the Client has the obligation to notify the HSE on Form F10. This is available as an interactive form on the HSE website:

https://extranet.hse.gov.uk/lfserver/external/f10

For projects which are enforced by the Office of Rail Regulation (ORR) (Railways and other Guided Transport Systems) the notification must be made to the ORR not the HSE. For projects on nuclear sites, new nuclear construction sites and certain defence sites the notification must be made to the Office of Nuclear Regulation.

The Client must ensure that a copy of the most up to date notification is displayed in a prominent position on the construction site so that anybody who is affected by the work can see the information.

It should be noted that, unlike the 2007 Regulations, the fact that a project is notifiable does not trigger additional

requirements other than for the notification itself and to display a copy of the notification form at the site.

#### Who Are the Duty-holders?

The key safety roles or duty-holders are the Client, the Principal Designer, any designers, the Principal Contractor and contractors. These roles are described in the section on Key Terms; responsibilities are described in the section Key Actions.

#### **CDM Documentation**

The key to CDM compliance is not in the documentation, but the effective planning and management of the construction project.

#### **Pre-Construction Information**

Pre-construction information is defined as information which is in the Client's possession, or which is reasonably obtainable by or on behalf of the Client, which is relevant to the construction work. The pre-construction information must be of an appropriate level of detail and proportionate to the to the risks involved and includes information about the project, the planning and management of the project and the health and safety hazards, including design and construction hazards, and how they will be addressed.

For all projects of whatever scale, and even if only involving one contractor, the Client has to provide relevant preconstruction information to every designer and every contractor appointed or being considered for appointment. Where a Principal Designer is appointed they must assist the Client in the provision of the pre-construction information and, in so far as it is within the Principal Designer's control, supply the relevant pre-construction information promptly and in a convenient form to every contractor and designer appointed or being considered for appointment, the designers and every contractor appointed by the Client. This pre-construction information is listed in Appendix 2 of the HSE Guidance to the Regulations L153. The Guidance also contains, at Appendix 5, a flow chart on how different types of information relate to and influence each other in a construction project involving more than one contractor.

#### **Construction Phase Plan**

It is important to note that a construction phase plan is required for all projects involving construction work of whatever scale and even if there is only one contractor. Thus internal redecorating of an office or installing additional IT cabling, falls within the definition of construction work and will require a construction phase plan.

The Construction Phase Plan must record:

- health and safety arrangements for the construction phase
- site rules

 where relevant, specific measures concerning work that falls within one or more of the categories listed in Schedule 3 of the Regulations. (Schedule 3 relates to higher risk construction work and includes matters such as there being a particular risk of falls from height, drowning, being trapped in excavations or the use of particularly toxic substances. Schedule 3 also lists other high risk work such as the use of explosives, working in compressed air etc).

It is important that the plan is both proportionate and appropriate. The HSE indicate that the plan must record the arrangements for managing the significant health and safety risks associated with the construction phase of a project. It is the basis for communicating these arrangements to all those involved in the construction phase, so it should be easy to understand and as simple as possible.

The HSE indicate that the emphasis on the information to be included in the Construction Phase Plan should be information that:

- is relevant to the project;
- has sufficient detail to clearly set out the arrangements, site rules and special measures needed to manage the construction phase; but
- is still proportionate to the scale and complexity of the project and the risks involved.
- The HSE make clear that the plan should **not** include documents that get in the way of a clear understanding of what is needed to manage the construction phase, such as generic risk assessments, records of how decisions were reached or detailed safety method statements

Appendix 3 of the HSE guidance gives detailed information on the scope and content of this plan.

Examples of typical issues which should be included in a plan are detailed by the HSE as:

- a description of the project such as key dates and details of key members of the project team
- the management of the work including:
  - the health and safety aims for the project
  - the site rules
  - arrangements to ensure cooperation between project team members and coordination of their work, eg regular site meetings
  - arrangements for involving workers
  - site induction
  - welfare facilities

The Health and Safety File must be kept available for inspection

- fire and emergency procedures
- the control of any of the specific site risks listed in Schedule 3 where they are relevant to the work involved.

#### **Health and Safety File**

 Where there is more than one contractor a health and safety file must be prepared by the Principal Designer appropriate to the characteristics of the project. The purpose of the file is to provide information likely to be needed to ensure health and safety during any subsequent work, such as maintenance, cleaning, refurbishment or demolition.

The HSE indicate that the type of information considered for inclusion should be:

- a brief description of the work carried out
- any hazards that have not been eliminated through the design and construction processes, and how they have been addressed (eg surveys or other information concerning asbestos or contaminated land)
- key structural principles (eg bracing, sources of substantial stored energy including pre- or posttensioned members) and safe working loads for floors and roofs
- hazardous materials used (eg lead paints and special coatings)
- information regarding the removal or dismantling of installed plant and equipment (eg any special arrangements for lifting such equipment)
- health and safety information about equipment provided for cleaning or maintaining the structure
- the nature, location and markings of significant services, including underground cables; gas supply equipment; fire-fighting services etc
- information and as-built drawings of the building, its plant and equipment (eg the means of safe access to and from service voids and fire doors).

It is the duty of the Principal Designer to create and maintain an evolving Health and Safety File for use by the project's eventual user or occupier or those involved in a subsequent project, to ensure the health and safety of any person.

The Principal Contractor also has a duty to ensure that information is provided to the Principal Designer for addition to the Health and Safety File until the termination of the construction phase.

Where the Principal Designer's appointment concludes before the end of the project, the Principal Designer is required to pass the Health and Safety File to the Principal Contractor who must then ensure that the Health and Safety File is appropriately reviewed, updated and revised to take account of any changes. On completion of the project the Health and Safety File must be passed to the Client.

The Health and Safety File must be kept available for inspection by any person who may need it to comply with any relevant legal requirements. The client's responsibility for the Health and Safety File is only discharged when he disposes of his entire interest in the structure and the client passes the file to the person acquiring interest in the structure and ensures that they are made aware of the nature and purpose of the file. The Health and Safety File thus endures with the structure and should be maintained up to date throughout its life.

# Client Duties and Obligations in relation to Principal Designers and Principal Contractors

One of the main client duties is to ensure that there are suitable arrangements for managing the project including the allocation of sufficient time and other resources and for ensuring the arrangements are maintained and reviewed throughout the project. However under the 2015 CDM Regulations the Client has a legal duty to take reasonable steps to ensure that the Principal Designer and Principal Contractor comply with their duties.

Reasonable steps will include monitoring the standards being maintained and the Client may need to seek independent advice from their appointed competent health and safety advisers to undertake this. The duty of a Client to take reasonable steps to ensure that Principal Contractors and Principal Designers comply with their duties is a new requirement under the 2015 Regulations. This would make it easier for a prosecution to be brought against a Client for failures on behalf of Principal Contractors and Principal Designers of such monitoring is not demonstrably carried out.

The areas which could be of value to review or assess are:

- accident and incident data, including any discernible trends
- the actions taken by the Principal Designer to ensure that health and safety is adequately considered by all designers
- areas where standards were not available
- the levels of competence shown by the contractors
- the effectiveness of remedial actions
- how the health and safety plan could be updated and improved.

In practice this is an ongoing process throughout the life of the project. As new work starts, information is added to the construction phase plan, and completed work information added to the Health and Safety File where relevant.

#### **Site Safety Issues**

Part 4 of the CDM regulations provide detailed requirements relating to construction site welfare and safety and is substantially unchanged from the Part 4 requirements under the 2007 Regulations:

- auditing, inspection and reports; key construction site features must be regularly inspected by competent persons including scaffolding, plant and lifting equipment; health and safety plans should specify competent persons and confirm arrangements for preparing and recording reports of such inspections;
- demolition and dismantling is a specialist activity that must be carried out by competent persons, and a written demolition plan must be provided;
- doors and gates must be safe in operation and adequately secured;
- emergency routes, exits and procedures; these should be integrated with existing arrangements and it should be ensured that all those affected can escape quickly and safely;
- excavations (including cofferdams and caissons) must be adequately shored and protected from collapse; falling hazards may also be present, consideration should be given as to how appropriate design can reduce the risks;
- the use of explosives; is a specialist method of demolition; this method will only be suitable in certain circumstances;
- falling objects must be controlled; particular consideration should be given to public protection measures, especially on refurbishment or construction projects in town and city centres;
- fire equipment should be provided; training in its
  use will be necessary, with equipment provided for
  key areas; high risk activities (eg hot work) should be
  eliminated or reduced by design if possible or otherwise
  strictly managed;
- fire risks avoid build-up of materials and implement fire prevention strategies;
- fragile materials, and the provision of protection to prevent falling through fragile building materials; it is particularly important to identify these materials during demolition or refurbishment projects;
- fresh air ventilation may be necessary where exhaust fumes or other contaminants are present; ventilation equipment may be necessary and should be considered when planning the work;

- good order, housekeeping and general tidiness will reduce instances of slips, trips and minor falls;
- good site security is essential in order to avoid risks to unauthorised persons entering the site and to stop children gaining access;
- lighting may be necessary during construction; temporary lighting must be adequate for safe access and safe working conditions; power supplies and backup should be considered;
- prevention of drowning where works are carried out above or near water courses, the risk of drowning must be considered; tidal waters and fast flowing rivers are generally higher risk;
- prevention of falls, and the provision of hand rails, barriers, fall arrest systems etc is a key issue to be addressed in the health and safety plan; the form of construction and methods applied will significantly influence the need for fall protection; this should be considered at the design stage;
- safe workplaces, including safe access and egress and adequate workspace; this must be covered by the health and safety plan and the construction project programme;
- stability of structures must be considered during any demolition work; contractors should also consider arrangements for storing materials and preventing overloading of existing or new structures resulting in uncontrolled collapse;
- traffic routes must be adequately separated to allow safe passage of pedestrians and vehicles; traffic management strategies must form part of the health and safety plan; including controls such as one-way systems, clear signage and barriers;
- movement of vehicles must be managed reversing should be minimised and where necessary should be controlled and supervised by competent persons (bankspersons or reversing assistants); design should consider reducing risk by minimising or avoiding the need for reversing;
- weather protection the elements can have a significant effect on site safety; construction phase plans should consider local weather conditions and provide for PPE and contingency plans;
- welfare facilities are essential to maintaining good hygiene and promoting good health; washing facilities are vital to reducing risks from contact with cement and other products and reducing the risk of Leptospirosis from stagnant water and areas frequented by rats.

Each of the duty-holders has specific tasks to perform

#### **Transitional Provisions**

There are limited transitional provisions in the six month period up until 6th October 2015 which are contained in Schedule 4 of the Regulations and summarised below:

- For projects where a CDM Coordinator and Principal Contractor has already been appointed under the 2007 Regulations and the construction phase has started, the CDM Co-ordinator may continue in post until either the project finishes or the earlier of 6th October 2015 or the appointment of a Principal Designer. The CDM Coordinator must hand over all relevant information to the Principal Designer. The Client must appoint a Principal Designer before 6th October 2015 unless the project has finished.
- For projects which have commenced and there is no CDM Coordinator and no Principal Contractor (ie below the notification threshold of the 2007 Regulations) and there is more than one contractor then the Client must appoint a Principal Contractor as soon as is practicable after 6th April 2015 and may appoint a Principal Designer. The Principal Contractor must then draw up a Construction Phase Plan and if there is no Principal Designer produce the Health and Safety File. If appointed the Principal Designer must produce the Health and Safety File.
- For projects where the construction phase has commenced and there is no CDM Co-Ordinator and no Principal Contractor (ie below the notification threshold of the 2007 Regulations) and there is only one contractor then that contractor must produce a Construction Phase Plan as soon as is practicable after 6th April 2015.

# **Key Actions**

#### **Responsibilities of the CDM Duty-holders**

Each of the duty-holders has specific tasks to perform at each stage of the project depending on the nature and scale of the project.

#### Client

The Client has an overall duty to ensure that there are adequate arrangements for managing a project including the allocation of sufficient time and resources. The arrangements must be maintained and reviewed throughout the project.

The Regulations specify that the arrangements are suitable if they enable construction work to be carried out so far as is reasonably practicable safely and the minimum welfare facilities are provided. The other key client duties are:

• providing adequate pre construction information to designers and contractors who are appointed or are

- considered for appointment (with the assistance of the Principal Designer where appointed)
- taking reasonable steps to establish that those appointed have adequate skills, knowledge, experience and, if an organisation, organisational capability to perform the role for which they are appointed
- where there is going to be more than one contractor appointing at an early stage the Principal Designer and subsequently the Principal Contractor
- where the work is notifiable notifying the HSE or other relevant regulatory authority for rail and nuclear projects
- ensuring construction work does not start unless there is an adequate construction phase plan in place and adequate welfare facilities
- where the project is notifiable displaying the copy of the notification on the construction site
- taking reasonable steps to ensure that Principal Designers and Principal Contractors comply with their duties
- where there is more than one contractor retaining the Health and Safety File and passing it to anyone who acquires the Client's interest in the structure.

#### **Contractors**

Contractors have the following duties under the Regulations:

- not accepting an appointment unless they have the skills, knowledge, experience and, if an organisation, organisational capability, to perform the role for which they are appointed
- not carrying out construction work on a project unless satisfied that the Client is aware of their duties under the Regulations
- plan, manage and monitoring construction work carried out by the contractor, or workers under the control of the contractor, to ensure, so far as is reasonably practicable it is carried out without risks to health and safety
- if there is only one contractor working on the project, they must take account of the general principles of prevention when planning the work and estimating the time required for the various phases
- if there is only one contractor, preparing the Construction Phase Plan
- only employing or appointing persons to work on a construction site if they have the necessary skills, training experience to carry out the work safely

- providing workers under their control with appropriate supervision, instruction and information including a suitable site induction
- not undertaking work on a construction site unless reasonable steps have been taken to prevent unauthorised access
- ensuring that there are adequate welfare facilities in accordance with Schedule 2
- complying with the instructions of the Principal Contractor and Principal Designer and the relevant parts of the Construction Phase Plan
- · complying with Part 4 of the Regulations
- cooperating with others involved in the project and report any dangerous conditions.

#### **Principal Contractors**

Principal contractors have the following duties under the Regulations:

- not accepting an appointment unless they have the skills, knowledge, experience and, if an organisation, organisational capability to perform the role for which they are appointed
- not carrying out construction work on a project unless satisfied that the Client is aware of their duties under the Regulations
- preparing the Construction Phase Plan
- organising cooperation between contractors (including successive contractors on the same construction site)
- coordinating the implementation by contactors of applicable legal requirements for health and safety
- plan, manage and monitoring construction work carried out by the contractor, or workers under the control of the contractor, to ensure, so far as is reasonably practicable it is carried out without risks to health and safety
- ensuring that employers and where necessary the self-employed take account the general principles of prevention, in particular in complying with Part 4 of the Regulations and where required following the Construction Phase Plan
- ensure a suitable site induction is provided
- taking necessary steps to prevent access to the site by unauthorised persons
- ensuring that there are adequate welfare facilities in accordance with Schedule 2

- liaising with the Principal Designer for the duration of the Principal Designer's appointment and share with the Principal Designer information relating to the planning management and monitoring of the pre-construction phase and the coordination of health and safety matters during the pre-construction phase
- where the Principal Designer's appointment concludes before the end of the construction phase, completing and update the Health and Safety File and hand it to the Client

#### **Designers**

Designers have the following duties under the Regulations:

- not accepting an appointment unless they have the skills, knowledge, experience and, if an organisation, organisational capability to perform the role for which they are appointed
- not commencing work on a project unless satisfied that the Client is aware of their duties under the Regulations
- taking into account the general principles of prevention and any pre- construction information so as to eliminate, so far as is reasonably practicable (or where not reasonably practicable reduce or control) foreseeable risks to any person who carries out or liable to be affected by construction work, those who maintain or clean a structure or those who use a structure designed as a workplace
- providing information about risks to the Principal Designer
- ensuring appropriate information is included in the Health and Safety File
- providing sufficient information with the design about the design, construction or maintenance of the structure to adequately assist the client and other duty holders to comply with their obligations.

#### **Principal Designers**

In addition to the duties of a Designer outlined above, the Principal Designer has a duty to:

- assist the client with the provision of pre-construction information
- so far as it is within their control provide pre construction information promptly and in a convenient form to other contractors and designers
- ensure designers comply with their duties
- ensure the cooperation of all involved in the preconstruction phase

Clients must be businesses or 'undertakings' in order to have duties under CDM

- liaise with the Principal Contractor for the duration of the Principal Designer's appointment and share with the Principal Contractor information relating to the planning management and monitoring of the pre-construction phase and the coordination of health and safety matters during the pre construction phase
- prepare the Health and Safety File and hand it to the client or if the appointment finishes before the end of the construction phase hand it to the Principal Contractor for finalisation and subsequent handing to the Client.

## **Key Terms**

#### Client

Any person or organisation for which a construction project is carried out, regardless of the project being undertaken inhouse or contracted out. 'Clients' include originators under PFI projects, school governors, local authorities, charities etc.

Clients must be businesses or 'undertakings' in order to have duties under CDM – Domestic clients do have duties under CDM but unless they direct the construction work these duties are transferred to the Contractor or, if there is more than one, the Principal Contractor. If a Principal Contractor is not appointed then the contractor in charge of the construction phase becomes the Principal Contractor. The designer in charge of the pre-construction phase becomes the Principal Designer. The Principal Designer can take on the Client duties instead of the contractor or Principal Contractor if there is a written agreement with the Client for the Principal Designer to do so.

#### **Construction Work**

Includes building or civil engineering work, such as:

- the construction, alteration, conversion, fitting out, commissioning, renovation, repair, upkeep, redecoration or other maintenance (including cleaning which involves the use of water or an abrasive at high pressure or the use of corrosive or toxic substances), decommissioning, demolition or dismantling of a structure
- the preparation for an intended structure, including site clearance, exploration, investigation (but not site survey) and excavation (but not pre-construction archaeological investigations), and the clearance or preparation of the site or structure for use or occupation at its conclusion
- the assembly on site of prefabricated elements to form a structure or the disassembly on site of prefabricated elements which, immediately before such disassembly, formed a structure
- the removal of a structure or of any product or waste resulting from demolition or dismantling of a structure or from disassembly of prefabricated elements which

- immediately before such disassembly formed such a structure
- the installation, commissioning, maintenance, repair or removal of mechanical, electrical, gas, compressed air, hydraulic, telecommunications, computer or similar services which are normally fixed within or to a structure.

It does not include:

- pre-construction archaeological investigations
- surveying this includes taking levels, making measurements and examining a structure for faults
- mineral extraction and exploration.

#### **Construction Phase**

This is the time from when construction actually begins, to when the finished structure is handed over to the client.

#### Designer

This is any organisation or person who prepares a design or specification, or delegates the preparation of a design to an employee or someone within his sphere of control. Designers are appointed by the client, and may comprise an organisation with a range of disciplines.

#### **Enforcement of the Regulations**

The Health and Safety (Enforcing Authority) Regulations 1998 (EA Regulations) allocate the enforcement of health and safety legislation at different premises between LAs and HSF.

#### HSE enforcement of construction work

HSE is the enforcing authority for construction work carried out on "construction sites" (where the principal work activity is construction work), or carried out at HSE enforced premises. HSE will also enforce construction work carried out at local authority enforced premises by persons who do not normally work at the premises if:

- the project is notifiable;
- all or part of the work is to the external fabric of the building/structure; or
- the work is carried out in a physically segregated area, normal activities having been suspended to enable the work to take place, etc (and the work is not maintenance of insulation on pipes, boilers, or other parts of heating/water systems etc).

#### Local authority enforcement of construction work

The local authority will be the enforcing authority for construction work at premises where they are the enforcing

authority, where construction work is carried out by persons who do not normally work at the premises, if:

- the project is not notifiable
- all of the work is internal.

#### Reducing Risk by Design – the General Principles of Prevention

The hierarchy of design risk management can be represented as a series of questions to be asked when considering construction risks. They are:

- 1. Can the hazard be eliminated completely so that the risk is avoided altogether?
- 2. If not, can the hazard be tackled at source?
- 3. If not, can priority be given to measures that control the risk and will protect all workers?
- 4. Before using PPE as a control measure can it be confirmed that this is a last resort after other measures have been considered and established as not reasonably practicable?

It is incumbent on designers to provide information regarding any significant risk that cannot be eliminated or controlled through the risk reduction process.

This information must be clearly communicated and explicitly identify the risks inherent in the design. Generic information about design risks is not acceptable, and design and site specific information must be provided to contractors via the Construction Phase Plan and tender documents and process.

#### Structures

These include:

- any building, timber, masonry, metal or reinforced concrete structure, railway line or siding, tramway line, dock, harbour, inland navigation, tunnel, shaft, bridge, viaduct, waterworks, reservoir, pipe or pipe-line, cable, aqueduct, sewer, sewage works, gasholder, road, airfield, sea defence works, river works, drainage works, earthworks, lagoon, dam, wall, caisson, mast, tower, pylon, underground tank, earth retaining structure or structure designed to preserve or alter any natural feature, fixed plant and any structure similar to the foregoing;
- anything similar to the above; or
- any formwork, falsework, scaffold or other structure designed or used to provide support or means of access during construction work

### **Related Documents**

- Managing Health and Safety in Construction;
   Construction (Design and Management) Regulations
   2015 Guidance on Regulations (HSE; Legal Series L153)
- A Quick Guide for Clients on 'Construction, Design and Management, Regulations 2015' (HSE; INDG Series) INDG 411 (rev 1))
- Construction (Design and Management) Regulations 20015 (Parliament; SI 2015/51)
- Health and Safety in Construction (HSE; HSG Series HSG 150 2006).
- The HSE's construction web pages, www.hse.gov.uk/ construction/

# Further Information and References

Other useful websites include:

- European Agency for Safety and Health at Work
- UCATT, the union for workers in the construction sector
- Working Well Together (WWT), http://wwt.uk.com/
- Safety in Design, http://www.safetyindesign.org.uk/
- Construction Skills, CITB, http://www.citb.co.uk/
- Constructing Excellence, http://www. constructingexcellence.org.uk
- Construction Industry Council
- UKCG, UK Contractors Group, http://www.ukcg.org.uk/
- Construction Industry Advisory Committee (CONIAC)

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