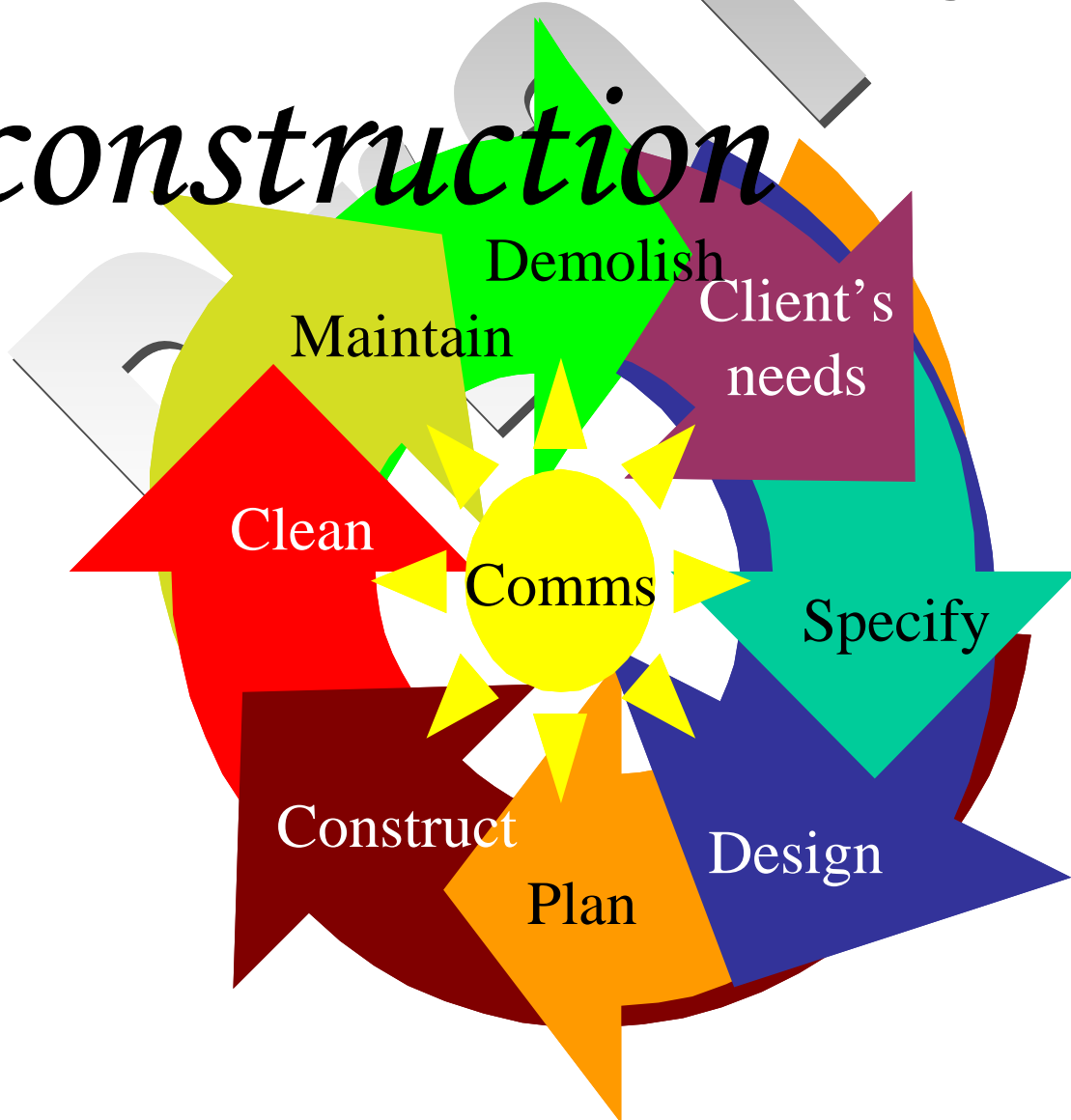


Managing Health and safety in construction



Status of this Document

This Code has been approved by the Health and Safety Commission, with the consent of the Secretary of State. It gives practical advice on how to comply with the law. If you follow the advice you will be doing enough to comply with the law in respect of those specific matters on which the Code gives advice.

You may use alternative methods to those set out in the Code in order to comply with the law. However, the Code has a special legal status. If you are prosecuted for breach of health and safety law, and it is proved that you did not follow the relevant provisions of the Code, you will need to show that you have complied with the law in some other way or a Court will find you at fault.

Notice of Approval

By virtue of Section 16(1) of the Health and Safety at Work etc. Act 1974, and with the consent of the Secretary of State for the Department of Work and Pensions, The Health and Safety Commission has on 2007 approved the Code of Practice entitled Managing Health and Safety in Construction.

This Code of Practice comes into effect on The revised Code of Practice under the Construction (Design and Management) Regulations 1994, which came into force on 4th September 2001, is hereby replaced with effect from the same date. A reference in this Code of Practice to another document does not imply approval by the HSC of that document except to the extent necessary to give effect to this Code of Practice.

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Introduction

1. The Construction (Design and Management) Regulations [2007] (CDM²⁰⁰⁷) come into force on [1st April 2007]. They replace the Construction (Design and Management) Regulations 1994 (CDM94) and the Construction (Health, Safety and Welfare) Regulations 1996 (CHSW). This Approved Code of Practice (ACoP) provides practical guidance on complying with the duties set out in the Regulations. It replaces the ACoP to the Construction (Design and Management) Regulations 1994 from the [1st April 2007].
2. The key aim of CDM²⁰⁰⁷ is to integrate health and safety into the management of the project and to encourage everyone involved to work together to:
 - a) improve the planning and management of projects from the very start;
 - b) identify risks early on so that they can be eliminated or reduced at the design or planning stage and the remaining risks can be properly managed;
 - c) target effort where it can do the most good in terms of health and safety; and
 - d) discourage unnecessary bureaucracy.
3. These regulations are intended to focus attention on planning and management throughout construction projects, from design concept onwards. The aim is for health and safety considerations to be treated as an essential, but normal part of a projects development – not an afterthought or bolt on extra.
4. **The effort devoted to planning and managing health and safety should be in proportion to the risks and complexity associated with the project. When deciding what you need to do to comply with these Regulations, your focus should always be on action necessary to reduce and manage risks. Any paperwork produced should help with communication and risk management. Paperwork which adds little to the management of risk is a waste of effort, and can be a dangerous distraction from the real business of risk reduction and management.**
5. Time and thought invested at the start of the projects will pay dividends not only in improved health and safety, but also in:
 - a) reductions in the overall cost of ownership, because the structure is designed for safe and easy maintenance and cleaning work, and because key information is available in the health and safety file;
 - b) reduced delays;
 - c) more reliable costings and completion dates;
 - d) improved communication and co-operation between key parties; and
 - e) improved quality of the finished product.

Typical operating and owning costs of a building* are in the ratio:

- 1 for construction costs
- 5 for maintenance and building operating costs
- 200 for business operating costs.

* Report of the Royal Academy of Engineering on "The Long Term costs of Owning and Using Buildings" (1998)

Application of the Regulations

(Regulation 3 and 25)

6. The Regulations are divided into five parts. Part 1 of the regulations deals with matters of interpretation and application. The Regulations apply to all construction work in Great Britain and its territorial sea, and apply to both employers and the self employed without distinction.
7. Part 2 covers general management duties which apply to all construction projects, including those which are non-notifiable.
8. Part 3 sets out additional management duties which apply to projects above the notification threshold (projects lasting more than 30 days, or involving more than 500 person days of construction work). These additional duties require particular appointments or particular documents which will assist with the management of health and safety from concept to completion.
9. Part 4 of the regulations apply to all construction work carried out on construction sites, and covers physical safeguards which need to be provided to prevent danger. Duties to achieve these standards are held by contractors who actually carry out the work, irrespective of whether they are employers or are self-employed. Duties are also held by those who do not do construction work themselves, but control the way in which the work is done. In each case, the extent of the duty is in proportion to the degree of control which the individual or organisation has over the work in question.
10. This does not mean everyone involved with design, planning or management of the project legally must ensure that all of the specific requirements in this section are complied with. They only have such duties if, in practice, they exercise significant control over the actual working methods, safeguards and site conditions. For example, Contractors carrying out excavation work are normally responsible for ensuring that the excavation is safe to work at, but if a client specifies that it is dug and supported in a particular way, then the Client will have a duty to ensure their instructions comply with the requirements in regulation 31.
11. Contractors must not allow work to start or continue unless the necessary safeguards are in place. For example, a brickwork contractor should not cause or permit workers under his control to work on an incomplete scaffold even if providing the scaffold is another contractor's responsibility.
12. Part 5 of the Regulations covers issues of civil liability; transitional provisions which will apply during the period when the regulations come into force, and amendments and revocations of other legislation.

Definitions

Regulation 2

Construction Work:

13. Construction work is defined in the regulations. The following are not construction work as defined:
 - a) putting up and taking down marquees and similar tents designed to be re-erected at various locations;
 - b) general maintenance of fixed plant, except when this is done as part of other construction work, or it involves substantial dismantling or alteration of fixed plant which is large enough to be a structure in its own right, eg structural alteration of a large silo; complex chemical plant; power station generator or large boiler;
 - c) tree planting and general horticultural work;

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- d) positioning and removal of lightweight movable partitions, such as those used to divide open-plan offices or to create exhibition stands and displays;
- e) surveying – this includes taking levels, making measurements and examining a structure for faults;
- f) work to or on vessels such as ships and mobile offshore installations;
- g) off site manufacture of items for later use in construction work (eg roof trusses, pre-cast concrete panels, bathroom pods and similar prefabricated elements and components);
- h) fabrication of elements which will form parts of offshore installations;
- i) the construction of fixed offshore oil and gas installations at the place where they will be used.

14. Some construction projects include operations, such as those described in the previous paragraph, which are not themselves construction work. Where this is the case, the overlap between the construction and non-construction work should be addressed in the management arrangements and the health and safety plan.

Notification:

Regulations 2(3) and 21

15. Except where the project is for a domestic client, HSE must be notified of projects where construction work is expected to:

- last more than 30 working days; or
- involve more than 500 person days, eg 50 people working for over 10 days.

16. All days on which construction work takes place count towards the period of construction work. Holidays and weekends do not count if no construction work takes place on these days.

17. Where a small project that is not notifiable requires a short extension, or short-term increase in the number of people, there is no need to notify HSE. However, if the work or the scope changes significantly so that it becomes notifiable, HSE should be informed.

18. The information that has to be sent to HSE is set out in Schedule 1 of CDM²⁰⁰⁷. A Form F10(rev) can be used and is available from HSE's local offices¹ or can be completed online². You do not have to use this form, as long as you provide all of the specified information. Notification should be sent to the HSE office that covers the site where the construction work is to take place.³

19. CDM Co-ordinators should notify HSE as soon as possible after their appointment. If the principal contractor is not appointed at that time then another, updated, notification must be made after they have been appointed. Any missing information must be notified once it becomes available, and the notifier should make clear that it relates to an earlier notification. If a significant change occurs, it is helpful to notify HSE, for example when a new principal contractor is appointed or if the start date changes by a month or more.

Co-ordination and Co-operation

Regulations 5 and 6

20. Although there is no requirement for the formal appointment of a CDM co-ordinator or principal contractor and for a construction phase plan for non-notifiable projects, regulations 5 and 6 do require co-operation and co-ordination between all members of the project team. For low risk

¹ <https://www.hse.gov.uk/forms/notification/f10hseoffices.htm>

² <https://www.hse.gov.uk/forms/notification/f10.pdf>

³ Addresses of HSE's local offices and the areas they cover can be obtained from HSE's Infoline (08701 545500) or HSE's internet site <http://www.hse.gov.uk/contact/maps/>

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projects, a low-key approach will be sufficient. In higher risk projects, for example those involving demolition, a more rigorous approach to co-ordination, cooperation and planning will be needed. Guidance given to CDM co-ordinators and principal contractors in this document give an indication as to what is needed, but any action taken should be in proportion to the risk which the work creates. The architect, lead designer or contractor who is carrying out the bulk of the design work should normally co-ordinate the health and safety aspects of the design work; the builder or main contractor, if there is one, should normally co-ordinate construction work.

21. It is vital that those doing the work understand the risks involved and what to do about them. If the risks are low and the precautions well understood by those carrying out the work, then there will be no need for a written plan. In other simple cases a brief summary that clearly sets out who does what and in what order will be enough. Where the risks are higher, for example where the work involves:

- structural alterations;
- deep excavations, and those in unstable or contaminated ground;
- unusual working methods or safeguards;
- ionising radiation or other significant health hazards;
- nearby high voltage powerlines;
- a risk of falling into water which is, or may become fast flowing;
- diving;
- explosives;
- heavy or complex lifting operations.

Then something closer to the construction phase plan will be needed. When carrying out demolition, regulation 29 requires those in control of the work to produce a written plan showing how danger will be prevented.

Taking Account of the General Principles of Prevention

Regulation 7.

22. When considering what precautions are necessary to control risks associated with a project, everyone who has a duty under these Regulations must take account of the general principles of prevention specified in schedule 1 of the Management of Health and Safety at Work Regulations 1999. These general principles are listed in **appendix 7**. Further guidance on the application of the general principles of prevention can be found in the Approved Code of Practice for the Management of Health and Safety at Work Regulations 1999⁴.

Summary of the Duties under the Regulations

23. A summary of the duties and how they are applied is given in the following table and chart.

	All construction projects (Part 2 of the Regulations)	Additional duties for Notifiable projects (Part 3 of the regulations)
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⁴ Management of health and safety at work 2nd Edition L21 2000 HSE Books ISBN 0 7176 2488 9.

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	All construction projects (Part 2 of the Regulations)	Additional duties for Notifiable projects (Part 3 of the regulations)
Clients (excluding domestic clients)	<ul style="list-style-type: none"> • Check competence and resources of all appointees • Ensure there are suitable management arrangements for the project • Allow sufficient time and resources for all stages • Provide pre-construction information to designers and contractors. 	<ul style="list-style-type: none"> • Appoint CDM co-ordinator* • Appoint principal contractor* • Make sure that the construction phase does not start unless there are suitable: <ul style="list-style-type: none"> ▪ welfare facilities, and ▪ construction phase plan in place • Retain and provide access to the health and safety file <p>(* There must be a CDM co-ordinator and principal contractor until the end of the construction phase)</p>
CDM Co-ordinators		<ul style="list-style-type: none"> • Advise and assist the client with his/her duties; • Notify HSE • Co-ordinate health and safety aspects of design work and cooperate with others involved with the project • Facilitate good communication between client, designers and contractors • Liaise with principal contractor regarding ongoing design • Prepare/update health and safety file
Designers	<ul style="list-style-type: none"> • Eliminate hazards and reduce risks during design • Provide information about remaining risks 	<ul style="list-style-type: none"> • Check client is aware of duties and CDM co-ordinator has been appointed • Check HSE has been notified • Provide any information needed for the health and safety file
Principal contractors		<ul style="list-style-type: none"> • Plan, manage and monitor construction phase in liaison with contractors; • Prepare, develop and implement a written plan and site rules. (Initial plan completed before the construction phase begins.) • Give contractors relevant parts of the plan • Make sure suitable welfare facilities are provided from the start and maintained throughout the construction phase. • Check competence of all their appointees • Ensure all workers have site inductions and any further information and training needed for the work • Consult with the workers • Liaise with CDM co-ordinator re ongoing design • Secure the site

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	All construction projects (Part 2 of the Regulations)	Additional duties for Notifiable projects (Part 3 of the regulations)
Contractors	<ul style="list-style-type: none"> • Plan, manage and monitor own work and that of workers • Check competence of all their appointees and workers • Train own employees • Provide information to their workers • Comply with the specific requirements in part 4 of the regulations • Ensure there are adequate welfare facilities for their workers 	<ul style="list-style-type: none"> • Check client is aware of duties and a co-ordinator has been appointed and HSE notified before starting work • Co-operate with principal contractor in planning and managing work, including reasonable directions and site rules • Provide details to the principal contractor of any contractor whom he engages in connection with carrying out the work; • Provide any information needed for the health and safety file • Inform principal contractor of problems with the plan • Inform principal contractor of reportable accidents, diseases and dangerous occurrences
Everyone	<ul style="list-style-type: none"> • Check own competence • Cooperate with others and coordinate work so as to ensure the health and safety of construction workers and others who may be affected by the work • Report obvious risks • Comply with requirements in Schedule 3 and Part 4 of the regulations for any work under their control. 	

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Chapter 1. Clients

24. The client has one of the biggest influences over the way a project is run. They have substantial influence and contractual control and their decisions and approach determine:

- the time, money and other resources available for projects;
- who makes up the project team, their competence, when they are appointed and who does what;
- whether the team is encouraged to co-operate and work together effectively;
- whether the team have the information that they need about the site and any existing structures;
- the arrangements for managing and co-ordinating the work of the team.

25. Because of this, they are made accountable for the impact their approach has on the health and safety of those working on or affected by the project. However, the Regulations also recognise that many clients know little about construction health and safety, so **clients are not required or expected to plan or manage projects themselves. Nor do they have to develop substantial expertise in construction health and safety, unless this is central to their business. Clients must ensure that various things are done, but are not normally expected to do them themselves.**

26. In the case of notifiable projects, clients must appoint a competent CDM co-ordinator. Those clients without construction expertise should rely on the CDM co-ordinator's advice on how best to meet their duties, but the CDM co-ordinator will need the clients support and input to be able to carry out their work effectively. The client remains responsible for ensuring that client duties are met.

27. Clients can also, intentionally or unwittingly, take on additional responsibilities. If they specify materials or methods of working they may well become designers in relation to those specific matters. They will also legally be contractors if they directly manage or carry out construction work.

Who are clients?

Regulation 2

28. A client is an organisation or individual for whom a construction project is carried out. Clients only have duties when the project is associated with a business or other undertaking (whether for profit or not). This can include for example, local authorities, school governors, insurance companies and project originators on Private Finance Initiative (PFI) projects. Domestic clients are a special case and do not have duties under CDM²⁰⁰⁷.

Domestic Clients

29. Domestic clients are people who have work done on their own home or the home of a family member, that does not relate to a trade or business, whether for profit or not. It is the type of client that matters, not the type of property. Local authorities, housing associations, charities, landlords and other businesses may own domestic property, but they are not domestic clients. If the work is in connection with the furtherance of a business attached to domestic premises, such as a shop, the client is not a domestic client.

30. Sometimes groups who would otherwise be domestic clients form companies to administer construction work. A common example of this is a company formed by leaseholders of flats to

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undertake maintenance of the common parts of a structure. In such a case, the company is not a domestic client, and will have duties under the regulations.

31. Domestic clients have no client duties under CDM²⁰⁰⁷, which means that there is no legal requirement for appointment of a CDM co-ordinator or principal contractor when such projects reach the notification threshold. Similarly, there is no need to notify HSE where projects for domestic clients reach the notification threshold. However, designers and contractors still have their normal duties as set out in Parts 2, and 4 of the regulations, and domestic clients will have duties under part 4 of the Regulations if they control the way in which construction work is carried out (see paragraph 9 above).

32. Designers and contractors working for domestic clients have to manage their own work and co-operate with and co-ordinate their work with others involved with the project so as to safeguard the health and safety of all involved in the project. The requirements in Schedules 2 and 3 and other health and safety law still apply.

Insurance and warranty claims

33. An insurance company arranging for construction work to be carried out under the terms of an insurance policy is the client for the purposes of CDM²⁰⁰⁷. However, where the insured arranges the work and the insurance company reimburses them, the insured is the client. If the latter is a domestic client they attract no duties under CDM²⁰⁰⁷.

34. If the insurer specifies designers or contractors for certain aspects of the work, then the insurer is responsible for establishing that they are competent.

35. It is common, with insurance-related work, for agents to be appointed to act on behalf of either the insured or insurer. These agents resolve claims and may co-ordinate the remedial works. Such agents may legally be clients with all the relevant duties.

36. Where remedial work is carried out under a home warranty scheme, such as those provided by the National House Building Council (NHBC), it is the provider of the warranty, eg NHBC, who is the client for the purposes of CDM²⁰⁰⁷.

Developers

37. In some instances, domestic clients may buy a house or flat before the whole project is complete, for example where house builders develop a site with a view to selling a number of homes. In such cases the purchaser may have an interest in the property, but it is still the developer who arranges for the construction work to be done and they are legally the client.

38. Builder-developers are often both client and principal contractor, although they may appoint another contractor as principal contractor. They may also be a designer or co-ordinator. They must comply with CDM²⁰⁰⁷ in all their roles.

PFI, PPP and similar forms of procurement

39. Project originators are legally the client at the start of the project, and should ensure that a CDM coordinator is appointed and HSE notified during the early design and specification phase. The project originator cannot wait until someone else, eg the Special Purpose Vehicle (SPV), takes over the client role.

40. The role and responsibilities of the client can transfer from one party to another as the project proceeds. This is normally the case when the SPV is appointed to carry out detailed specification and delivery of the project. Any such transfer should:

- be clear to, and agreed by all those involved;

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- be clearly recorded;
- provide the practical authority to discharge the client's duties

If the project originator does not wish to remain a client in respect of the Regulations after the SPV has been appointed, they should make use of the election facility in Regulation 8. Without such an election, the project originator may retain some client responsibilities.

If there is doubt

41. In some circumstances it may not be immediately obvious who is legally the client and there can sometimes be more than one client involved in a project. **To avoid confusion, this needs to be resolved by those involved at the earliest stage possible.** Take into account who:

- ultimately decides what is to be constructed, where, when and by whom;
- commissions the design and construction work (the employer in contract terminology);
- initiates the work;
- is at the head of the procurement chain;
- engages the contractors.

42. If there is still doubt, then all of the possible clients can appoint one of them as the only client for the purposes of CDM²⁰⁰⁷. Someone will always be the client. It is in the interests of all possible contenders to identify who it is. If not they run the risk that all will be considered to carry the client's duties under the regulations.

What clients must do for all projects:

Regulations 4-10

43. Clients must make sure that:

- Designers, contractors and other team members that they propose to engage are competent (or work under the supervision of a competent person), are adequately resourced and appointed early enough for the work they have to do- guidance on assessing competence is given in chapter 6;
- They allow sufficient time for each stage of the project, from concept onwards;
- They cooperate with others concerned in the project as is necessary to allow other dutyholders to comply with their duties under the regulations;
- They coordinate their own work with others involved with the project in order to ensure the safety of those carrying out the construction work, and others who may be affected by it;
- There are reasonable management arrangements in place throughout the project to ensure that the construction work can be carried out, so far as is reasonably practicable, safely and without risk to health. (This does not mean managing the work themselves, as few clients have the expertise and resources needed and it can cause confusion.);
- Contractors have made arrangements for suitable welfare facilities to be provided from the start and throughout the construction phase;
- Any fixed workplaces (eg offices, shops, factories, schools) which are to be constructed will comply, in respect of their design and the materials used, with any requirements of the Workplace (Health Safety and Welfare) regulations 1992;
- Relevant information likely to be needed by designers, contractors or others to plan and manage their work is passed to them in order to comply with regulation 10.

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Co-operation, Co-ordination, Timeliness and resources (see also paragraphs 20 and 21): *Regulations 5, 6 and 9*

44. Co-operation between parties and co-ordination of the work are key to the successful management of construction health and safety. Co-operation and co-ordination can only be meaningful if the relevant members of the project team have been appointed early enough to allow them to contribute to risk reduction. This is particularly important during the design stage when both clients and contractors should contribute to discussions on buildability, usability and maintainability of the finished structure. Clients should seek to appoint those who can assist with design considerations at the earliest opportunity so that they can make a full contribution to risk reduction during the planning stages.

45. Unrealistic deadlines and a failure to allocate sufficient funds are two of the largest contributors to poor control of risk on site. When engaging designers and contractors, and for notifiable projects appointing CDM co-ordinators and principal contractors, clients have to consider the resources (eg staff, equipment and, particularly, time) needed to plan and do the work properly. Any contractors who are being considered for appointment should be informed of the minimum time period allowed to them for planning and preparation before construction work begins on site. Contractors should be given sufficient time after their appointment to allow them to plan the work and mobilise the necessary equipment (e.g. welfare facilities) and staff to allow the work to proceed safely and without risk to health. This is particularly important where the project involves demolition work- contractors must be given sufficient time for the planning and safe execution of any demolition activities.

46. Clients should consult with appointees (including the principal contractor) to find out how much time they will need for planning and preparation before work is expected to start in order that both parties can agree a suitable time period. Similarly, CDM co-ordinators will need sufficient time after their appointment to carry out their duties under the regulations. Clients must then inform their appointees how much time the Client has allowed for planning and preparation before the work starts.

Arranging design work

Regulations 4 and 5

47. Clients must only employ designers who are competent to carry out their CDM duties. Further help with assessing competence of designers is given in chapter 6.

48. Clients often employ more than one designer, for example architects, civil, structural and services engineers. In such cases they all need to know who does what and the timing of the appointments needs to enable the design work to be co-ordinated from an early stage. Nominating one designer as the 'lead designer' is often the best way to ensure co-ordination and co-operation during work which involves a number of designers. For notifiable sites, this 'lead designer' may be appointed as a CDM co-ordinator under regulation 8, but the CDM co-ordinator's duties are wider than just design co-ordination and suitable arrangements must be made to carry out all of the CDM co-ordinator's tasks.

Management arrangements

Regulation 9

49. Most clients, particularly those who only occasionally commission construction work, will not be experts in the construction process and for this reason they are not required to take an active role in managing the work. Clients are required to take reasonable steps to ensure that suitable management arrangements are in place throughout the life of the project so that the work can be

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carried out safely and without risk to health. The arrangements put in place should focus on the needs of the particular job and should be proportionate to the risks arising from the work.

50. For non-notifiable projects the client will need to ensure that arrangements are in place to ensure that:

- a) There is clarity as to the roles, functions and responsibilities of members of the project team;
- b) Those with duties under the regulations have sufficient time and resource to comply with their duties;
- c) There is good communication, co-ordination and co-operation between members of the project team (eg between designers and contractors);
- d) Designers are able to confirm that their designs (and any design changes) have taken account of the requirements of regulation 11 (Designers duties), and that the different design elements will work together in a way which does not create risks to the health and safety of those constructing, using or maintaining the structure;
- e) That the contractor is provided with the pre-construction information (see paragraphs 53-56);
- f) Contractors are able to confirm that health and safety standards on site will be controlled and monitored, and welfare facilities will be provided by the contractor from the start of the construction phase through to handover and completion.

51. Most of these arrangements will be made by others in the project team, such as designers and contractors. Before they start work, a good way of checking is to ask the relevant members of the team to explain their arrangements, or to ask for examples of how they will manage these issues during the life of the project. When discussing roles and responsibilities, on simple projects all that may be needed is a simple list of who does what. The main duties of project team members are listed in the table in the introduction to this Approved Code of Practice.

52. Having made these initial checks before work begins, clients should make periodic checks through the life of the project to make sure the arrangements which have been made, are properly implemented and updated as the project progresses. For non notifiable projects, only simple checks will be needed, for example:

- checking that there is adequate protection for the client's workers and/or members of the public;
- checking to make sure that adequate welfare facilities have been provided by the contractor;
- checking that there is good co-operation and communication between designers and contractors,
- checking that the arrangements which the contractor agreed to make to control key risks on site have been implemented.

53. Most clients on non-notifiable projects should be able to carry out these checks for themselves. If you need help, this should be available from the competent person you have appointed under regulation 7 of the Management of Health and Safety at Work Regulations 1999. Alternatively, you could seek advice from someone who has acted as a CDM co-ordinator for a notifiable project, but you are only **required** to appoint a CDM co-ordinator if the project is notifiable.

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54. When deciding whether management arrangements are suitable and maintained throughout the project, clients will need to make a judgement, taking account of the nature of the project and the risks that the work will entail. If this judgement is reasonable, and clearly based on the evidence requested and provided, clients will not be criticised if the arrangements subsequently prove to be inadequate, or if the company who has made the arrangements fails to implement them properly without the client's knowledge.

Providing the Pre-construction Information

Regulation 10

55. Clients must provide designers and contractors who may be bidding for the work (or who they intend to engage), with the project-specific health and safety information needed to identify hazards and risks associated with the design and construction work. (The pre-construction information).

56. The information should be provided as part of the tendering or early procurement process, and responses to the issues identified can be a real help when judging competence of those tendering for the work. It therefore needs to be identified, assembled and sent out in good time so that those who need it when preparing to bid or when preparing for the work can decide what resources (including time) will be needed to enable design, planning and construction work to be organised and carried out properly. Where design work continues during the construction phase, the pre-construction information will need to be provided to designers before work starts on each new element of the design. Similarly, where contractors are appointed during the construction phase, each contractor (or those who are bidding for the work) must be provided with the pre-construction information in time for them to take this into account when preparing their bid, or preparing for work on the site.

57. Clients who already have a health and safety file from earlier work, or who have previously carried out surveys or assessments, including under the Control of Asbestos at Work Regulations 2002⁵, may already have all, or much of the information needed. However, where there are gaps in this information, the client should ensure that these are filled by commissioning surveys or by making other reasonable enquiries. It is not acceptable for clients to make general reference to hazards which might exist- for example that '.... there may be asbestos present in the building'. Clients should carry out the necessary surveys in advance and provide the necessary information to those who need it.

Example 1.

A client was aware that there were electrical and gas services passing under the site. He arranged for plans for these to be provided by the relevant utility suppliers, and confirmed the exact location of the services by carrying out on-site tests. This information was then provided to contractors who were asked to tender for the work so that they could take account of the presence of the services when bidding for the work.

⁵ Further information can be found at <http://www.hse.gov.uk/pubns/asbindex.htm>.

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58. The pre-construction information provided should be sufficient to ensure that significant risks during the work can be anticipated and planned for. It should concentrate on those issues that designers and contractors could not reasonably be expected to anticipate or identify, and not on obvious hazards such as the likelihood that the project would involve work at height. Appendix 2 lists topics that should be considered when drawing up the pre-construction information.

59. The information needs to be in a form that is convenient, ie clear, concise and easily understood, but it can be included in other documents, for example the specification, providing the relevant health and safety issues are fully covered. Brief notes on 'as built' drawings are particularly useful, but should be checked in case significant alterations have been carried out. In the case of notifiable projects, CDM Co-ordinators will normally advise the client as to what is needed and arrange for relevant information to be given to designers and contractors. Guidance for CDM Co-ordinators is given in Chapter 3.

60. Clients are also required to tell contractors who they engage to carry out construction work (including, where relevant, Principal Contractors) the minimum notice that they will be given before they are expected to start construction work. This is to ensure that contractors have sufficient time to plan and prepare – eg mobilise their workforce and equipment, and make arrangements for welfare facilities to be provided (see example 5 on page 19).

Welfare Arrangements

Regulations 5 and 6

61. Clients do not have to provide welfare facilities for construction workers, but if there are particular constraints which make it difficult for facilities to be provided, the client should co-operate with contractors and assist them with their arrangements.

Additional things clients must do for notifiable projects:

Regulations 14, 15, 16 and 17

62. For notifiable projects, in addition to the duties set out above, clients must:

- Appoint a CDM Co-ordinator to advise and assist with their duties and to co-ordinate the arrangements for health and safety during the planning phase;
- Appoint a Principal Contractor to plan and manage the construction work – preferably early enough for them to work with the designer on issues relating to buildability, usability and maintainability;

The right
information for the
right people
at the
right time

Example 2.

A row of single storey brick built garages was to be demolished. The site was to be completely fenced off. The pre-construction information stated that there were no hazardous substances or services to the garages. It provided details of the access route to the garages and stated that in recent months children had been playing in the area.

The Principal Contractor and demolition contractor agreed that no other information was needed.

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- ensure that the construction phase does not start until the principal contractor has prepared a suitable health and safety plan and made arrangements for suitable welfare facilities to be present from the start of the work;
- make sure the health and safety file is prepared, reviewed, or updated ready for handover at the end of the construction work. This must then be kept available for any future construction work or to pass on to a new owner.

63. **Getting the right people for these roles and making early appointments is particularly important for clients with little construction or health and safety expertise, as they will need to rely on the advice given by the CDM Co-ordinator on matters relating to the competence of those who they intend to appoint, and the adequacy of the management arrangements made by appointees.** For notifiable projects, if a client does not make these appointments they become legally liable for the work that the CDM co-ordinator and principal contractor should do, as well as for not making the appointments.

Appointment of the CDM co-ordinator

Regulations 4 and 14

64. For notifiable projects, the client must appoint a competent, adequately resourced CDM co-ordinator as soon as practicable after initial design work or other preparations for construction work have begun. Guidance on the assessment of competence of a CDM coordinator can be found in chapter 6.

65. The CDM co-ordinator provides clients with a key project advisor in respect of construction health and safety risk management matters. Their main purpose is to help clients to carry out their duties; to co-ordinate health and safety aspects of the design work and to prepare the health and safety file⁶.

66. Early appointment is crucial for effective planning and establishing management arrangements from the start. The regulations require the appointment to take place as soon as is practicable after initial design work or other preparation for construction work has begun. This allows the client to appraise their project needs and objectives, including the business case and any possible constraints on development to enable them to decide whether or not to proceed before appointing the co-ordinator. The co-ordinator needs to be in a position to be able to co-ordinate design work and advise on the suitability and compatibility of designs, and therefore they should be appointed before significant detailed design work begins. Significant detailed design work includes preparation of the initial concept design and implementation of any strategic brief. As a scheme moves into the detailed design stage, it becomes more difficult to make fundamental changes that eliminate hazards and reduce risks associated with early design decisions.

Example 3.

A designer specified tilt and turn windows to reduce risks during window cleaning. The client overruled this on the grounds of cost. The designer pointed out that the client was taking over his duties under reg.14, and needed to address how the risk to window-cleaners could be minimised and how the duties under the [Workplace Regulations](#) could be complied with.

⁶ Under the Management of Health and Safety at Work Regulations 1999, Regulation 7(1) requires clients should already have in place competent persons to assist them with their legal duties in relation to health and safety. The appointment of the CDM co-ordinator will normally meet this duty in relation to construction related health and safety issues.

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67. Proper consideration of the health and safety implications of the design for those who build and maintain the structure will make a significant contribution to reducing its whole life cost, and will make delivery to time, cost and quality more likely.

68. The co-ordinator can be an individual or a company. Co-ordinators can be appointed independently of any other role on the project team, or they may combine this work with another role, for example, project manager, designer or principal contractor. Where the role is combined, it is crucial that the co-ordinator has sufficient independence to carry out their tasks effectively. The tasks can be shared out, but when this happens it is important to make sure that all of the duties are discharged. On simple projects one person should be able to provide all of the support that clients need, but a team approach will be more common for larger or more complicated projects because of the workload and skills required.

Appointment of the principal contractor

Regulations 4 and 14

69. For notifiable projects, clients must appoint one competent, adequately resourced principal contractor to plan, manage and monitor the construction work. Guidance on assessing the competence of principal contractors is given in chapter 6.

70. The principal contractor can be an organisation or an individual, and is usually the main or managing contractor. A principal contractor's key duty is to co-ordinate and manage the construction phase to ensure the health and safety of everybody carrying out construction work, or who are affected by the work.

71. The principal contractor must be appointed as soon as the client knows enough about the project to select a suitable contractor. Early appointment allows the principal contractor and other specialists, for example maintenance contractors and facilities management experts to make a substantial contribution to ensuring the buildability and maintainability of the structure under construction. This helps to eliminate and reduce risks to health and safety, and to avoid interruptions, delays and other problems, which can add significantly to the costs of a project.

72. Early appointment is essential for the principal contractor to have sufficient time to develop an adequate construction phase health and safety plan and to arrange for appropriate resources, including welfare facilities, to be available when work commences on site. (providing welfare facilities when work starts on site is a specific duty of the Principal contractor, but the Client also has a duty to make sure that the principal contractor has done so.) Principal contractors should be told as part of the pre-construction information the minimum amount of time which they will be given for planning and preparation before the construction work is expected to start on site (Regulation 10(2)(c)).

Example 4.

On a large contract for a bank, worth several million pounds, the co-ordinator was appointed late and given less than 48 hours to prepare the information pack.

This meant that there was insufficient time to properly consider the plan. Work was delayed because the contractor had no information about the underground services to be found on site. In addition the co-ordinator was not able to influence the design.

Example 5.

A client recognised that welfare facilities were required from the very beginning of the construction phase. This meant services had to be installed early.

To ensure that services would be available from the start of the construction phase, arrangements were made with utility companies for enabling works to be done before the principal contractor arrived on site.

This reduced the lead-time required before construction could begin.

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73. There can only be one principal contractor at any one time. To ensure continuity, clients should normally keep the same principal contractor for the whole project from site clearance and preparation to final completion. However, there may be exceptions, for example where:

- preliminary works, eg involving demolition or site preparation work, where there is a substantial delay between site clearance and the start of new construction work;
- separate projects for different clients, eg for a building shell and subsequent fitting-out work.

74. In these cases, any change in principal contractor should:

- be clear to, and agreed by all those involved, particularly in relation to the timing of the change;
- be clearly recorded;
- provide the practical authority to enable the principal contractor to discharge his duties.

Management Arrangements

Regulation 9

75. For notifiable projects, clients must appoint a competent CDM co-ordinator who will assist them with the assessment of the adequacy of the management arrangements made by others in the project team. **Having appointed a competent CDM co-ordinator, the client is entitled to rely on their advice when making these judgements.** Guidance for CDM co-ordinators is covered in chapter 2.

Before the Construction Phase Begins

Regulation 16

76. For notifiable projects, before construction work begins clients must check to ensure that suitable welfare facilities have been provided by the principal contractor, and that the construction phase plan has been prepared by the principal contractor. With the help of the CDM coordinator, clients must ensure that the plan is project-specific and suitable. Guidance on the content of the construction phase plan is given in chapter 4.

77. Once the construction phase has begun, neither clients nor CDM co-ordinators have a duty to check that the plan is updated; this is the responsibility of the principal contractor.

The health and safety file

Regulation 17

78. For notifiable projects, the health and safety file (the file) is a source of information that will help to reduce the risks and costs involved in future construction work, including cleaning, maintenance, alterations, refurbishment and demolition. Clients therefore need to ensure that the file is prepared and kept available for inspection in the event of such work. It is a key part of the information, which the client, or the client's successor, must pass on to anyone preparing or carrying out work to which CDM²⁰⁰⁷ applies.

79. As soon as a CDM co-ordinator is appointed, clients should discuss and agree a suitable, user-friendly format for the file and what type of information it should contain. At the end of the construction phase, normally at practical completion, the file must be finalised and given to the client by the CDM co-ordinator. In some cases, for example where there is partial occupation or phased handover of a project it may be needed earlier to inform other work. For this to happen, CDM co-ordinators need to make appropriate arrangements at the beginning of the project to collect

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and compile the information that is likely to be needed for the file as work progresses. There is further information about the file and its contents in chapter 8.

Completion and handover (All projects)

Regulation 9

80. One of the most important stages in a project is when it nears completion and is handed over to the client. It is rare for all construction work to be completed before handover. Sometimes clients, in their eagerness to have things up and running, assume control when a great deal of construction work remains.

81. Risks to employees and others not engaged in construction work can increase substantially as they visit the site or spend more time there. The risks to the construction workers can also increase, due to the presence and work of others not directly engaged or experienced in construction work.

82. To minimize such risks, the management of this phase needs to be considered well in advance to address:

- the nature, scope and duration of any finishing off work;
- how this work will be managed and by whom;
- how the site will be split up, and access controlled, to safeguard construction workers as well as clients' employees and/or members of the public

For simple projects these arrangements can be discussed and agreed between the various parties. In more complex situations, the arrangements should be recorded as part of the construction phase plan.

What clients don't have to do

83. Clients are not required or expected to:

- plan or manage construction projects themselves; or
- specify how work must be done, eg requiring a structure to be demolished by hand. Indeed they should not do so unless they have the expertise to assess the various options and risks involved. (They should, of course, point out particular risks that would inform this decision.)
- provide welfare facilities for those carrying out construction work (though they should co-operate with the contractor to assist with his arrangements);
- check designs to make sure that regulation 11 has been complied with;
- visit the site (to supervise or check construction work standards);
- employ third party assurance advisors to monitor health and safety standards on site (though there may be benefits to the client in doing so)
- subscribe to third party competence assessment schemes (though there may be benefits from doing so);

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CDM Co-ordinators

Chapter 2. The CDM co-ordinator (Notifiable projects only)

84. The role of CDM co-ordinator is to provide the client with a key project advisor in respect of construction health and safety risk management matters. They should assist and advise the client on appointment of competent contractors and the adequacy of management arrangements; ensure proper co-ordination of the health and safety aspects of the design process; facilitate good communication and cooperation between project team members and prepare the health and safety file.

85. Through early involvement with clients and designers, a CDM co-ordinator can make a significant contribution to reducing risks to workers during construction, and to contractors and end users who work on or in the structure after construction.

Appointing the CDM Co-ordinator

Regulation 14

86. Early appointment of the CDM co-ordinator is crucial for effective planning and establishing management arrangements from the start. The regulations require the appointment to take place as soon as is practicable after initial design work or other preparation for construction work has begun. This allows the client to appraise their project needs and objectives, including the business case and any possible constraints on development to enable them to decide whether or not to proceed before appointing the CDM co-ordinator. The CDM co-ordinator needs to be in a position to be able to co-ordinate the health and safety aspects of the design work and advise on the suitability and compatibility of designs, and therefore they should be appointed before significant detailed design work begins. Significant detailed design work includes preparation of the initial concept design and implementation of any strategic brief. As a scheme moves into the detailed design stage, it becomes more difficult to make fundamental changes that eliminate hazards and reduce risks associated with early design decisions.

87. Proper consideration of the health and safety implications of the design for those who build and maintain the structure will make a significant contribution to reducing its whole life cost, and will make delivery to time, cost and quality more likely.

88. The CDM co-ordinator can be an individual or a company. They can be appointed independently of any other role on the project team, or they may combine this work with another role, for example, project manager, designer or principal contractor. Where the role is combined, it is crucial that the CDM co-ordinator has sufficient independence to carry out their tasks effectively. The tasks can be shared out, but when this happens it is important to make sure that all of the duties are discharged. On simple projects one person should be able to provide all of the support that clients need, but a team approach will be more common for larger or more complicated projects because of the workload and skills required.

89. Chapter 6 contains advice on selecting a competent CDM co-ordinator.

What CDM co-ordinators should do

Regulation 20

90. CDM Co-ordinators must:

- a) Give suitable and sufficient advice and assistance to clients in order to help them to comply with their duties, in particular:

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- the duty to appoint competent designers and contractors; and
 - the duty to ensure that adequate arrangements are in place for managing the project;
- b) notify HSE about the project (see paragraphs 15-19 above);
 - c) co-ordinate design work, planning and other preparation for construction where relevant to health and safety;
 - d) identify and collect the pre-construction information and advise the client if surveys need to be commissioned to fill significant gaps;
 - e) promptly provide in a convenient form to those involved with the design of the structure; and to every contractor (including the principal contractor) who may be or has been appointed by the client, such parts of the pre-construction information which are relevant to each;
 - f) manage the flow of health and safety information between clients, designers and contractors;
 - g) advise the client on the suitability of the initial construction phase plan and the arrangements made to ensure that welfare facilities are on site from the start;
 - h) produce or update a relevant, user friendly, health and safety file suitable for future use at the end of the construction phase.

Advising the Client on Competency of Designers and Contractors:

Regulation 4 and 20

91. Clients are responsible for appointing competent and adequately resourced designers and contractors (including Principal Contractors). Most Clients, particularly those whose involvement with construction work is limited or non-existent, will not have the expertise necessary to assess the competency and resource of designers and contractors. A competent CDM co-ordinator will have this knowledge and expertise, and they should assist clients with these assessments. Further advice on assessing the competence of duty holders can be found in chapter 6.

Managing information flow

Regulations 10, 15 and 20

92. Co-operation and co-ordination can only be achieved if there is good communication between all parties involved in a particular aspect of a project. During planning stages the CDM co-ordinator needs to make sure that there are appropriate systems in place to encourage communication and the sharing of relevant information, and CDM co-ordinators should manage the flow of information between the team members. They may need to convene special meetings if they are not satisfied there is sufficient co-operation between designers or with other team members, or if adequate regard is not being given to health and safety. It is, however, better for these issues to be addressed in routine project meetings.

Example 6.

The co-ordinator noted that a design required the heads of in-situ cast pile caps to be broken down by hand, causing the team considerable exposure to noise and hand-arm vibration.

He suggested that by slightly redesigning the reinforcing steelwork and fitting it with protective sleeving before the pour, it would be possible to use either a machine-mounted concrete crusher or a hydraulic burster instead of hand-held breakers.

This suggestion was agreed with the designer and adopted, resulting in considerable time savings as well as reducing the health risk.

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CDM Co-ordinators

Providing Information

Regulation 10, 15 and 20

93. Clients must provide designers and contractors who may be bidding for the work (or who they intend to engage), with the project-specific health and safety information needed to identify hazards and risks associated with the design and construction work. (The pre-construction information). For notifiable projects, clients are required to provide this information to the CDM co-ordinator. The CDM co-ordinator should check the information to ensure that it is complete, advise the client if there are any significant gaps or defects, and ensure these are filled by commissioning surveys or by making other reasonable enquiries. The CDM co-ordinator should then provide designers or contractors who may be bidding for, or preparing to carry out construction work on site, with such parts of the pre-construction information that are relevant to each.

94. Guidance on the content of the pre-construction information and when it should be provided is given in paragraphs 55-60 in chapter 1.

Advising the Client on adequacy of Management Arrangements:

Regulations 9 and 20.

95. Clients must make sure that there are suitable (project specific) arrangements for managing each project so that the work can be carried out safely and without risk to health. Most clients, particularly those who only occasionally commission construction work, will not be experts in the construction process and will not wish to become too involved with the day to day management decisions. The regulations do not require clients to take an active role in managing the work, but they do require clients to take reasonable steps to ensure that suitable management arrangements are in place throughout the life of the project.

96. The CDM co-ordinator should assist with the development of these arrangements, and should advise clients on whether or not the arrangements are adequate. They should assist the client with decisions about how much time contractor will need to prepare before construction work begins. When advising and assisting the client, the following issues should be considered:

- a) Is the client aware of their duties and do they understand what is expected of them?
- b) Has the client prepared relevant information about the site in order to meet their duties under Reg 10?
- c) Have the necessary appointments been made, and has the project been notified?
- d) Is there an established project team who meet regularly to discuss and co-ordinate activities in relation to the project?
- e) Are project team members clear about their roles and responsibilities?
- f) Are their arrangements in place for coordinating design work and reviewing the design to ensure that the requirements in Reg 11 are being addressed?
- g) Are their arrangements in place for dealing with late changes to the design, and for co-operating with contractors so that problems are shared?
- h) Has the principal contractor been given enough time to plan and prepare for the work, and mobilise for the start of the construction phase?
- i) Has the principal contractor made arrangements for providing welfare facilities on site from the outset, and have they prepared a construction phase plan that addresses the main risks during the early stages of construction?
- j) Are there suitable arrangements for developing the plan to cover risks that arise as the work progresses?

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- k) Has the format for the health and safety file been agreed, and are arrangements in place for collecting the information which it will contain?
- l) Has the principal contractor put in place suitable arrangements for consulting with workers on site; for carrying out site induction and for ensuring that workers are adequately trained and supervised?

97. Not all of these questions will need answers at the start of the project, and the arrangements will need to evolve as the project develops. The key thing is to plan ahead so that arrangements are in place before the risks that need managing materialise on site.

Co-ordinating design work- Design Reviews

Regulation 20

98. The CDM co-ordinator's legal responsibility in respect of design work only extends to health and safety aspects of the design – checking that the requirements of regulation 11 have been addressed and that the different design elements work together without causing danger. This is best achieved through design reviews during which health and safety issues are addressed alongside practicality and cost in a wider review of the design's buildability, maintainability and usability.

99. When considering buildability, meetings should where possible include the contractor so that difficulties associated with construction can be discussed and solutions agreed before the work begins. When discussing usability and maintainability, involving the client or those who will be responsible for operating the building or structure will mean that proper consideration can be given to the health and safety of those who will maintain and use the structure once it has been completed. Doing this during the design stage will result in significant cost savings for the client, as rectifying mistakes after the structure has been built is always expensive.

100. As part of design reviews, CDM co-ordinators need to ensure that safe methods for construction work have been identified, and that the designs include the information needed by other designers and contractors to allow them to work safely and without risk to health. This information needs to be clear and concise.

101. The timing of the reviews also needs careful consideration. Design needs to be far enough on for people to have a clear view of what is in mind, but not so far on that it is too late to modify the proposals, if necessary. Design is an iterative process so it may need review at several different stages. The effort devoted to design review should be in proportion to the risks and complexity.

102. CDM Co-ordinators who identify important health and safety issues that have not been addressed in the design must draw them to the attention of the designer.

The CDM co-ordinator and the construction phase

Regulation 20

103. Design often continues throughout a project and CDM co-ordinators have a continuing role during the construction phase – ensuring that designers, including those engaged by a contractor and contractors who carry out design work themselves, co-operate with each other, and designs meet the requirements of the Regulations. Where design changes and decisions during the construction phase have significant health and safety implications, CDM co-ordinators should liaise with the principal contractor about any implications for the construction phase plan.

104. The design of temporary works, such as falsework, formwork and scaffolding, falls within the scope of CDM²⁰⁰⁷. CDM Co-ordinators have to take reasonable steps to ensure co-operation between permanent and temporary works designers, in particular to ensure that arrangements are in

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place to ensure that designs are compatible and that the permanent works can support any loadings from temporary works.

105. CDM Co-ordinators need to pay particular attention to late designs or late changes to designs. Examples would be revisions on architects' instructions, when clients require changes or when unforeseen problems are encountered on site. The CDM co-ordinator should make sure that there are arrangements in place to ensure that such changes do not result in significantly increased risks on site.

Health and safety file

Regulations 17 and 20

106. CDM Co-ordinators must prepare a suitable health and safety file, or update it – if one already exists. It is important that they discuss this with the client before work starts on site so that the format can be agreed, along with who should provide what information, when. This requires the co-operation of several dutyholders so co-ordinators need to make sure that designers and contractors know, early on, what they will have to provide.

107. Clients may need to provide incentives or include requirements in contracts to ensure that the information is given to the CDM co-ordinator immediately after relevant design or construction work is completed. At the end of a project the CDM co-ordinator should give the completed file to the client for safekeeping. (Chapter 8 and paragraph 262 provide more information on the health and safety file.)

What co-ordinators don't have to do

108. CDM Co-ordinators don't have to:

- a) approve the appointment of designers, principal contractors or contractors, although they normally advise clients about competence and resources;
- b) approve or check designs, although they have to be satisfied that the design process addresses the need to eliminate and control risks;
- c) approve the principal contractor's construction phase health and safety plan, although they have to be able to advise clients on its adequacy at the start of construction;
- d) supervise the principal contractor's implementation of the construction phase health and safety plan; or
- e) supervise or monitor construction work – this is the responsibility of the principal contractor.

Example 7.

The co-ordinator together with the principal contractor ensured that the mechanical and electrical contractor for a multi-storey office block discussed the location of the services with the pre-cast floor contractor. This allowed the services drawings to be completed in time for service voids to be pre-formed in the pre-cast floors during the manufacturing stage.

Operatives avoided significant exposure to noise and vibration from extensive diamond drilling on site. It was also significantly quicker and cheaper.

Draft Approved Code of Practice Designers

Chapter 3. Designers

109. Designers are in a unique position to reduce the risks that arise during construction work, and have a key role to play in CDM²⁰⁰⁷. Designs develop from initial concepts through to a detailed specification, often involving different teams and people at various stages. At each stage, designers from all disciplines can make a significant contribution by identifying and eliminating hazards, and reducing likely risks from hazards where elimination is not possible.

110. Designers' earliest decisions fundamentally affect the health and safety of construction work. These decisions influence later design choices, and considerable work may be required if it is necessary to unravel earlier decisions. It is therefore vital to address health and safety from the very start.

111. Designers' responsibilities extend beyond the construction phase of a project. They also need to consider the health and safety of those who will maintain, repair, clean, refurbish and eventually remove or demolish all or part of a structure as well as the health and safety of users of workplaces. For most designers, buildability considerations and ensuring that the structure can be easily maintained and repaired will be part of their normal work, and thinking about the health and safety of those who do this work should not be an onerous duty. Failure to address these issues adequately at the design stage will usually increase running costs, because Clients will then be faced with more costly solutions when repairs and maintenance become necessary.

112. Where significant risks remain when they have done what they can, designers should provide information with the design to ensure that the CDM co-ordinator, other designers and contractors are aware of these risks and can take account of them. (See paragraphs 131-134.)

113. Designers also have duties under other legislation, including those parts of the Management of Health and Safety at Work Regulations 1999 which require risk assessment. Compliance with regulation 11 of CDM 2007 (as set out in this chapter) will usually be sufficient for designers to achieve compliance with regulations 3(1), (2) and (6) of the Management Regulations as they relate to the design of the structure.

114. Advice on the selection of competent designers is given in chapter 6.

Who are designers?

Regulation 2

115. Designers are those who have a trade or a business which involves them in:

- preparing designs for construction work, including variations. This includes preparing drawings, design details, specifications, bills of quantities and the specification (or prohibition) of articles and substances, as well as all the related analysis, calculations, and preparatory work; or
- arranging for their employees or other people under their control to prepare designs relating to a structure or part of a structure.

It does not matter whether the design is recorded (eg on paper or a computer) or not (eg it is only communicated orally).

Example 8.

On a major office development with a large central atrium, the electrical contractor highlighted an innovative product for the roof glazing that was unknown to the other team members, including the designers. This was a double glazed unit incorporating internal prismatic reflectors.

It removed the problem of glare and the need for high-level roller blinds. It was virtually maintenance free, and led to significant savings over the life of the building, and significantly reduced the need to work at height.

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Designers

116. Designers therefore include:

- a) architects, civil and structural engineers, building surveyors, landscape architects, other consultants, manufacturers and design practices (of whatever discipline) contributing to, or having overall responsibility for, any part of the design, for example drainage engineers designing the drainage for a new development;
- b) anyone who specifies or alters a design, or who specifies the use of a particular method of work or material, such as a design manager, quantity surveyor who insists on specific material or a client who stipulates a particular layout for a new building;
- c) building service designers, engineering practices or others designing plant which forms part of the permanent structure (including lifts, heating, ventilation and electrical systems), for example a specialist provider of permanent fire extinguishing installations;
- d) those purchasing materials where the choice has been left open, for example those purchasing building blocks and so deciding the weights that bricklayers must handle;
- e) contractors carrying out design work as part of their contribution to a project, such as an engineering contractor providing design, procurement and construction management services;
- f) temporary works engineers, including those designing auxiliary structures, such as formwork, falsework, façade retention schemes, scaffolding, and sheet piling;
- g) interior designers, including shop-fitters who also develop the design;
- h) heritage organisations who specify how work is to be done in detail, for example providing detailed requirements to stabilise existing structures; and
- i) those determining how buildings and structures are altered, eg during refurbishment, where this has the potential for partial or complete collapse.

117. Local authority or government officials may provide advice relating to designs and relevant statutory requirements, eg the building regulations, but this does not make them designers. This is because these are legal requirements where the designer has no choice in respect of compliance. Any such requirements should be treated as 'design constraints' in the usual way. However, if the statutory bodies require that particular features which are not statutory requirements are included or excluded (eg stipulating the use of hazardous substances for cleaning or the absence of edge protection on flat roofs), then they are designers and must ensure that they comply with these Regulations.

118. Manufacturers supplying standardised products that can be used in any project are not designers under CDM²⁰⁰⁷, although they may have duties under supply legislation. The person who selects the product is a designer and must take account of health and safety issues arising from its use. If a product is purpose-made for a project, the person who prepares the specification is a designer under CDM²⁰⁰⁷, and so is the manufacturer who develops the detailed design.

What designers should do for all projects

Regulations 4, 5, 6, 11 and 18.

119. Designers should:

- a) make sure that they are competent and adequately resourced to address the health and safety issues likely to be involved in the design;
- b) check that clients are aware of their duties;
- c) When carrying out design work, avoid foreseeable risks to those involved in the construction and future use of the structure, and in doing so, they should eliminate hazards

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(so far as is reasonably practicable, taking account of other design considerations) and reduce risk associated with those hazards which remain;

- d) provide adequate information about any significant risks associated with the design;
 - e) co-ordinate their work with that of others in order to improve the way in which risks are managed and controlled;
120. In carrying out these duties, designers need to consider the hazards and risks to those who:
- a) carry out construction work including demolition;
 - b) clean any window or transparent or translucent wall, ceiling or roof in or on a structure or maintain the permanent fixtures and fittings;
 - c) use a structure designed as a place of work;
 - d) may be affected by such work, for example customers or the general public.

When do these duties apply?

Regulation 11 and 12

121. These duties apply whenever designs are prepared which may be used in construction work in Great Britain. This includes concept design, competitions, bids for grants, modifications of existing designs and relevant work carried out as part of feasibility studies. It does not matter whether or not planning permission or funds have been secured, the project is notifiable or high-risk; or the client is a domestic client.

Making clients aware of their responsibilities

Regulation 11(1)

122. Designers are often the first point of contact for a client, and CDM²⁰⁰⁷ requires them to check that clients are aware of their duties under the Regulations.

123. Where the client is not aware of their duties, this document, or the HSE information sheet for clients⁷, or the leaflet produced by the Construction Clients Group (CCG)⁸, will be sufficient to explain what these duties are. The duty to inform is aimed at the designer who has the initial or main contact with the client. Other designers need take no action unless they have reason to suspect that clients are not aware of their duties.

Preparing a design

Regulation 11(4)

124. Designers have to weigh many factors as they prepare their designs. Health and safety considerations have to be weighed alongside other considerations, including cost, fitness for purpose, aesthetics, buildability, maintainability and environmental impact. CDM²⁰⁰⁷ allow designers to take due account of other relevant design considerations. The regulations do not prescribe design outcomes, but they do require designers to weigh the various factors and reach reasoned, professional decisions.

Example 9.

A designer considered the use of a water-based paint for the exterior of a metal spire on a tall building to reduce exposure to solvents.

She determined that the level of exposure to solvents from a solvent-based paint would be low, and the metalwork would require more frequent repainting with a water-based paint.

She therefore concluded that it was better to specify the solvent-based paint because of the high risk of frequent working at height.

⁷ This can be obtained from www.hse.gov.uk/

⁸ This can be obtained from [not yet published]

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125. Designers are required to avoid foreseeable risks ‘so far as is reasonably practicable, taking account of other relevant design considerations’. The greater the risk, the greater the weight that must be given to eliminating or reducing it. Of course designers are not expected to consider or address risks which cannot be foreseen, and the Regulations do not require zero risk designs because this is simply impossible. However, designers must not produce designs that cannot be constructed, maintained, used or demolished in reasonable safety.

126. Designers should critically assess their design proposals at an early stage, and then throughout the design process, to ensure that health and safety issues are identified, integrated into the overall design process and addressed as they go along. It is pointless to complete the design first, then try to address the risks which the design has introduced. By then, all of the key decisions are likely to have been taken and no one will be willing to make any changes because of the time and cost involved.

127. The first thing that designers need to do is eliminate hazards (things with a potential to cause harm) from their designs so far as is reasonably practicable, taking account of other design considerations. Examples would be to design out things like fragile roofing materials or products; eliminating rooflights from areas where roof access is needed; positioning plant which needs regular maintenance at ground level so there is no need for work at height or providing permanent safe access for work at height. Eliminating hazards removes the associated risk, and is therefore the best option and should always be the first choice.

128. It is not always reasonably practicable to eliminate hazards, and where this is the case consideration should be given to incorporating design solutions which reduce the overall risk to an acceptable level. This can be done by reducing the:

- likelihood of harm (injury or adverse health effect);
- potential severity of the harm;
- number of people exposed to the harm; and
- frequency or duration of exposure to harm.

Example 10.

A designer specified the use of lifting attachments. Not only did this reduce work at height, but it was estimated by the steel erectors that they were saving at least 1 hour per day

129. The amount of effort put in to eliminating hazards and reducing risks should depend on the degree of risk. There is little point in spending a lot of money, time and trouble on low risk issues. There is also little to be gained by detailed comparison of construction techniques that present similar risks, for example whether to specify a steel frame or concrete portal building. The focus should be on issues that are known to have the potential to cause significant harm, and where there are known solutions that reduce the risks to everyone exposed.

130. Designers also need to take account of other relevant health and safety requirements when carrying out design work. Where the structure will be used as a workplace, (eg factories, offices, schools, hospitals) they need to take account of the provisions of the Workplace (Health, Safety and Welfare) Regulations 1992 which relate to the design of, or materials used in the structure. This means taking account of risks directly related to the proposed use of the structure, including associated private roadways and pedestrian routes, and risks arising from the need to clean and maintain the permanent fixtures and fittings. For example, hospitals will need to be designed in a way which will accommodate the safe lifting and movement of patients; food preparation and serving areas will need non-slip floors.

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Providing information

Regulation 11(5)

131. Designers must provide information that other project team members are likely to need to identify and manage the remaining risks. **This should be project specific, and concentrate on significant risks which may not be obvious to those who use the design.** For example, providing generic risk information about the prevention of falls is pointless, because competent contractors will already know what needs to be done, but if the design gives rise to a specific and unusual fall risk which may not be obvious to contractors, designers should provide information about this risk.

132. Designers also need to provide information about aspects of the design that could create significant risks during future construction work or maintenance. If in doubt about the level of information needed, the best way to find out is to ask those who will use it.

133. Significant risks are not necessarily those that involve the greatest risks, but those, including health risks that are:

- not likely to be obvious to a competent contractor or other designers;
- unusual; or
- likely to be difficult to manage effectively.

134. Information should be brief, clear, precise, and in a form suitable for the users. This can be achieved using:

- **notes on drawings** – this is preferred, since the notes will then be immediately available to those carrying out the work. They can refer to other documents if more detail is needed, and be annotated to keep them up to date;
- **written information provided with the design**- this should be project specific, and should only contain information which will be useful to those constructing or maintaining the structure.
- **suggested construction sequences** showing how the design could be erected safely, where this is not obvious, for example suggested sequences for putting up precast panel concrete structures. Contractors may then adopt this method or develop their own approach.

It is not always possible to provide all the information at the same time, particularly when design work is continuing whilst construction work is underway. In these circumstances information should be released as the design develops, but construction work should not be allowed to proceed unless all the information necessary for the work to be carried out safely has been provided.

Example 11

During the construction of a multi-storey office block the design sequence required the stairways to be installed progressively, as the floors were completed. This provided much quicker and safer access for people and materials than ladders.

Example 12

A designer considered using augered piles for a scheme to be built on contaminated land. He recognised that workers could be exposed to a toxic hazard. As a raft foundation was not viable from an engineering viewpoint, driven piles were specified. However, if augered piles had been the only reasonably practicable solution, the designer would have needed to include the possibility of exposure to toxic substances in information for the information pack.

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Co-operation

Regulation 5

135. Designers must co-operate with the client, and other designers and contractors, including those designing temporary works. This is to ensure that incompatibilities between designs are identified and resolved as early as possible, and that the right information is provided in the pre-construction information.

136. For smaller projects where most of the work is done by a single designer, this can be achieved through discussion with those who use or are affected by the design. For larger projects or those involving significant risks, a more managed approach will be necessary.

137. Co-operation can be encouraged by:

- a) setting up an integrated team involving designers, principal contractor and other relevant contractors;
- b) the appointment of a lead designer, where many designers are involved; (see paragraph 58);
- c) agreeing a common approach to risk reduction during design;
- d) regular meetings of all the design team (including the co-ordinator) with contractors, and others;
- e) regular reviews of developing designs;
- f) site visits, through which designers can gain a direct insight into how the risks are managed in practice.

138. Regular reviews of the design involving all members of the design team are particularly important in making sure that proper consideration is given to buildability, usability and maintainability. When considering buildability, meetings should include the contractor so that difficulties associated with construction can be discussed and solutions agreed before the work begins. When discussing usability and maintainability, involving the client or those who will be responsible for operating the building or structure will mean that proper consideration can be given to the health and safety of those who will maintain and use the structure once it has been completed. Doing this during the design stage will result in significant cost savings for the client, as rectifying mistakes after the structure has been built is always expensive.

Example 11.

A structural engineering consultancy was engaged to provide detailed design drawings for the steelwork to be incorporated in a complex alteration to an existing structure. The company recognised that many of the structural steel elements were of different lengths and the site layout meant that it would be difficult to lift the beams into position during assembly. The structural engineer ensured that simple lifting brackets were designed into each structural steel element, and that the lifting points were marked on the design drawings. This reduced the likelihood of error on site and the time taken for installation of the steel was reduced by a third.

Additional duties where the project is notifiable

139. In addition to the duties outlined above, when the project is notifiable, designers should:

- a) Ensure that the client has appointed a CDM co-ordinator and notified HSE,
- b) Ensure that they do not start design work other than initial design work unless a CDM co-ordinator has been appointed;
- c) co-operate with the CDM co-ordinator, principal contractor and with any other designers or contractors as necessary for each them to comply with their duties. This includes providing any information needed for the pre-construction information pack or health and safety file.

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140. For a notifiable project, designers need to ensure that a CDM co-ordinator has been appointed and HSE has been notified about the project. If appointment and notification have been done, then designers can assume that the client is aware of their duties.

141. Early appointment of the CDM co-ordinator is crucial for effective planning and establishing management arrangements from the start. The regulations require the appointment to take place as soon as is practicable after initial design work or other preparation for construction work has begun. Guidance on the timing of appointment of the CDM co-ordinator is given in paragraph 66 in chapter 2.

142. Once the CDM co-ordinator has been appointed, the designer will need to co-operate with them and provide the information, which the CDM co-ordinator needs to comply with their duties.

What designers don't have to do

143. Under CDM²⁰⁰⁷, designers don't have to:

- a) take into account or provide information about unforeseeable hazards and risks;
- b) design for possible future uses of structures that cannot reasonably be anticipated from their design brief;
- c) specify construction methods, except where the design assumes or requires a particular construction or erection sequence, or where a competent contractor might need such information;
- d) exercise any health and safety management function over contractors or others; or
- e) worry about trivial risks.

144. Designers are not legally required to keep records of the process through which they achieve a safe design, but it can be useful to record why certain key decisions were made. Brief records of the points considered, the conclusions reached, and the basis for those conclusions, can be very helpful when designs are passed from one designer to another. This will reduce the likelihood of important decisions being reversed by those who may not fully understand the implications of doing so.

145. Too much paperwork is as bad as too little, because the useless hides the necessary. Large volumes of paperwork listing generic hazards and risks, most of which are well known to contractors and others who use the design are positively harmful, and suggest a lack of competence on the part of the designer.

Example 12.

An air conditioning system, which included a water cooling tower, was refurbished as part of a factory extension.

The designer made sure that the system complied with current design standards and included safe access for cleaning and maintenance.

Information was provided to the occupier on maintenance and testing of the system to ensure the control of Legionella.

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Chapter 4. The Principal Contractor (Notifiable projects only)

146. Good management of health and safety on site is crucial to the successful delivery of a construction project. The key duty of principal contractors is to properly plan, manage and co-ordinate work during the construction phase in order to ensure that the risks are properly controlled. Principal contractors must also comply with the duties placed on all contractors under the Regulations.

147. Principal contractors are usually the main or managing contractor. This allows the management of health and safety to be incorporated into the wider management of project delivery. This is good business practice as well as being helpful for health and safety purposes.

148. Although written plans are only legally required for notifiable projects, all projects must be properly planned and managed, and the principles set out in this section may be relevant to those who plan for non-notifiable projects.

149. Advice on selection of a competent Principal Contractor is given in chapter 6.

What principal contractors must do

Regulations 4, 5, 6 and 22-24 and Part 4 of the Regulations

150. Principal contractors must:

- a) satisfy themselves that clients are aware of their duties, that a CDM co-ordinator has been appointed and HSE notified before they start work;
- b) make sure that they are competent to address the health and safety issues likely to be involved in the management of the construction phase;
- c) ensure that the construction phase is properly planned, managed and monitored, with adequately resourced, competent site management appropriate to the risk and activity.
- d) Ensure that every contractor who will work on the project is informed of the minimum amount of time which they will be allowed for planning and preparation before they begin work on site;
- e) ensure that all contractors are provided with the information about the project that they need to enable them to carry out their work safely and without risk to health. Requests from contractors for information should be met promptly.
- f) ensure safe working and co-ordination and co-operation between contractors;
- g) ensure that a suitable construction phase health and safety plan ('the plan') is:
 - prepared before construction work begins;
 - developed in discussion with, and communicated to, contractors affected by it;
 - implemented; and
 - kept up to date as the project progresses;
- h) satisfy themselves that the designers and contractors that they engage are competent and adequately resourced (chapter 6);
- i) ensure suitable welfare facilities are provided from the start of the construction phase;
- j) take reasonable steps to prevent unauthorised access to the site;
- k) prepare and enforce any necessary site rules;

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- l) provide (copies of or access to) relevant parts of the plan and other information to contractors, including the self-employed, in time for them to plan their work;
- m) liaise with the CDM co-ordinator on design carried out during the construction phase, including design by specialist contractors, and its implications for the plan;
- n) provide the CDM co-ordinator promptly with any information relevant to the health and safety file (chapter 8);
- o) ensure that all the workers have been provided with suitable health and safety induction, information and training;
- p) ensure that the workforce is consulted about health and safety matters (chapter 7);
- q) display the project notification.

Co-operation and Co-ordination

Regulations 5 and 6

151. Good co-operation and co-ordination of work between all of the parties involved in a project is essential if risks are to be identified early on and properly controlled. Principal contractors should take the lead and actively encourage co-operation and co-ordination between contractors from an early stage. A team approach involving the client, designers, contractors and even manufacturers who work closely together will often produce the best results. This allows the client, designers, contractors and facilities management experts, together, to identify the best solution for the clients needs, taking account of the practicalities of construction work, maintenance and use. Even on projects where it is not practical to formally establish an integrated team, the client, designer, contractors and others involved in the project still need to work together.

152. If there are other projects on the same or neighbouring sites (eg adjacent units on the same industrial estate) then the co-operation and co-ordination needs to extend to those involved with such projects. If this need can be identified early on, the risks that one project may cause for the other can also be identified and addressed in the early stages of project planning. If potential problems are not identified until the actual work has started they can be much more difficult to address.

153. Good, timely communication is essential to co-operation and co-ordination of activities. Information about risks and precautions needs to be shared sensibly (ie relevant information, not everything) when it is needed to plan and manage work. Drawings can be used to highlight hazards or unusual work sequences identified by designers, with advice on where to find more information, if required. Induction training and toolbox talks help to ensure workers understand the risks and precautions, and are a good opportunity to inform workers of site rules or any special risks relating to the project

How many principal contractors can there be for each project?

Regulation 14(2)

154. There can only be one principal contractor for a project at any one time. However, sometimes two or more projects take place on a site at the same time. This can occur if different clients commission adjacent work, or if a client procures two truly independent, unrelated packages of work which do not rely upon one another for their viability or completion.

155. Where overlapping projects are running on a single construction site, it is best to appoint one principal contractor for them all. If this is not done, all the principal contractors must co-operate, and their plans must take account of the interfaces – eg in traffic management. The requirements of regulations 8, 9 and 11 of the Management Regulations are also relevant.

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Planning and managing health and safety in the construction phase

Regulation 22(1)(a)

156. Principal contractors must plan, manage and co-ordinate work during the construction phase taking account of the information contained in the pre- construction information provided by the client, and any other information provided by contractors.

157. The effort devoted to planning and managing health and safety should be in proportion to the risks and complexity associated with the project.

158. The Principal Contractor should work with other contractors to identify the hazards and assess the risks related to their work, including the risks they may create for others. Using this information and applying the principles of prevention (Schedule 1 of the Management Regulations) the principal contractor, in discussion with the contractors involved, must plan, manage and co-ordinate the construction phase. This includes supervising and monitoring work to ensure that it is done safely and that it is safe for new activities to begin.

159. Where the project involves high risk-work, for example alterations that could result in structural collapse, or work on contaminated land, specialist advice is likely to be needed at the planning stage.

The Health and Safety Plan

Regulation 23

160. The way in which the construction phase will be managed and the key health and safety issues for the particular project must be set out in writing in the construction phase plan. This plan should set out the organisation and arrangements that have been put in place to manage risk and co-ordinate the work on site. It should not be a repository for detailed generic risk assessments, records of how decisions were reached or detailed method statements, but it may, for example, set out when such documents will need to be prepared. It should be well focused, clear and easy for contractors and others to understand – emphasising key points and avoiding irrelevant material. It is crucial that all relevant parties are involved and co-operate in the development and implementation of the plan as work progresses.

161. **The plan must be tailored to the particular project.** Generic plans that do not contain the information relevant to the particular risks associated with the work will not satisfy the requirements of regulation 23. Photographs and sketches can greatly simplify and shorten explanations. It should also be organised so that relevant sections can easily be made available to designers and contractors.

162. Often the design and preparation for later work is not complete at the start of the construction phase. Nevertheless, the plan for the initial phase of the construction work must be prepared before any work begins. It should also address later activities that will require careful planning. It may only be practical to address such activities in outline form before work starts and most will require revision in the light of developments.

163. The topics that need to be addressed when developing the construction phase plan are shown at appendix 2. Where other available documents address these issues appropriately, the plan may refer to them; the information does not need to be repeated.

Example 13.

On a busy construction site employing several contractors, the key details of the construction phase health and safety plan were transferred to a wall chart and displayed in the site office and in the canteen. This enabled all visitors and workers on site to find relevant information quickly and easily. The chart was reviewed on a weekly basis and any necessary revisions made.

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Implementing and monitoring the plan

Regulation 23(1) and 42.

164. A plan is no use if it is treated as merely a paper exercise and gathers dust. To improve standards, it must be a practical aid to the management of health and safety on site. Principal contractors and other contractors have a particular role in both implementing and monitoring the plan to ensure that it works in practice. Monitoring arrangements will need to be discussed and agreed with the client as they form part of the management arrangements.

165. The purpose of monitoring is to ensure that the precautions described in the construction phase plan are appropriate and followed in practice. **Where contractors do not work safely or comply with the plan, principal contractors must take appropriate action to deal with the risk. (They can give reasonable directions to any contractor and contractors have to comply, whether they have been appointed by the principal contractor or not – regulation 19(2)).** Principal contractors are responsible for ensuring the health and safety of everyone on site. Everyone on site (including the client, anyone working for the client and workers of utility companies) must co-operate with the principal contractor to enable them to comply with their duties.

166. The plan needs to be routinely reviewed, revised and refined by the principal contractor as the project develops. For example, where the plan is not being followed, and health and safety is put at risk, those involved must take appropriate action to deal with the risk. Monitoring may show the plan has shortcomings and needs to be modified. Any significant changes in the plan should be brought to the attention of all those affected.

Example 14.

New chemical processing plant was being installed in a factory. The clients had included requirements in relation to the safety of their workforce and plant in the pre-tender information pack. The pack included details of those parts of the site the client would continue to occupy, information about the permit to work system, emergency procedures and traffic management arrangements. Regular meetings were held to ensure good communication and co-ordination.

Site Rules

Regulation 22(1)(d)

167. Principal contractors should include any necessary rules for the management of construction work in the health and safety plan, which others on the site have to follow. These may cover issues such as restricted areas, permit-to-work systems, hot-work and emergency plans. In order to avoid cluttering the plan with detailed arrangements for implementing site rules, the plan should refer to other documents or put detailed arrangements in appendices. Site rules should be:

- set out in writing;
- understandable to those who have to follow them;
- brought to the attention of everyone who has to follow them;
- enforced.

168. Copies of the site rules should be displayed on site in a place where they can be seen by those who work there.

Display of notification to HSE

Regulation 22(1)(k)

169. The principal contractor must display a legible copy of the most up to date information notified to HSE where it can be read by people working on the site.

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Controlling access onto sites

Regulation 22(1)(i)

170. A principal contractor must take reasonable steps to prevent access by unauthorised persons to the construction site. Only people who are explicitly authorised, individually or collectively, by the principal contractor, should be allowed access. The authorisation may cover the whole site or be restricted to certain areas. Authorised people should have relevant site rules explained to them and undertake any necessary site induction, and should comply with site rules and co-operate with the principal contractor. Some authorised visitors may need to be supervised or accompanied while on site or visiting specific areas.

171. How access is controlled depends on the nature of the project, the risks and location. The boundaries of all sites should be physically defined, so far as is reasonably practicable, by suitable fencing. The type of fencing should reflect the nature of the site and its surroundings. Special consideration is needed where:

- rights of way cross sites;
- sites are in, or next to, other work areas;
- new houses are being built on a development where some houses are already occupied; or
- there are children or other vulnerable people nearby.

172. The effectiveness of the arrangements needs to be reviewed in the light of experience. In particular, their adequacy should be carefully reviewed if there is evidence of children playing on, or near the site.

Example 15.

A site compound was set up near the site entrance. This meant that every person who entered or left the site had to pass through the compound, where a register was kept listing all those who entered or left the site.

Site Induction, Training and Information

Regulation 22(2)

173. Site induction, training and information are vital to securing health and safety on site. The principal contractor has to ensure, so far as is reasonably practicable, that every worker has:

- a suitable induction; and
- any further information and training needed for the particular work.

Example 16.

In addition to a site-specific safety induction, every worker who entered the site was provided with a small pocket card detailing the site health and safety rules. Any new rules introduced as a result of work being carried out on the site were clearly displayed at the site entrance and the cards were reprinted and re-issued.

This does not mean that the principal contractor has to train everyone on the site- this will be the responsibility of individual contractors. Further advice on training and competence is given in chapter 6.

Induction

174. Inductions are a way of providing workers with specific information about the particular risks associated with the site and the arrangements that have been made for their control. Induction is not intended to provide general health and safety training, but it should include a site specific explanation of the following:

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- a) senior management commitment to health and safety;
- b) the outline of the project;
- c) the individual's immediate line manager and any other key personnel;
- d) any site-specific health and safety risks, for example in relation to access, transport, site contamination, hazardous substances and manual handling;
- e) control measures on the site, including:
- f) any site rules;
- g) any permit-to-work systems;
- h) traffic routes;
- i) security arrangements;
- j) hearing protection zones;
- k) arrangements for personal protective equipment, including what is needed, where to find it and how to use it;
- l) arrangements for housekeeping and materials storage;
- m) facilities available, including welfare facilities;
- n) emergency procedures, including fire precautions, the action to take in the event of a fire, escape routes, assembly points, responsible people and the safe use of any fire fighting equipment;
- o) arrangements for first aid;
- p) arrangements for reporting accidents and other incidents;
- q) details of any planned training, such as 'toolbox' talks;
- r) arrangements for consulting and involving workers in health and safety, including the identity and role of any:
 - s) appointed trade union safety representatives,
 - t) representatives of employee safety,
 - u) safety committees;
 - v) information about the individual's responsibilities for health and safety.

Example 17.

All new employees on a large transport infrastructure project attended an induction session, in works time, on their first day. Employer and trade union representatives jointly explained the key issues.

The joint approach reinforced the messages and made the induction more effective.

What principal contractors don't have to do

175. Principal contractors don't have to:

- Undertake detailed supervision of contractor's work.

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Chapter 5. Contractors and the self-employed

176. Contractors and those actually doing the construction work are most at risk of injury and ill health. They have a key role to play, in co-operation with the principal contractor, in planning and managing the work to ensure that risks are properly controlled.

177. All contractors (including utilities, specialist contractors, contractors nominated by the client and the self-employed) have a part to play in ensuring that the site is a safe and healthy place to work. The key to this is the proper co-ordination of the work, underpinned by good communication and co-operation between all those involved.

178. Anyone who directly employs, engages construction workers or controls or manages construction work is a contractor for the purposes of these Regulations. This includes companies that use their own workforce to do construction work on their own premises. The duties on contractors apply whether the workers are employees or self-employed and to agency workers without distinction.

What contractors must do on all projects:

Regulations 4-6, and Part 4.

For all projects:

179. For all projects contractors must:

- a) check clients are aware of their duties;
- b) satisfy themselves that they and anyone they employ or engage are competent and adequately resourced;
- c) Plan, manage and monitor their own work to make sure that workers under their control are safe from the start of their work on site;
- d) Ensure that any contractor who he appoints or engages to work on the project is informed of the minimum amount of time which will be allowed for them to plan and prepare before starting work on site;
- e) provide workers under their control (whether employed or self-employed) with any necessary information, including about relevant aspects of other contractors' work, and site induction (where not provided by a principal contractor) which they need to work safely, to report problems or to respond appropriately in an emergency;
- f) ensure that any design work they do complies with regulation 11;
- g) comply with any requirements listed in Schedules 2 and Part 4 of these Regulations that apply to their work;
- h) co-operate with others and co-ordinate their work with others working on the project;
- i) ensure the workforce is properly consulted on matters affecting their health and safety; and
- j) obtain specialist advice (eg from a structural engineer or occupational hygienist) where necessary when planning high risk-work – eg alterations that could result in structural collapse or construction on contaminated land.

Planning and managing construction work

Regulation 13(2)

180. Contractors should always plan, manage, supervise and monitor their own work and that of their workers to ensure that it is carried out safely and that health risks are also addressed. The

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effort invested in this should reflect the risk involved and the experience and track record of the workers involved. Where contractors identify unsafe practices, they must take appropriate action to ensure health and safety.

181. If one contractor is overseeing the work for a domestic client then they should ensure that the work of the various contractors is properly co-ordinated, and that there is good co-operation and communication. (see paragraphs 20 and 21).

Site induction, Information and training

Regulation 13(3)

182. Contractors must not start work on a construction site until they have been provided with basic information. This should include information from the client about any particular risks associated with the project (including information about existing structures where these are to be demolished or structurally altered), and from designers about any significant risks associated with the design.

183. Contractors must ensure, so far as is reasonably practicable, that every worker has:

- a suitable induction; and
- any further information and training needed for the particular work.

Further advice on training and competence is given in chapter 6.

Induction (see example 17)

Regulation 13(3)(a)

184. Inductions are a way of providing workers with specific information about the particular risks associated with the site and the arrangements which have been for their control. On non-notifiable sites, induction will need to be provided by the contractor, or by arrangement with the main contractor on site.

185. Induction is not intended to provide general health and safety training, but it should include a site specific explanation of the following:

- a) senior management commitment to health and safety;
- b) the outline of the project;
- c) the individual's immediate line manager and any other key personnel;
- d) any site-specific health and safety risks, for example in relation to access, transport, site contamination, hazardous substances and manual handling;
- e) control measures on the site, including:
 - any site rules;
 - any permit-to-work systems;
 - traffic routes;
 - security arrangements;
 - hearing protection zones;
- f) arrangements for personal protective equipment, including what is needed, where to find it and how to use it;
- g) arrangements for housekeeping and materials storage;
- h) facilities available, including welfare facilities;

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- i) emergency procedures, including fire precautions, the action to take in the event of a fire, escape routes, assembly points, responsible people and the safe use of any fire fighting equipment;
- j) arrangements for first aid;
- k) arrangements for reporting accidents and other incidents;
- l) details of any planned training, such as 'toolbox' talks;
- m) arrangements for consulting and involving workers in health and safety, including the identity and role of any;
- n) information about the individual's responsibilities for health and safety.

Reporting incidents

Regulation 19(2) (c)

186. The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR) require the 'responsible person' to notify any death, reportable injury, disease or dangerous occurrence to the relevant enforcing authority. The responsible person is the employer or, for the self-employed, the contractor or principal contractor.

Additional duties for Notifiable Projects:

187. In the case of notifiable projects, contractors must also:
- a) check that a CDM co-ordinator has been appointed and HSE notified before they start work;⁹
 - b) co-operate with the principal contractor, co-ordinator and others working on the project or adjacent sites;
 - c) tell the principal contractor about risks to others created by their work;
 - d) Provide details to the principal contractor of any contractor whom he engages in connection with carrying out the work;
 - e) comply with any reasonable directions from the principal contractor, and with any relevant rules in the health and safety plan;
 - f) inform the principal contractor of any problems with the plan or risks identified during their work that have significant implications for the management of the project;
 - g) tell the principal contractor about accidents and dangerous occurrences;
 - h) provide information for the health and safety file (chapter 8).

188. Contractors must co-operate with the principal contractor, and assist them in the development of the construction phase plan and its implementation. Where contractors identify shortcomings in the plan, the contractor should inform the principal contractor.

189. On notifiable sites, contractors must promptly inform the principal contractor about risks to other site workers or members of the public resulting from their work. This includes anything, for example from risk assessments and written systems of work, which might justify a review or update of the health and safety plan. Contractors must also provide details to the principal contractor of any other contractors who they engage to assist in the carrying out of the work. Principal contractors must be in a position to know who is working on the site. Principal contractors also

⁹ Having a copy of the notification of the project to HSE (form 10) with the appointments detailed in it is normally sufficient.

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have duties relating to the provision of information to contractors, and they will not be in a position to discharge these duties if they are not told that such contractors have been engaged.

190. Contractors must also provide information about RIDDOR incidents to principal contractors so that they can monitor compliance with health and safety law and, if necessary, review the arrangements for the management of health and safety.

191. On notifiable projects, site induction should be provided by the principal contractor, but the contractor must co-operate with the principal contractor to ensure that an adequate site induction is provided.

192. Where contractors are involved in design work, including for temporary works, they also have duties as designers. (See chapter 3.)

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Competence and Training

Chapter 6. Competence and Training

193. This Chapter gives advice about assessing the competence of organisations and individuals engaged or appointed under CDM²⁰⁰⁶ – co-ordinators; designers; principal contractors and contractors.

194. Assessments should focus on the needs of the particular project and be proportionate to the risks, size and complexity of the work.

195. To be competent, an organisation or individual must have:

- sufficient knowledge of the specific tasks to be undertaken and the risks which the work will entail;
- sufficient experience and ability to carry out their duties in relation to the project; to recognise their limitations and take appropriate action in order to prevent harm to those carrying out construction work, or those affected by the work.

196. Organisations and individuals will need specific knowledge about the tasks they will be expected to perform, and the risks associated with these tasks. This will usually come from formal or 'on the job' training.

197. Appropriate experience is also a vital ingredient of competence. People are more likely to adopt safe working practices if they understand the reasons why they are necessary, and past experience should be a good indicator of the person's/company's track record.

198. The development of competence is an ongoing process. Individuals will develop their competence through experience in the job and through training which is part of 'life long learning'. Professionals such as designers, CDM co-ordinators and advisors should be signed up to a 'continuing professional development' programme either through their company or Professional Institution. This will allow them to remain 'up-to-date' with changes in legislation and professional practice. Construction trades workers and labourers should also receive refresher training or regular training updates either through an in house planned programme of learning and development, or a more formal skills based training programme such as those offered by the CITB Construction Skills.

What you must do

Regulation 4

199. All those with duties under CDM²⁰⁰⁷ must satisfy themselves that businesses that they engage or appoint are competent. This means making reasonable enquiries to check that the organisation or individual is competent to do the relevant work and can allocate adequate resources to it. Those taken on to do the work must also be sure that they are competent to carry out the required tasks before agreeing to take on the work.

200. For notifiable projects, a key duty of the CDM co-ordinator is to advise clients about competence of designers and contractors, including the principal contractor.

201. Doing an assessment requires you to make a judgement as to whether the organisation or individual has the competence to carry out the work safely. If your judgement is reasonable, taking into account the evidence that has been asked for and provided, you will not be criticised if the organisation you appoint subsequently proves not to have been competent to carry out the work.

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How to assess the competence of Organisations:

202. Competency assessments of organisations (including principal contractors, contractors, designers and CDM co-ordinators) should be carried out as a two stage process:

203. **Stage 1:** An assessment of the company's organisation and arrangements for health and safety to determine whether these are sufficient to enable them to carry out the work safely and without risk to health;

204. **Stage 2:** An assessment of the company's experience and track record to establish that it is capable of doing the work; it recognises its limitations and how these should be overcome and it appreciates the risks from doing the work and how these should be tackled.

205. In order to provide more consistency in the way in which competency assessments of companies are carried out, a set of 'Core Criteria' have been agreed by industry and HSE. These are set out in appendix 3. **Stage 1 and stage 2 assessments should be made against these core criteria.**

206. Organisations who are bidding for work should put together a package of information that shows how their own policy, organisation and arrangements meet these standards. If regularly updated, this information should then be used each time they are asked to demonstrate competence as part of a tender process.

207. Alternatively, organisations may use an independent accreditation organisation to assess their competence against the elements of the core criteria. Where this route is adopted, both clients (with the help of the co-ordinator for notifiable projects) and organisations putting themselves forward for assessment should satisfy themselves that the accreditation body is using the criteria in appendix 3 as a basis for the assessment, and that the assessment process is robust enough to give the assurance necessary to ensure compliance. Relevant trade associations should be able to advise you on which schemes are suitable.

208. Companies employing less than 5 people may not have a written health and safety policy, organisation and arrangements, but they do need to demonstrate that their policy, organisation and arrangements are adequate in relation to the type of work they do. This could be done through an oral briefing, but assessments of competence will be made easier if procedures are clear and accessible. **For small companies the assessment should be simple and straightforward, and they should be able to show that they meet the criteria without the need for extensive paperwork.**

209. **Similarly, for smaller projects such as those falling below the notification threshold, companies should only be asked to provide the minimum paperwork necessary to show that they meet each element set out in the core criteria.** For larger projects, or those where the risks are greater, a more in-depth assessment will be needed, but the assessment should not stray beyond the elements set out in the core criteria.

Example 19

A principal contractor engaged a roofing company, with whom they had worked before, to carry out refurbishment work on the roof of an existing warehouse. Competence checks were made, and these were cross-referenced with the performance of the roofing firm on the previous contracts. The contract was awarded, but the roofing firm sub-let the work to another company at a considerably reduced price. The company, which carried out the work, had never done such a large job before and was not competent to do the job.

A worker from this company fell to his death from the roof. The principal contractor and the roofing firm were each prosecuted for failing to adequately check the competence of the company which actually carried out the work.

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210. Where the project is much larger than any that the organisation being assessed has worked on before, or where the work will involve them managing new risks, this should not automatically rule them out for consideration for the work. The assessor should look for an appreciation of these risks; an understanding of how they will be managed, and some indication of how any shortcomings in their current arrangements for managing such risks will be addressed.

211. It may be that an organisation is weak in certain areas. This can be addressed by putting arrangements in place to cover these weaknesses, or by employing people with particular expertise for relevant parts of the contract. What really matters is that the organisation has access to the expertise which it needs, and the ability to control the risks which arise from the work.

212. **Remember that assessments should focus on the needs of the particular project and be proportionate to the risks, size and complexity of the work.** Unnecessary bureaucracy associated with competency assessment can obscure the real issues and divert effort away from them.

How to assess the competence of Individuals:

Regulation 4

213. The information in this section will help clients, CDM co-ordinators or others who control the way in which construction work is carried out to assess the competence of key individuals. When assessing the competence of an organisation or company using the Core Criteria in appendix 3, element 5 requires an assessment of individuals qualifications and experience. The advice given in this section should be used to carry out such assessments.

214. **Remember that assessments should focus on the needs of the particular job and should be proportionate to the risks arising from the work.**

215. As with organisations, assessing the competence of an individual should be a two stage process:

- **Stage 1:** An assessment of the persons task knowledge to determine whether this is sufficient to enable them to carry out the work safely and without risk to health;
- **Stage 2:** An assessment of the individuals experience and track record to establish that they are capable of doing the work; they recognise their limitations and how these should be overcome and they appreciate the risks from doing the work and how these should be controlled.

216. Stage 1 assessments will look at an individuals qualifications and training records, and arrangements which have been made for their continuing professional development or lifelong learning. **This will include an assessment as to whether the individual has a basic understanding of the risks arising from construction work which is essential for all people who work on or regularly visit sites.**

217. Stage 2 assessments should concentrate on the persons past experience in the type of work which you are asking them to do. Where the work is more complex than any that the person has done before, or where the work will expose them to new risks, this should not automatically rule them out for consideration for the work. In these circumstances, the assessor should look for an appreciation of these risks; an understanding of how they will be managed, and some indication of how any shortcomings in their current knowledge will be addressed. Working under the supervision of someone who is competent and familiar with the work is one way in which people can learn how to do work safely.

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Assessing an individual's basic understanding of site risks

218. A basic understanding of the general risks arising from construction work is essential underpinning knowledge for everyone who works in the industry in order that they can protect their own health and safety and understand the effect that their own actions could have on others. This is particularly important for those who will regularly visit or work on construction sites. This basic understanding should be the foundation for health and safety knowledge and understanding on which more detailed competencies are developed.

219. The CITB Construction Skills touch screen test and equivalent schemes such as that offered by the Construction Clients National Certification Scheme are designed specifically to test this basic knowledge and understanding. Passing the touch screen test or equivalent schemes is one way of demonstrating this basic knowledge and understanding. All those who work on or regularly visit sites (including individuals from client, designer or CDM co-ordinator organisations) should be able to demonstrate that they have achieved at least this level of understanding before starting work on site.

220. Those who are new to construction work will need close supervision by an experienced person until they can demonstrate that they are aware of these risks and know how to avoid harm.

Assessing the Competence of Individual Designers and CDM Co-ordinators

Regulation 4

221. When carrying out an assessment for designers or CDM co-ordinators, membership of a relevant construction related professional institution gives a strong indication that the person has the necessary task knowledge and experience needed to fulfil the role. Some Institutions have different levels of membership which may give a clearer indication of the knowledge which they possess. Fellowship of an institution generally indicates that a member has more in depth knowledge and experience of a subject than that held by an ordinary member. Membership of a particular register operated by an institution also helps to indicate areas in which a person has particular expertise, for example membership of the Health and Safety Register operated by the ICE, or membership of the design register or co-ordinators register operated by the APS.

Competence of individual Designers

Regulation 4

222. Membership of a relevant professional institution for example CIBSE; ICE; IET; IMechE; IStructE; RIBA; CIAT; CIOB is a strong indicator that a designer has the necessary task knowledge and an ability to recognise the health and safety implications of their design work. Membership of a relevant register administered by such an institution gives a more detailed indication that the designer has the necessary knowledge and experience, for example the Construction Health and Safety Register of the Institution of Civil Engineers, or a member of the design register operated by the Association for Project Safety.

223. Those who specify materials, equipment and standards of finish (for example interior designers) are also considered designers under the Regulations, but they tend not to be members of specific professional institutions. Relevant academic qualifications or evidence of their past experience in this type of work will give a strong indicator as to their competence.

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224. Those who only occasionally become involved with design work and who do not meet the qualifying criteria (for example trainees) should work under the supervision of a competent designer.

225. When carrying out **stage 2** of the assessment you should consider the designer's past experience in the type of work which you are asking them to do. Those without relevant experience should be allowed to work under the supervision of someone who has. If designers work as part of a team, different individuals may bring different skills and knowledge to the work, and this should be taken into account when making the assessment.

Assessing the competence of individual CDM Co-ordinators

Regulation 4

226. CDM Co-ordinators need good interpersonal skills in order to encourage cooperation between designers and others. Although there is a legal duty to co-operate on everyone involved with the project, the co-ordinator has a specific duty to ensure that cooperation happens. Without it, good working relationships, clear communication and sharing of relevant information will not happen. An over bureaucratic approach should be avoided, not least because it makes it harder to secure the co-operation which is needed.

227. CDM co-ordinators also need a sound understanding of:

- health and safety in construction work;
- the design process;
- the importance of co-ordination of the design process, and an ability to identify information which others will need to know about the design in order to carry out their work safely.

228. This knowledge needs to be relevant to the project and future maintenance, use, refurbishment or demolition of the structure. The size and complexity of the project will determine whether an individual is capable, and has the resources to carry out all of the work required.

229. CDM Co-ordinators are not necessarily designers, and do not have to undertake any design work themselves. But in order to assess the health and safety implications of the design, they must have sufficient knowledge of the design process to enable them to hold meaningful discussions with designers, recognise when information about risks arising from the design will need to be passed to others and participate fully in relevant design team meetings. They will also need to be in a position to advise clients about the competence of others who are appointed by the client, and be able to assess whether the health and safety plan prepared by the principal contractor is adequate for controlling the risks associated with the project.

230. When carrying out the assessment, clients will need to take into account the size and complexity of the project, and the nature of the risks which will be associated with it. Where one individual does not possess all of the skills and experience necessary, the work can be shared with others, but it must be clear who is responsible for each part of the work, and who is in overall control.

231. For small projects where there are no special risks, **stage 1** of the assessment should concentrate on the person's knowledge of the construction processes and the health and safety risks associated with the work. An appropriate health and safety qualification such as a NEBOSH construction certificate will demonstrate that the person has adequate knowledge of health and safety, but this will need to be coupled with a **stage 2** assessment to demonstrate that they have

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experience in applying this knowledge in the construction environment. Membership of the Institution of Planning Supervisors, registration on the co-ordinators register administered by the Association for Project Safety or membership of the Health and Safety Register administered by the ICE can be taken as confirmation that the person has the necessary task knowledge and experience to carry out the co-ordinators duties on this type of project.

232. For larger or more complex projects, or for those with unusual or higher risks, the skills and knowledge of the CDM co-ordinator will need to reflect the complexity of the project and the specialist knowledge necessary to ensure that risks are properly controlled. It is more likely in these circumstances that a corporate appointment will be made and the competence assessment will be made against the Core Criteria mentioned in paragraph... above. The table in appendix 5 gives further guidance on the standards to be achieved for coordinators appointed to this type of project.

233. CDM Co-ordinators cannot carry out their duties effectively without the client's support. For that reason they will often need an understanding of relevant aspects of the client's business and the implications of the proposed work for it. CDM co-ordinators will need to make sure that clients understand their own role and duties as well as the benefits of good management of the project and early appointment of duty holders.

Assessing the competence of an individual site worker

Regulations 4,13(3) and 22(2)

234. Employers are required by law to ensure the competence of their employees and to provide training and instruction as necessary. CDM²⁰⁰⁷ places duties on contractors and principal contractors to ensure that workers are competent and to provide training where necessary.

235. As explained in paragraphs 219 and 220, the CITB Construction skills touch screen test, or equivalent schemes such as that offered by the Construction Clients National Certification Scheme give a good indication of this basic knowledge and understanding. This should be the foundation for health and safety knowledge and understanding on which more detailed competencies are developed.

236. Having gained this basic knowledge and understanding, workers should then receive regular updates and more specialised training as part of a life long learning process. This should either be delivered through a planned programme of 'on the job' training, for example through regular on site 'toolbox' talks coupled with 'off the job' training days, or through a more formal, assessed training package, for example an NVQ programme administered by the CITB Construction Skills, or similar programme.

237. The chart at appendix 6 shows a typical timeline for an unskilled construction worker from their first job in construction to a point where they can be considered competent. Workers who follow the 'in-house training' route to competence will need to ensure that the training they receive covers the health and safety aspects of the job as well as the necessary skills elements. Those who enrol on an accredited NVQ course will receive both elements of the training as part of the assessed course.

238. Unskilled workers who are following a programme of training will, over time, gather the necessary competence to become a skilled worker. With further experience and training, they should gain the competence necessary to become a supervisor. The table below summarises the knowledge, skills and likely capabilities of a typical trainee, a skilled worker and a supervisor.

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239. When developing training schemes, it is important to ensure that the content and style are appropriate. This includes providing training in a form that trainees can understand. Workforce or trade union appointed safety representatives can make a significant contribution to developing such training, and a joint approach can help ensure people adopt good practices. Information and training should be provided in a way that takes account of any language difficulties or disabilities¹⁰. It can be provided in whatever form is most suitable in the circumstances, as long as it can be understood by everyone. For employees with little or no understanding of spoken or written English, employers need to make special arrangements. These include providing translation, using interpreters, and replacing written notices with clear symbols or diagrams.

240. Further information about training opportunities available to construction workers can be found from [Construction Skills](#).

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¹⁰ Further advice is provided CILT, the National Centre for Languages– <http://www.cilt.org.uk> and the Construction Confederation – <http://www.thecc.org.uk>

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Management Responsibility

Individual Competence

The right person for the right job			
Level	The Job	Training and supervision	Measuring Performance
Trainee	Carry out a risk assessment and as a result: - specify the tasks for the trainee the tools, PPE and equipment the limits of activity the procedures to learn and assign to a supervisor. Spell out the behaviour expected	Provide supervision according to the risk assessment Provide induction training Train to pass the CITB-CS Health and Safety Test Provide support to learn procedures and behaviours	Set training targets and check regularly to see if these are achieved. Monitor the performance and behaviours of both supervisor and trainee
Site Worker	Specify tasks Authorise use of plant, equipment etc. according to qualifications and experience Communicate site rules for consultation, co-operation	Check qualifications provide induction training ongoing development and support to learn site wide procedures and play a full part in consultation	Carry out regular observations of performance against standards and site rules. Encourage best practice, use management procedures which correctly reward good practice and deter bad practice.
Supervisor	Specify the standards that supervisors should be achieving, particularly on consultation and behavioural expectations	Check qualifications Set up a reporting chain Provide management and technical support Provide Training and development on management issues as required.	Performance agreement with supervisor correctly identifies and reward H & S elements. Monitor implementation of management procedures by supervisors

TRAINEE		
	Description	Example of Attainment
Risk Control Knowledge	Adequate knowledge of tasks to be undertaken Understands what is expected and when to ask for help Understands role and importance of supervisor Can identify key risks of activities Knows how to react to basic risks Knows main health hazards and why PPE is important	CITB-CS Health and Safety Test or CCNSG Certificate or equivalent recognised passport training NVQ Level 1
Experience and ability	From no experience Has physical capability to carry out duties Minimum standard of language skills Can identify deteriorating conditions which may lead to increased risk Is aware of personal responsibility for him or herself and others, is aware of what constitutes a good attitude	Attends site induction Attends mandatory in house training Works safely to agreed standard under supervision demonstrates safe behaviour and wears appropriate PPE at all times
SITE WORKER		
	Description	Example of Attainment
Risk Control Knowledge	As for trainee plus Knows standards of H & S required for site operations Can identify all foreseeable risks arising from their work activity and know what actions to take to control these risks Can apply existing knowledge to new circumstances	As for trainee plus NVQ Level 2 or 3
Experience and ability	As for trainee plus Consistently works to agreed standards of H& S Quickly identifies defects and unacceptable risks Demonstrates good attitude and example at work Capable of working safely with minimal supervision	As for trainee plus Commensurate with Level 2 achievement Plays full role in site consultation Demonstrates ability to report unsafe conditions to supervisor Demonstrates motivation to learn
SUPERVISOR		
	Description	Example of Attainment
Risk Control Knowledge	As for site worker plus Knows how to lead in identifying remedial actions to mitigate risk in all foreseeable circumstances Understands implications of his or her own decisions on others Knows when to ask for specialist help	As for operative plus NVQ Level 3 Knowledge of supervision equivalent to CITB-CS 2 day supervisors course NEBOSH Certificate etc.
Experience and ability	Able to identify causes of problems and to deploy resources to solve problems on own initiative Demonstrates leadership skills, appropriate communication strategies Can read plans, think through problems and is flexible to adapt to changing circumstances	3- 5 years experience of this operation Trained and qualified to a level where he can describe risks of the range of work activities he is responsible for, is capable of identifying remote risks, and anticipating problems of change

Chapter 7. Worker Engagement and Communication

241. Involving the workforce in identifying and controlling risks is crucial to reducing the high accident rate associated with construction work. The workforce has first hand experience of site conditions and they are often the first to identify potential problems. Worker engagement is the participation by workers in decisions made by those in control of construction activities, in order that risks on site can be managed in the most effective way.

242. Participation will be most effective when the workforce has sufficient knowledge and confidence to provide feedback, and can identify risks and explain their importance. People have the confidence to do this when they are properly trained, know how to report their concerns, and see prompt action being taken as a result. Training should include, where necessary, the skills required to participate in decision-making processes, and consultation with managers.

What you are required to do:

For all projects

Regulations 5(2) and 13

Providing information:

243. All those in control of construction work are required to provide workers (including the self employed) under their control with any information that worker needs to carry out the construction work safely and without risk to health.

244. All workers should be provided with a suitable site specific induction to inform them of the arrangements for health, safety and welfare at their work site. This should include any relevant findings resulting from a risk assessment, including risks arising from the activities of other workers working nearby. If contractors have site rules these should be explained, along with the procedures to be followed in the event of any worker finding themselves in a position of serious and imminent danger. Contractors must communicate to their workers the identity of the person who is responsible for implementing health and safety procedures on site. Every worker has a duty under CDM to report anything, which is likely to endanger the health and safety of himself or others.

245. To ensure involvement of the entire workforce, contractors may need to make special arrangements for workers who have little or no understanding of English, or who cannot read English. These could include providing translation, using interpreters or replacing written notices with clearly understood symbols or diagrams.

Example 20

A major contractor recognised that for a site operative to fully participate in management meetings on health and safety, certain skills were needed. For example to know how to prioritise issues, how to present an evidence based argument for change and how to judge what is a reasonable and constructive response from a manager. Training on this site was provided to safety representatives, both Trade Union recognised and non trade union, through a site based TUC recognised training course for safety representatives.

246. Arrangements for worker engagement on smaller sites should always be tailored to the size and nature of the project and risks involved. On smaller sites informal arrangements for collecting workers views can be effective. An effective way of achieving this is to arrange reviews of method statements immediately before the work itself is being carried out. Those workers who will be involved in the work can then comment directly on the risks and the ways in which these are being controlled.

Worker Representatives

247. Health and safety law recognises two types of worker representative:

- Those appointed by recognised trades unions under the Safety Representatives and Safety Committees Regulations 1977¹¹ (SRSCR), and,
- Representatives of employee safety appointed under the Health and Safety (Consultation with Employees) Regulations 1996¹² (HSCER).

Both types of representative are entitled to training paid for by their employer to enable them to play a full and active part in securing health and safety. Suitable training is available through a number of organisations, including trade unions.

Arrangements for Serious or Imminent Danger

Regulation 13(3)(e)

248. Regulation 8 of the Management of Health and Safety at Work Regulations 1999 requires employers to establish and give effect, where necessary, to appropriate procedures to be followed in the event of serious and imminent danger to persons at work. It also enables any worker exposed to serious or imminent danger to stop work and immediately proceed to a place of safety. Contractors should consult with the workforce to ensure that all workers are aware of this right, and that they have procedures in place to effectively deal with these situations when they arise. Serious or imminent danger means that the risk of injury or ill health is serious, and that the danger will arise as soon as the work would begin.

Example 21

A medium sized contractor uses the site induction as an opportunity, not only to communicate messages to the workers attending, but also to involve those workers in initial discussion on health and safety matters. The contractor recognises induction as a first opportunity to make a strong impression on workers, but also to assess individual attitudes and competence.

Example 22

On a major new build project, managers were won over and reassured by the style and no nonsense approach adopted by the Trade Union appointed safety representative, who demonstrated a real commitment to safety, and a refusal to get sidetracked by issues with no relevance to health and safety.

In an alternative approach a Principal Contractor appointed and trained a senior employee in his late 50's to act as a Safety Coach, operating outside the normal line management chain, to walk the sites, supporting and encouraging the workers to adopt and maintain high standards of health and safety. The client was supportive of this role, which has now expanded in this company.

¹¹ See "Safety representatives and safety committees" (L 97, ISBN 0717612201)

¹² See "A guide to the Health and Safety (Consultation with Employees) Regulations 1996." (L 95, ISBN 0717612341)

Additional Arrangements for Notifiable Projects

Co-operation and Consultation

Regulation 24

249. In addition to the duties outlined above, Principal contractors have the specific duties to make and maintain arrangements to enable effective co-operation and consultation between themselves, contractors and workers.

250. Worker engagement requires Principal contractors to encourage collaboration and trust between contractors on their sites. This goes much further than simply consulting workers on issues such as what kind of wet weather clothing they would find most useful. It involves a joint commitment to solving problems together. Effective worker engagement will develop from effective consultation and co-operation between the Principal contractor and other contractors on site. Effective worker engagement by a Principal Contractor will include the following three elements

- A commitment by managers to lead by example, to provide the resources, targets and expectations to make the process work.
- Implementation of a range of mechanisms to communicate, ensure co-operation with and consult the workforce in managing health and safety on site.
- Collecting the evidence that the mechanisms are effective, that the workforce is involved, and that co-operation between contractors is successful.

Example 23

Directors of a specialist sub contractor committed themselves to visiting all their company's ten sites in a three month period and speaking to every operative. Their simple message was "Look after yourself, do not take shortcuts".

Alongside this four hot topics were identified, including respect for people, housekeeping, pedestrian walkways and site planning. Toolbox talks were given setting out the company's standards on these topics and engaging individual workers in discussion. Managers demonstrated commitment by allocating resources to these topics, and encouraging zero tolerance to lower standards.

Cooperation:

251. Principal contractors should record the arrangements they make for co-operation and consultation with workers on their site in the Health and Safety Plan. These arrangements will require regular review and updating, as the circumstances on site change. The arrangements need to cover all workers effectively, including those who may only be on site for brief periods. The arrangements should be proportionate to the size and complexity of the construction work, the scale of the hazards and the size of the workforce. The workforce and their representatives should contribute to the development of this plan; and, in particular, to provide insights into specialised areas of activity.

252. All the duty holders on site should respond positively and constructively to initiatives proposed and implemented by the Principal contractor. The Principal contractor has a duty to plan ahead, to foresee particular periods in the construction schedule where the workforce may be particularly busy, and to take these into account. Principal contractors may develop a range of solutions to improve co-operation on site. For example;

- Involving workers in carrying out site specific risk assessments
- Set up clearly defined communication channels, to alert the workforce to developments on site
- Briefing sub contractors regularly on the work programme
- Requiring regular, or daily briefings where front line supervisors brief workers on the work programme and day to day risks on site
- Setting up formal committees or operatives forums
- Ensuring that issues raised are dealt with and feedback is provided to the workforce

253. Principal contractors have a duty to monitor the effectiveness of the measures they take to ensure the health and safety of workers on their sites. The emphasis should be on obtaining simple feedback, avoiding the need for workers themselves to fill in forms.

Consultation:

254. Individual employers have a duty to consult with their own employees on matters that affect their health and safety. CDM 2007 places additional duties on the Principal Contractor to consult with all workers involved in a project, to ensure that the measures taken to protect workers health and safety are effective.

255. Consultation means not only giving information to workers, but also listening and taking account of what workers say, before making health and safety decisions. Principal contractors do not have to duplicate consultation, which an employer has already carried out, for example on the detail of a contractor's method statement. Principal contractors should implement a range of mechanisms to ensure that consultation is effective. Possible ways of doing this include:

- Engaging with TU Safety Reps or other appointed representatives
- Establishing Health and Safety Committees or forums

Example 24

A Principal Contractor established daily briefings from supervisors to the gang under their control. These supervisors covered a range of trades and employers. Managers cascaded the information supervisors needed to ensure risks in their part of the worksite are identified and controlled, including those risks created where different activities took place in close proximity. Supervisors completed a card indicating who had received the briefing, with space for feedback to the Principal Contractor on any matters arising.

The Principal Contractor showed commitment to the system by monitoring every card completed, taking remedial action, and by following up when cards were not completed.

Example 25

On a major new hospital site, the Principal Contractor established a mixed safety committee where TU Appointed Safety Representatives sat alongside non union representatives from smaller sub contractors. Training was provided for these representatives on site, and once established, the Committee increasingly addressed significant health and safety issues, moving away from complaints about welfare to discussions about improving logistics and planning through better communication and co-operation. The committee recognised that meaningful consultation requires training, planning and thoughtful contributions from workers and managers, with a real commitment to improving standards through joint problem solving.

- Regular consultation meetings
- Consultation during inductions, daily briefings, toolbox talks, site wide meetings
- Informal methods, for example during site managers walk abouts, or during senior managers visits
- Procedures to encourage workers to report defects, deterioration in conditions or innovations to raise standards.

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Chapter 8. The health and safety file (Notifiable projects only)

256. The health and safety file should contain the information needed to allow future construction work, including cleaning, maintenance, alterations, refurbishment and demolition to be carried out safely. Information in the file should alert those carrying out such work to risks, and should help them to decide how to work safely. The file should be useful to:

- clients, who have a duty to provide information about their premises to those who carry out work there;
- designers during the development of further designs or alterations;
- CDM co-ordinators preparing for construction work;
- principal contractors and contractors preparing to carry out or manage such work.

257. The file should form a key part of the information that the client, or the client's successor, is required to provide for future construction projects under regulation 12. The file should therefore be kept up to date after any relevant work or surveys.

258. **The scope, structure and format for the file should be agreed between the client and CDM co-ordinator at the start of a project.** There can be a separate file for each structure, one for an entire project or site, or one for a group of related structures. The file may be combined with the Building Regulations Log Book, or a maintenance manual providing that this does not result in the health and safety information being lost or buried. What matters is that people can find the information they need easily and that any differences between similar structures are clearly shown.

What you must do

Regulation 17

259. Clients, designers, principal contractors, other contractors and CDM co-ordinators all have legal duties in respect of the health and safety file:

- CDM co-ordinators must prepare, review, amend or add to the file as the project progresses, and give it to the client at the end of project;
- clients, designers, principal contractors and other contractors must supply the information necessary for compiling or updating the file;
- clients must keep the file to assist with future construction work; and
- everyone providing information should make sure that it is accurate, and provided promptly.

260. A file must be produced or updated (if one already exists) as part of all notifiable projects. For some projects, for example re-decoration using non-toxic materials, there may be nothing of substance to record. Only information likely to be significant for health and safety in future work need be included. The NHBC Purchaser Manual provides suitable information for developers to give to householders. You do not have to produce a file on the whole structure if a project only involves a small amount of construction work on part of the structure.

261. The client should make sure that the CDM co-ordinator compiles the file. In some cases, for example design and build contracts, it is more practical for the principal contractor to obtain the information needed for the file from the specialist contractors. In these circumstances the principal contractor can assemble the information and give it to the CDM co-ordinator as the work is completed.

262. It can be difficult to obtain information for the file after designers or contractors have completed their work. What is needed should be agreed in advance to ensure that the information is prepared and handed over in the required form and at the right time.

The contents of the health and safety file

Regulation 20

263. When putting together the Health and Safety file, you should consider including information about each of the following where they are relevant to the health and safety of any future construction work. The level of detail should allow the likely risks to be identified and addressed by those carrying out the work:

- a) a brief description of the work carried out;
- b) any residual hazards which remain and how they have been dealt with (eg surveys or other information concerning asbestos; contaminated land; water bearing strata; buried services etc);
- c) key structural principles (eg, bracing, sources of substantial stored energy – including pre- or post-tensioned members) and safe working loads for floors and roofs, particularly where these may preclude placing scaffolding or heavy machinery there;
- d) hazardous materials used (eg lead paint; pesticides; special coatings which should not be burnt off etc);
- e) information regarding the removal or dismantling of installed plant and equipment (eg any special arrangements for lifting, order or other special instructions for dismantling etc);
- f) health and safety information about equipment provided for cleaning or maintaining the structure;
- g) the nature, location and markings of significant services, including underground cables; gas supply equipment; fire-fighting services etc;
- h) information and as-built drawings of the structure, its plant and equipment (eg, the means of safe access to and from service voids, fire doors and compartmentalisation etc).

264. The file does not need to include things that will be of no help when planning future construction work, for example:

- a) the pre-construction information, or construction phase health and safety plan;
- b) construction phase risk assessments, written systems of work and COSHH assessments;
- c) details about the normal operation of the completed structure;
- d) construction phase accident statistics;
- e) details of all the contractors and designers involved in the project (though it may be useful to include details of the Principal Contractor and Planning Supervisor);
- f) contractual documents;
- g) information about structures, or parts of structures, that have been demolished – unless there are any implications for remaining or future structures, eg, voids;
- h) information contained in other documents, but relevant cross-references should be included.

Example 26

A pharmaceutical company decided to commission a new process plant and instructed the co-ordinator to provide the health and safety file on mechanical completion.

At the commissioning stage the client then appointed itself as co-ordinator and principal contractor. The health and safety file was updated to include relevant commissioning information.

265. Some of these items may be useful to the client, or may be needed for purposes other than complying with the CDM regulations, but the Regulations themselves do not require them to be included in the file. Including too much material may hide crucial information about risks.

Storing the file after the work is complete:

Regulation 17

266. To be useful the file needs to be kept up to date, and retained for as long as it is relevant – normally the lifetime of the structure. It may be kept electronically (with suitable backup arrangements), on paper, on film, or any other durable form. Where clients dispose of their entire interest in a structure, they should pass the file to the new owners and ensure that they are aware of the nature and purpose of the file. Where they sell part of a structure, any relevant information in the file should be passed or copied to the new owner.

267. If the client leases out all or part of the structure, arrangements need to be made for the health and safety file to be made available to leaseholders. In some cases, the client might transfer the file to the leaseholder during the lease period. In other cases, it may be better for the client to keep the file, but tell leaseholders that it is available. If the leaseholder acts as a client for future construction projects, the leaseholder and the original client will need to make arrangements for the file to be made available to the new co-ordinator.

268. In multi-occupancy situations, for example where a housing association owns a block of flats, the owner should keep and maintain the file, but ensure that individual flat occupiers are supplied with health and safety information concerning their home.

269. A development may include roads and sewers that will be adopted by the local authority or water company. It is generally best to prepare separate files covering each client's interests.

Example 18.

A client included the preparation of the health and safety file in the co-ordinator's contract. The co-ordinator received information from the principal contractor and designers for inclusion within the health and safety file. The co-ordinator reviewed all the information provided and extracted what was needed for inclusion within the health and safety file. One contractor had provided his risk assessments. The co-ordinator did not include these because they were not relevant to future construction or cleaning work.

Appendix 1 The Construction (Design and Management) Regulations

270.

[Note: The full text of the Regulations will be provided in the final document. They are not repeated here.]

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Appendix 2 Pre-construction information

When drawing up the pre-construction information, each of the following topics should be considered. Information should be included where the topic is relevant to the work proposed. The pre-construction information provides information for those bidding for or planning work, and for the development of the construction phase plan. **The level of detail in the information should be proportionate to the risks involved in the project.**

Pre-construction Information

1. Description of project

- (a) project description and programme details including:
 - key dates (including planned start and finish of the construction phase); and
 - the minimum time to be allowed between appointment of the Principal Contractor and instruction to commence work on site.
- (b) details of client, designers, CDM co-ordinator and other consultants;
- (c) whether or not the structure will be used as a workplace (in which case, the finished design will need to take account of the relevant requirements of the Workplace (Health, Safety and Welfare) Regulations 1992);
- (d) extent and location of existing records and plans.

2. Client's considerations and management requirements:

- (a) arrangements for:
 - planning for and managing the construction work, including any health and safety goals for the project;
 - communication and liaison between client and others;
 - security of the site;
 - welfare provision;
- (b) requirements relating to the health and safety of the client's employees or customers or those involved in the project such as
 - site hoarding requirements,
 - site transport arrangements or vehicle movement restrictions,
 - client permit-to-work systems,
 - fire precautions,
 - emergency procedures and means of escape,
 - 'no-go' areas or other authorisation requirements for those involved in the project,
 - any areas the client has designated as confined spaces
 - smoking and parking restrictions;

3. Environmental restrictions and existing on-site risks

- a) Safety hazards, including:

- boundaries and access, including temporary access – eg narrow streets, lack of parking, turning or storage space;
- any restrictions on deliveries or waste collection or storage;
- adjacent land uses – eg schools, railway lines or busy roads;
- existing storage of hazardous materials;
- location of existing services particularly those that are concealed – water, electricity, gas, etc.;
- ground conditions, underground structures or water courses where this might affect the safe use of plant, eg cranes, or the safety of groundworks;
- information about existing structures – stability, structural form, fragile or hazardous materials, anchorage points for fall arrest systems (particularly where demolition is involved);
- previous structural modifications, including weakening or strengthening of the structure (particularly where demolition is involved);
- fire damage, ground shrinkage, movement or poor maintenance which may have adversely affected the structure;
- any difficulties relating to plant and equipment in the premises, such as overhead gantries whose height restricts access;
- health and safety information contained in earlier design, construction or ‘as-built’ drawings, such as details of pre-stressed or post-tensioned structures.

b) Health hazards, including:

- asbestos, including results of surveys (particularly where demolition is involved);
- existing storage of hazardous materials;
- contaminated land, including results of surveys;
- existing structures containing hazardous materials;
- health risks arising from client’s activities.

4. Significant design and construction hazards

- a) significant design assumptions and suggested work methods, sequences or other control measures;
- b) arrangements for co-ordination of on-going design work and handling design changes;
- c) information on significant risks identified during design;
- d) materials requiring particular precautions.

5. The health and safety file

Description of its format and any conditions relating to its content.

Appendix 3 Construction Phase Plan

When drawing up the construction phase plan, you should consider each of the following topics. Information should be included in the plan where the topic is relevant to the work proposed. The plan sets out how health and safety is to be managed during the construction phase. **The level of detail should be proportionate to the risks involved in the project.**

Construction phase plan

1. Description of project

- a) project description and programme details including any key dates;
- b) details of client, CDM co-ordinator, designers, principal contractor and other consultants;
- c) extent and location of existing records and plans that are relevant to health and safety on site, including information about existing structures when appropriate.

2. Management of the work

- a. management structure and responsibilities;
- b. health and safety goals for the project and arrangements for monitoring and review of health and safety performance;
- c. arrangements for:
 - regular liaison between parties on site;
 - consultation with the workforce;
 - the exchange of design information between the client, designers, CDM co-ordinator and contractors on site;
 - handling design changes during the project;
 - the selection and control of contractors;
 - the exchange of health and safety information between contractors;
 - site security;
 - site induction;
 - on site training;
 - welfare facilities and first aid;
 - the reporting and investigation of accidents and incidents including near misses;
 - the production and approval of risk assessments and written systems of work;
- d. site rules;
- e. fire and emergency procedures.

3. Arrangements for controlling significant site risks

- a. Safety risks, including:
 - delivery and removal of materials (including waste¹³) and work equipment taking account of any risks to the public, eg during access to or egress from the site;

¹³ Regulations made under the Clean Neighbourhoods and Environment Act 2005 are expected to require that from October 2007 all construction projects above a given value will be required to write and implement a site waste management plan (SWMP). The SWMP will record the amount of each type of waste that is expected to arise on site

Draft Approved Code of Practice Appendix 3- The Construction Phase Plan

- dealing with services - water, electricity and gas, including overhead powerlines and temporary electrical installations;
- accommodating adjacent land use;
- stability of structures whilst carrying out construction work, including temporary structures and existing unstable structures;
- preventing falls;
- work with or near fragile materials;
- control of lifting operations;
- the maintenance of plant and equipment;
- work on excavations and work where there are poor ground conditions;
- work on wells, underground earthworks and tunnels;
- work on or near water where there is a risk of drowning;
- work involving diving;
- work in a caisson or compressed air working;
- Work involving explosives;
- traffic routes and segregation of vehicles and pedestrians;
- storage of materials (particularly hazardous materials) and work equipment;
- any other significant safety risks.

b. health risks, including:

- the removal of asbestos;
- dealing with contaminated land;
- manual handling;
- use of hazardous substances, particularly where there is a need for health monitoring;
- reducing noise and vibration;
- work with ionising radiation
- any other significant health risks.

4. *The health and safety file*

- a) layout and format;
- b) arrangements for the collection and gathering of information;
- c) storage of information.

and whether it can be reused, recycled or needs to be disposed of. During construction the plan will be updated to map what happens against what was expected to happen, allowing lessons to be learned for future projects. Non-statutory guidance will explain the SWMP process in further detail.

Appendix 4 Competence**Core Criteria for demonstration of Competence:
Companies, Contractors, Co-ordinators and Designers**

You need to meet the standards set out in the core criteria table below. **Column 1** of the table lists the elements which should be assessed when establishing whether or not a company is competent for the work which they will be expected to do. **Column 2** lists the standards against which the assessment should be made. **Column 3** gives some examples of how a company might demonstrate that it meets these standards.

Companies do not have to produce all of the evidence listed in column 3 to satisfy the standard- they simply need to produce enough evidence to show that they meet the standard in column 2, taking account of the nature of the project and the risks which the work entails. This requires you to make a judgement as to whether the evidence provided meets the standard to be achieved. **If your judgement is reasonable, and clearly based on the evidence you have asked for and been provided with, you will not be criticised if the company you appoint subsequently proves not to be competent when carrying out the work.**

Remember that assessments should focus on the needs of the particular job and should be proportionate to the risks arising from the work. Unnecessary bureaucracy associated with competency assessment obscures the real issues and diverts effort away from them.

If you employ less than 5 persons you do not have to write down your policy, organisation or arrangements under criteria 1 and 2. However, you do need to demonstrate that your policy and arrangements are adequate in relation to the type of work you do. Assessments of competence will be made easier if your procedures are clear and accessible.

‘Contractor’, ‘Designer’ and ‘CDM co-ordinator’ relate to your function, not to the type of organisation.

	Criteria	Standard to be achieved	Examples of the evidence that you could use to demonstrate you meet the required standard
STAGE 1 assessment			
1	Health and Safety Policy and Organisation for Health and Safety	You are expected to have and implement an appropriate policy, regularly reviewed, and signed off by the Managing Director or equivalent. The policy must be relevant to the nature and scale of your work and set out the responsibilities for health and safety management at all levels within the organisation	A signed, current copy of the company policy (indicating when it was last reviewed and by whose authority it is published); Guidance on writing company policies for health and safety can be found in HSE free leaflet INDG 259.
2	Arrangements	These should set out the arrangements for health and safety management within the organisation and should be relevant to the nature and scale of your work. They should	A clear explanation of the arrangements which the company has made for putting its policy into effect and for discharging its duties under CDM 2007. Guidance on making arrangements for the management of health and safety can

	Criteria	Standard to be achieved	Examples of the evidence that you could use to demonstrate you meet the required standard
		set out how the company will discharge their duties under CDM 2007. There should be a clear indication of how these arrangements are communicated to the workforce	be found in HSE free leaflet INDG 259.
3	Competent Advice – Corporate and Construction related	Your organisation, and your employees, must have ready access to competent health and safety advice, preferably from within your own organisation. The advisor must be able to provide general health and safety advice, and also (from the same source or elsewhere) advice relating to construction health and safety issues.	Name and competency details of the source of advice, eg a safety group, trade federation, or consultant who provides health and safety information and advice; An example from the last 12 months of advice given and action taken.
4	Training and Information	You should have in place, and implement, training arrangements to ensure your employees have the skills and understanding necessary to discharge their duties as Contractors, Designers or Co-ordinators. You should have in place a programme for refresher training, eg a Continuing Professional Development programme or life long learning which will keep your employees updated on new developments and changes to legislation or good health and safety practice. This applies throughout the organisation- from Board or equivalent, to trainees.	Headline training records Evidence of a H&S training culture including records, certificates of attendance and adequate H&S induction training for site based workforce; Evidence of an active CPD programme; Sample ‘tool box talks’.
5	Individual Qualifications and Experience	Employees are expected to have the appropriate qualifications and experience for the assigned tasks, unless they are under controlled and competent supervision.	Details of qualifications and/or experience of specific corporate post holders eg Board members, Health and Safety Advisor etc; Other key roles should be named or identified and details of relevant qualifications and experience provided. FOR CONTRACTORS: details of number/percentage of people engaged in the project who have passed a construction health and safety assessment, e.g. the CITB Construction Skills touch screen test or affiliated schemes, or the CCNSG equivalent; For site managers, details of any specific training such as the Construction Skills

	Criteria	Standard to be achieved	Examples of the evidence that you could use to demonstrate you meet the required standard
			<p>CITB 'Site Management Safety Training Scheme' certificate or equivalent;</p> <p>For professionals, details of qualifications and/or professional institution membership;</p> <p>For site workers, details of any relevant qualifications or training such as S/NVQ certificates;</p> <p>Evidence of a company based training programme suitable for the work to be carried out.</p> <p>FOR DESIGN ORGANISATIONS- details of number/percentage of people engaged in the project who have passed a construction health and safety assessment, e.g. the CITB Construction Skills touch screen test or affiliated schemes, or the CCNSG equivalent;</p> <p>Details of any relevant qualifications and/or professional Institution membership and Any other specific qualifications such as ICE construction H&S Register, NEBOSH Construction Certificate, APS Design Register;</p> <p>FOR CDM CO-ORDINATORS- details of number/percentage of people engaged in the project who have passed a construction health and safety assessment, e.g. the CITB Construction Skills touch screen test or affiliated schemes, or the CCNSG equivalent;</p> <p>Evidence of health and safety knowledge such as NEBOSH Construction Certificate;</p> <p>Details of Professional Institution membership and any other specific qualifications such as member of the co-ordinators register administered by the APS, ICE construction H&S register etc.</p> <p>Evidence of a clear commitment to training and the Continuing Professional Development of staff.</p>
6	Monitoring, Audit and Review	You should have a system for monitoring your procedures, for auditing them at periodic intervals, and for reviewing them on an on-going basis.	<p>Could be through formal audit or discussions/reports to senior managers;</p> <p>Evidence of recent monitoring and management response;</p> <p>Copies of site inspection reports;</p>
7	Workforce involvement	You should have, and implement, an established means of consulting with your workforce on health and safety	Evidence showing how consultation is carried out.

	Criteria	Standard to be achieved	Examples of the evidence that you could use to demonstrate you meet the required standard
		matters.	Records of HS Meetings/Committees; Names of appointed safety representatives (trades union or other); For those employing <5, be able to describe how you consult with your employees to achieve the consultation required.
8	Accident reporting and enforcement action; follow up investigation	You should have records of all RIDDOR reportable events for at least the last 3 years. You should also have in place a system for reviewing all incidents, and recording the action taken as a result. You should record any enforcement action taken against your company over the last 5 yrs, and the action which you have taken to remedy matters subject to enforcement action	Evidence showing the way in which you record and investigate accidents and incidents; Records of last 2 accidents/incidents and action taken to prevent recurrence; Records of any enforcement action taken over the last 5 years, and what action was taken to put matters right; (Information on enforcement taken by HSE over the last 5 years is available on the HSE website) For larger companies, simple statistics showing incidence rates of major injuries, over three-day injuries, reportable cases of ill-health and dangerous occurrences for the last three years. Records should include any incidents that occurred whilst the company traded under a different name, and any incidents that occur to direct employees or labour only subcontractors.
9	Sub-contracting/consulting procedures (if applicable)	You should have arrangements in place for appointing competent sub-contractors/consultants; You should be able to demonstrate how you ensure that sub contractors will also have arrangements for appointing competent sub-contractors or consultants. You should have arrangements for monitoring sub-contractor performance	Evidence showing how you ensure sub-contractors are competent; Examples of sub-contractor assessments you have carried out; Evidence showing how you require similar standards of competence assessment from sub contractors; Evidence showing how you monitor sub-contractor performance;

	Criteria	Standard to be achieved	Examples of the evidence that you could use to demonstrate you meet the required standard
10	Hazard elimination and risk control (Designers only)	You should have, and implement, arrangements for meeting your duties under regulation 11 of CDM ²⁰⁰⁷	<p>Evidence showing how you:</p> <p>Ensure co-operation and co-ordination of design work within the design team and with other designers/contractors;</p> <p>Ensure that hazards are eliminated and any remaining risks controlled;</p> <p>Ensure that any structure which will be used as a workplace will meet relevant requirements of the Workplace (Health Safety and Welfare) Regulations 1992.</p> <p>Examples showing how risk was reduced through design.</p> <p>A short summary of how changes to designs will be managed</p> <p>(Note: the emphasis here should be on practical measures which reduce particular risks arising from the design, not on lengthy procedural documentation highlighting generic risks.)</p>
11	Risk assessment leading to a safe method of work (Contractors only)	You should have procedures in place for carrying out risk assessments and for developing and implementing safe systems of work/ method statements.	<p>Evidence showing how the company will identify significant HS risks and how they will be controlled.</p> <p>Sample risk assessments/ safe systems of work/method statements;</p> <p>If you employ less than 5 persons and do not have written arrangements, you should be able to describe how you achieve the above.</p>
		The identification of health issues is expected to feature prominently in this system.	This will depend upon the nature of the work, but must reflect the importance of this risk area.
12	Cooperating with others and coordinating your work with that of other contractors	You should be able to illustrate how cooperation and coordination of your work is achieved in practice, and how you involve the workforce in drawing up method statements /safe systems of work.	<p>Evidence could include for sample risk assessments, procedural arrangements, project team meeting notes</p> <p>Evidence of how the company co-ordinates its work with other trades;</p>

	Criteria	Standard to be achieved	Examples of the evidence that you could use to demonstrate you meet the required standard
	(Contractors)		
13	Welfare Provision (Contractors)	You should be able to demonstrate how you will ensure that appropriate welfare facilities will be in place before people start work on site;	Evidence could include for example health and safety policy commitment; contracts with welfare facility providers; details of type of welfare facilities provided on previous projects
14	CDM Co-ordinator's duties (CDM Coordinators)	You should be able to demonstrate how you go about encouraging cooperation, coordination and communication between designers;	The evidence should be in the form of actual examples rather than by generic procedures.
STAGE 2 assessment			
1	Work experience	You should give details of relevant experience in the field of work for which you are applying.	<p>A simple record of recent projects/contracts should be kept, with the phone numbers /addresses of contacts who can verify that work was carried out with due regard to health and safety.</p> <p>This should be sufficient to demonstrate your ability to deal with the key health and safety issues arising from the work you are applying for.</p> <p>Where there are significant shortfalls in your previous experience, or there are risks associated with the project which you have not managed before, an explanation of how these shortcomings will be overcome.</p>

Guidance for assessing competence of a co-ordinator for a larger or more complex project, or one with high or unusual risks.

Organisations do not have to produce all of the evidence listed in column 3 to satisfy the standard- they simply need to produce enough evidence to show that they meet the standard in column 2, taking account of the nature of the project and the risks which the work entails. This requires you to make a judgement as to whether the evidence provided meets the standard to be achieved. **If your judgement is reasonable, and clearly based on the evidence provided, you will not be criticised if the company you appoint subsequently proves not to be competent to carry out the work.**

271. **Remember that assessments should focus on the needs of the particular job and should be proportionate to the risks arising from the work.** Unnecessary bureaucracy associated with competency assessment obscures the real issues and diverts effort away from them.

<i>Stage</i>	<i>Element</i>	<i>Sub Element</i>	<i>Examples of Attainment</i>
Stage 1	Task knowledge appropriate for the tasks to be undertaken. May be technical or managerial.	The design process	Professionally Qualified to Chartered level (<i>Note 1</i>) Membership of a relevant construction institution, for example CIBSE; ICE; IEE; IMechE; IStructE; RIBA; CIAT.
	Health and safety knowledge sufficient to perform the task safely, by identifying hazard and evaluating the risk in order to protect self and others, and to appreciate general background	Health and safety in construction	Validated CPD in this field (<i>Note 2</i>), and typical additional qualification eg: NEBOSH Construction Certificate, Member of H&S Register administered by the ICE (<i>Note 3</i>). Fellowship of Association for Project Safety, Membership of Institution of Planning Supervisors.
Stage 2	Experience and ability sufficient to perform the task, (including where appropriate an appreciation of constructability), to recognise personal limitations, task related faults and errors and to identify appropriate actions.		Evidence of significant work on similar projects with comparable hazards, complexity and procurement route.

Note 1 Chartered membership of a recognised construction related institution.

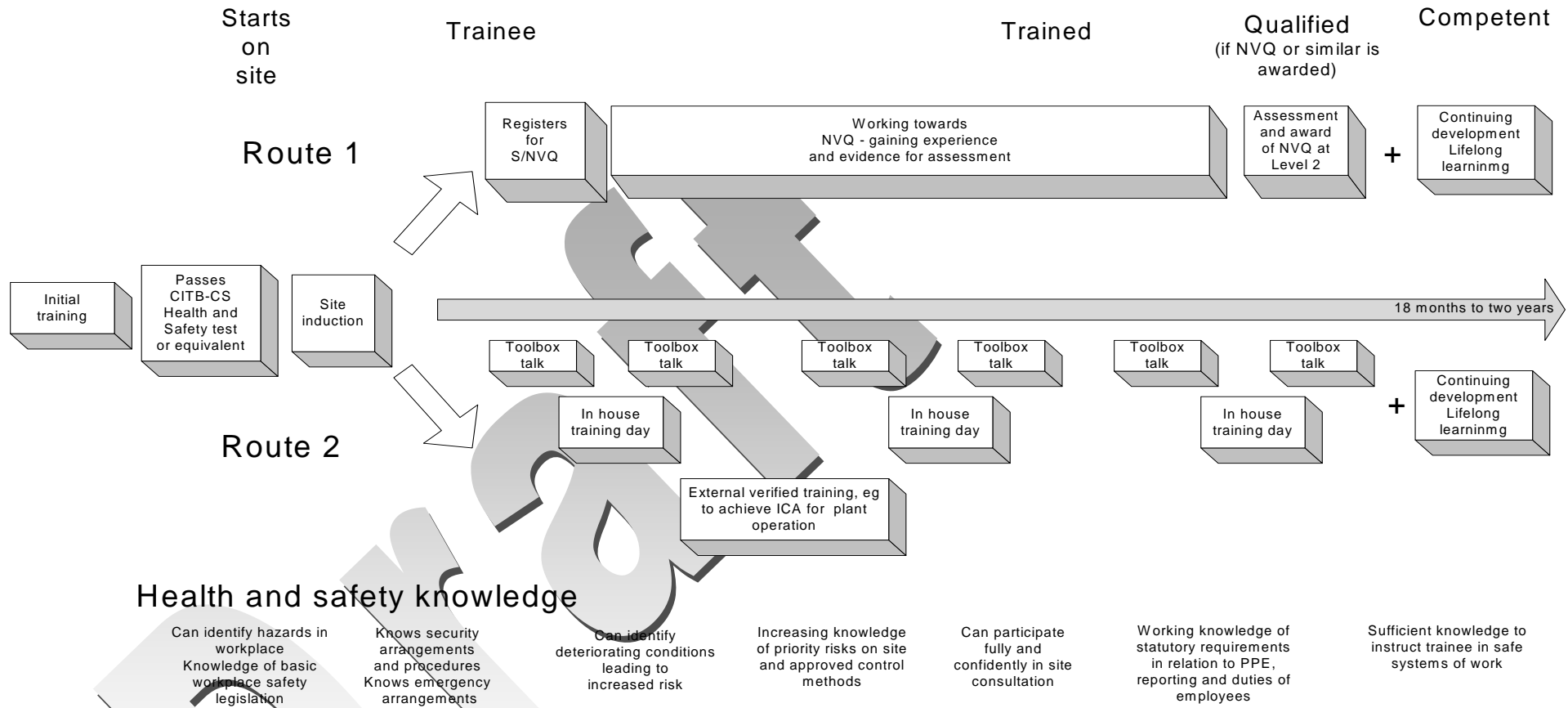
Note 2 Open to any member of a construction related institution

Appendix 6

Development of competence - timeline for an unskilled construction worker

(Not an Apprentice or trainee on a recognised training programme)

Stages on the timeline



Appendix 7

Appendix 7

Duty holders should use these principles to direct their approach to identifying and implementing precautions which are necessary to control risks associated with a project.

The principles of prevention:

- (a) avoiding risks;
- (b) evaluating the risks which cannot be avoided;
- (c) combating the risks at source;
- (d) adapting the work to the individual, especially as regards the design of workplaces, the choice of work equipment and the choice of working and production methods, with a view, in particular, to alleviating monotonous work and work at a predetermined work-rate and to reducing their effect on health;
- (e) adapting to technical progress;
- (f) replacing the dangerous by the non-dangerous or the less dangerous;
- (g) developing a coherent overall prevention policy which covers technology, organisation of work, working conditions, social relationships and the influence of factors relating to the working environment;
- (h) giving collective protective measures priority over individual protective measures; and
- (i) giving appropriate instructions to employees.