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| ONR Technical Inspection Guide (TIG)  Construction (Design and Management) |



ONR Technical Inspection Guide (TIG)

Construction (Design and Management)

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| Issue | Description of update(s) |
| 3 | Major revision to Issue 2:   * Change in structure to better reflect purpose and scope of guidance * Content extended to incorporate all dutyholders under The Construction (Design and Management) Regulations 2015 (CDM 2015) * Clarification of general duties most applicable to ONR regulated sites * Increased referencing and signposting to key industry guidance * Increased clarification of ONR regulatory expectations * Revised Appendix B to map Licence Conditions to CDM requirements. |

Contents

[1. Introduction 4](#_Toc183769120)

[1.1. Purpose 4](#_Toc183769121)

[1.2. Scope and applicability 4](#_Toc183769122)

[2. Purpose and structure of CDM 2015 6](#_Toc183769123)

[3. Guidance on arrangements for CDM 2015 9](#_Toc183769124)

[3.1. Skills, knowledge, experience, and organisational capability 9](#_Toc183769125)

[3.2. Cooperate with others 12](#_Toc183769126)

[3.3. The role of the client 12](#_Toc183769127)

[3.4. The role of the Designer 18](#_Toc183769128)

[3.5. The role of Principal Designer 21](#_Toc183769129)

[3.6. The role of contractors 25](#_Toc183769130)

[3.7. The role of the Principal Contractor 29](#_Toc183769131)

[4. Part 4 of CDM 2015 – General requirements for all construction sites 34](#_Toc183769132)

[5. ONRs approach to regulation of CDM 2015 36](#_Toc183769133)

[6. Capability map 41](#_Toc183769134)

[Appendix A – CDM 2015 capability map 43](#_Toc183769135)

[Appendix B – CDM 2015/LC/TIG/TAG mapping 48](#_Toc183769136)

[References 58](#_Toc183769137)

[Glossary 64](#_Toc183769138)

# Introduction

1. The Health and Safety at Work etc. Act 1974 (HSWA) [1] is the primary piece of legislation covering occupational health, safety and welfare in Great Britain (GB). It is supported by secondary legislation, often referred to as ‘regulations’. ONR inspects dutyholders’ compliance with the HSWA and regulations, judging the suitability of the arrangements made and the adequacy of their implementation. Most of the regulations are goal-setting, and do not prescribe in detail what the dutyholders' arrangements should contain; this is the responsibility of the dutyholder who remains accountable for health, safety and welfare.

## Purpose

1. To support inspectors in undertaking compliance inspections, ONR produces a suite of guides to assist inspectors to make regulatory judgements and decisions in relation to the adequacy of dutyholders’ compliance arrangements, and the health and safety provision for activities undertaken at the site. This Technical Inspection Guide (TIG) has been prepared as a guide to assist ONR inspectors during inspections in which they judge the adequacy of The Construction (Design and Management) Regulations 2015   
   (CDM 2015) [2] compliance arrangements and their implementation.

## Scope and applicability

1. All ONR regulated sites carry out work falling under the scope of CDM 2015 throughout their lifecycle, from design concept; construction; commissioning; maintenance, and alterations through to defueling, decommissioning and demolition.
2. The aim of CDM 2015 is to ensure all dutyholders are appointed and aware of their duties. This can be simply described as ensuring that the **right information is provided to the right people at the right time,** and includes ensuring that health, safety and welfare is managed during all construction works including notifiable projects.
3. This guidance has been prepared as an aid to help inspectors facilitate a consistent approach to the regulation of compliance with the requirements of CDM 2015; and details what each dutyholder must or should do to comply with the law.
4. This guidance provides a framework for inspection activities, and will give insight to inspectors on the suitability of dutyholders arrangements on site.
5. The guidance provided is split into the following main elements:

* The purpose and scope of CDM 2015;
* Guidance on ONR’s expectations on duties that apply to all involved in a construction project;
* Guidance for the specific CDM 2015 dutyholders; and,
* Tools to assist with interventions, including guidance on regulation of construction activities, the CDM 2015 capability map ([Appendix A – CDM 2015 capability map](#AppA)) and mapping of each CDM 2015 regulation to the requirements of the Licence Conditions (LCs) (Appendix B – CDM 2015/LC/TIG/TAG mapping).

1. Inspectors should use their discretion in the depth and scope to which they apply this guidance. It is intended as an aid in the exercise of their professional judgement in reaching consistent proportionate regulatory decisions. Inspectors should ensure that this guidance is used in conjunction with the principles in [ONR's Risk Informed and Targeted Engagement (RITE) Policy](https://www.onr.org.uk/publications/regulatory-reports/regulatory-policy/onr-rd-pol-002-risk-informed-and-targeted-engagements-rite-policy/) [3] and the [Enforcement Policy Statement](https://www.onr.org.uk/our-work/how-we-regulate/enforcement/) [4] to target regulatory engagements in a risk-informed manner.
2. Please note that this guidance is not a replacement for the existing   
   [HSE guidance on CDM 2015](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5] and will not contain the level of legislative detail therein. For this reason inspectors should familiarise themselves with the HSE guidance as a reference and to aid them in the legislative decision making process. For further information, refer to section ‎5.
3. A glossary of terms and definitions associated with CDM 2015 can be found to the rear of the document (refer to ‘Glossary’).

# Purpose and structure of CDM 2015

1. CDM 2015 are regulations made under the Health and Safety at Work Act (HSWA), which ONR enforces on GB nuclear sites, authorised defence sites, and new nuclear build sites. It has a wide scope and applies to all sizes and all types of construction projects in GB, throughout the entirety of the process from concept to completion, which includes, but is not limited to design; new build; modifications; refurbishments; extensions; conversions; repair; maintenance; and demolition of a building and/or a structure.
2. The definition of ‘construction’ is very broad, and includes work such as maintenance during an outage, and installation of any services which are normally found in a structure (examples are provided in Table 3 - Examples of activities that are likely to fall under the scope of CDM 2015). If in doubt, you should check the interpretation in [Regulation 2](https://www.legislation.gov.uk/uksi/2015/51/regulation/2) [2].
3. The term ‘dutyholder’ is used to describe those with legal responsibility to discharge duties of client, designer, Principal Designer (PD), Principal Contractor (PC), and contractor. It is the responsibility of dutyholders to ensure the health, safety, and welfare of workers and others during the entirety of construction projects. This includes designing out risk, when reasonably practicable, to improve buildability, usability and maintainability of structures throughout their lifetime including eventual decommissioning and demolition.
4. CDM 2015 sets out what people involved in construction work need to do to protect themselves and anyone else the work affects from harm arising from construction work (refer to Table 1 - CDM 2015 responsibilities and justification). It is structured to address the key elements to securing construction health and safety.
5. Designs prepared outside of GB are required to comply with CDM 2015 if they are going to be constructed in GB. This is relevant, in particular, during the Generic Design Assessment (GDA) process for new nuclear power stations.
6. ONR inspects the compliance of all dutyholders’ arrangements and practices against CDM 2015 to judge the suitability and the adequacy of their implementation.
7. CDM 2015 is made of 5 parts, covering 39 regulations, 5 schedules, and 6 appendices (refer to Table 2 - A brief outline of the main parts of CDM 2015 for further information).
9. Whilst some of the duties in the regulations are absolute, others are goal setting with the requirement to take action ‘so far as is reasonably practicable’ (SFAIRP). Inspectors need to be aware of the requirements of the regulations and should refer to ONR’s [TAG on regulating duties to reduce risks to ALARP](https://www.onr.org.uk/publications/regulatory-guidance/regulatory-assessment-and-permissioning/technical-assessment-guides-tags/nuclear-safety-tags/technical-assessment-guides-tags-nuclear-safety-full-list/) [6] for guidance on assessing whether dutyholders have reduced risks ‘so far as is reasonably practicable’.
10. Due to the wide scope of CDM 2015, this TIG links into other ONR guidance, for example, ONR’s [TAG on civil engineering](https://www.onr.org.uk/publications/regulatory-guidance/regulatory-assessment-and-permissioning/technical-assessment-guides-tags/nuclear-safety-tags/technical-assessment-guides-tags-nuclear-safety-full-list/) [7], which outlines considerations given to CDM 2015 during the assessment of safety cases.
11. Appendix B – CDM 2015/LC/TIG/TAG mapping details the mapping of CDM 2015 with the relevant LCs and ONR guidance, identifying areas of overlap and limitations of LCs and ONR guidance over CDM 2015.

Table 1 - CDM 2015 responsibilities and justification

| Responsibility | Justification |
| --- | --- |
| Managing the risks by applying the general principles of prevention. | This is to avoid, evaluate and control risk appropriately at source, particularly at the design stage. |
| Appointing the right people and organisations at the right time. | Those appointing should ensure that the people and organisations that they intend to appoint have the necessary skills, knowledge and experience as well as the organisational capability to discharge their work safely. |
| Making sure everyone has the information, instruction, training, and supervision they need to carry out their jobs in a way that secures health and safety. | Information and supervision should be proportionate and effective to the size and complexity of the construction project. |
| Dutyholders cooperating and communicating with each other and coordinating their work. | This will ensure that everyone understands the risks and the measures in place to control them. |
| Consulting workers and engaging with them to promote and develop effective measures to secure health, safety, and welfare. | This should be ‘two-way’ process aimed to identify risks, ensures appropriate control and assists in securing employee commitment. |

Table 2 - A brief outline of the main parts of CDM 2015

| Part of CDM 2015 and title | Regulation numbers | Detail |
| --- | --- | --- |
| Part 1 – Commencement, interpretation, and application | 1-3 | Contains definitions to key terminologies, and Regulation 3 sets out the scope of CDM, which extends to outside of GB. |
| Part 2 – Client duties | 4-7 | Particularly relevant to licensees. |
| Part 3 – Health and safety duties and roles | 8-15 | Covering different duties for roles on a construction project, including PD, designers, PC, Contractors and Workers. |
| Part 4 – General requirements for all construction sites | 16-35 | Specific to the health, safety, and welfare, including fire safety on construction sites. |
| Part 5 – General | 36-39 | Administrative requirements of CDM 2015. Regulation 36 sets out the enforcement authority of fire safety on a construction site, which is ONR on GB nuclear sites, authorised defence sites, and new nuclear build sites. |

# Guidance on arrangements for CDM 2015

1. The following sections provide guidance on how CDM 2015 applies to dutyholders within the nuclear industry. This includes the general duties applicable to all dutyholders relating to skills, knowledge, experience, and if an organisation, organisational capability and the requirement for all dutyholders to cooperate. It also includes guidance relevant to the specific dutyholders.
2. This guidance supports the information provided in [HSE Guidance L153 - Managing health and safety in construction](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5] which inspectors should ensure they are familiar with.

## Skills, knowledge, experience, and organisational capability

1. CDM 2015 states that every dutyholder appointed to work on a construction project must have the skills, knowledge, experience and, if an organisation, the organisational capability, to fulfil their role to secure construction health and safety. On a nuclear site, the adequacy of these of arrangements are also an important consideration for nuclear safety. A dutyholder should not accept an appointment unless it meets these requirements. Anyone making an appointment to a project must take ‘reasonable’ steps to ensure potential appointees meet these requirements as part of their due diligence.

### Skills

1. Relevant skills are required to enable duty holders to carry out the work to a standard specified by work instructions and related industry standards.   
   This includes the skills to use the materials and equipment they need to perform the work, such as reading and interpreting drawings. Also the ability to communicate effectively, such as delivering effective coordination meetings, toolbox talks or briefs on risk assessments and working procedures.
2. For example:

* An excavator operator requires the skills to operate the specific make and model of plant safely. They need to be familiar with the controls and technology of the plant to carry out specific tasks in a safe and controlled manner.
* A setting out engineer will be required to read drawings, use setting out equipment accurately and use communication skills to accurately record his findings and co-ordinate with his site team.

1. Although a worker may have had relevant skills in the past, not using the skills for a period of time can result in skills fade. Anyone assessing skills should be cognisant of the potential for skills fade and consider whether mitigation measures, such as additional supervision or a refresher training course is necessary to ensure they have sufficient capability.

### Knowledge

1. Knowledge is often described as the understanding of information about a subject that you gain by experience or study, either known by one person or by people in a team. Knowledge should include general construction knowledge and in-depth knowledge about any particular specialisms. Knowledge and skills are often complementary.
2. An individual’sknowledge of general construction health and safety risks can be obtained and tested by attending courses provided by the many national bodies. These can be used to verify knowledge.
3. Training plays a key role in providing all CDM 2015 related roles with the foundations in developing skills and knowledge.
4. Approved schemes can be used to demonstrate the skills and knowledge of individuals. For example, the following are some of the training schemes which are available:

* [**CSCS**](https://www.cscs.uk.com/?msclkid=0fafdbeff07b17489b60bd79bc24d16a&utm_source=bing&utm_medium=cpc&utm_campaign=Official%20CSCS%20Website&utm_term=cscs%20card&utm_content=Smart%20AdGroup%201706623426529)(Construction Skills Certification Scheme) [8]
* [**CPCS**](https://constructiontest.co.uk/cpcs-card/#google_vignette) (Construction Plant Competency Scheme) has over 70 listed categories of plant used in construction [9]
* [**IPAF**](https://www.ipaf.org/en-gb) (International Powered Access Federation) for mobile elevating work platforms (MEWPS) [10]
* [**CITB**](https://www.citb.co.uk/national-construction-college/health-safety-and-sustainability-courses/)(Construction Industry Training Board) for construction training including on CDM 2015 for different dutyholders, health and safety for Directors, site managers (SMSTS) and site supervisors (SSSTS) [11]
* [**APS**](https://www.aps.org.uk/membership/accredited-courses)(Association for Project Safety) for CDM 2015 awareness and for different dutyholders [12]

1. Documented evidence of a card or ‘ticket’ awarded to an individual does not necessarily demonstrate they have the skills, knowledge and experience to fulfil their role and may only indicate someone has attended a training course. Some schemes however can assist with ensuring this legal requirements are met for a transient workforce. For example, CSCS and CPCS schemes incorporate a period of work experience and demonstration of evidence for those under training and who are inexperienced before a card for ‘skilled’ operative is issued. During this time, the worker will be issued with a ‘trainee’ card.
2. The specific requirements of any scheme should be clearly understood if they are being used to demonstrate skills, knowledge and experience of any individuals.

### Experience

1. Experience can often be described as (the process of getting) knowledge or skills from doing, seeing, or feeling things. A dutyholder should be able to demonstrate relevant experience in similar construction projects with similar complexities and risks.
2. For example, a PC should be able to demonstrate experience of managing a similar project with similar construction risks. Experience of running a nuclear power plant, whilst high hazard, is unlikely to result in the same experience of managing high risk construction activities in a nuclear new build project.
3. The skills, knowledge and experience in a trade discipline or profession, and awareness of other related risks on site, will be accumulated by construction employees as they develop their careers. For example, the supervision of a work discipline and the workers carrying out the work is a key part of managing work on a CDM 2015 project.
4. Supervisors must have relevant skills, knowledge and experience to supervise the work discipline (ground works, cladding, etc.). A supervisor must be able to identify hazards and risks associated with their work, and work by other contractors in their proximity, and must have good cooperation and communication skills be able to ensure control measures to reduce risks to workers under their supervision are understood. A supervisor must be observant and diligent to ensure the control measures are implemented and need to demonstrate suitable behaviours to be a leader. A lot of the skills, knowledge, experience demonstrated by a proficient supervisor are ‘soft skills’ and are developed over their career.

### Organisational capability

1. Organisational capability includes the organisation having policies and systems in place to set adequate health and safety standards which comply with the law, and the resources (including financial and people) to ensure the standards are delivered.
2. Build UK’s ‘[Common Assessment Standard](https://builduk.org/wp-content/uploads/2024/06/Common-Assessment-Standard-Question-Set-Version-4.0.pdf)’ [13] is a prequalification questionnaire which can be a good benchmark of the standards when assessing a small or medium sized CDM 2015 duty holder.
3. An organisation may have achieved external accreditation through various industry bodies. The accreditation thresholds vary and therefore, the criteria for acceptance and demonstration of evidence should be clarified before accepting them as evidence of an organisation’s capability.
4. Some dutyholders, such as structural and mechanical designers may have memberships for professional organisations such as the Institute of Structural Engineers or the Institution of Mechanical Engineers. Evidence of up to date continual professional development (CPD) and Curriculum Vitae (CVs) will often be required to maintain these memberships.
5. Further guidance on skills, knowledge and experience can be found on the [HSE’s webpage](https://www.hse.gov.uk/competence/what-is-competence.htm) [14] and in three of ONR’s LC-related TIGs:

* [LC](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.onr.org.uk%2Fmedia%2Fdqljd1eo%2Fns-insp-gd-010.docx&wdOrigin=BROWSELINK) 10 – Training [15];
* LC 12 – Duly authorised and other suitably qualified persons [16];
* LC 36 – Organisational capability [17].

## Cooperate with others

1. The regulations require all dutyholders, including designers, to cooperate with each other, to the extent necessary, to enable any person with a duty or function to fulfil that duty or function. This duty extends to dutyholders involved in different projects with shared interfaces.
2. For example, when more than one CDM 2015 project is being carried out on a licensed site, the dutyholders from each project need to co-operate along with the licensee.
3. The PD and PC must ensure all parties cooperate with each other so that, so far is as reasonably practicable, the project is carried out without risks to health or safety. This should include establishing effective means of communication to impart relevant information, monitor progress, share concerns and resolve conflicts including in programming or incompatible work practices. It is important that significant and/or unusual risks that cannot be eliminated and design changes are reviewed and managed accordingly.

## The role of the client

### Who is a client?

1. A client is any person for whom a construction project is carried out, including all planning, design, management or other work involved in a project until the end of the construction phase.
2. Clients could be a nuclear licensee, authorisee on an authorised defence site, or requesting parties during GDA.
3. The client can be an individual person (although unlikely on a ONR regulated site), a single legal entity or part of a legal entity that also has other duties under CDM 2015 Regulations. There could also be more than one client.   
   Before any project commences, there must be clarity and agreement as to who will act as the CDM 2015 client during for the duration of the project.
4. The client cannot absolve itself of its legal duties including those relating to CDM 2015, the HSWA, the Energy Act 2013 [18] and the relevant statutory/applicable provisions. For example, a licensee cannot appoint an embedded contractor to take on the client role and the client will still retain legal duties even if it appoints a PC to undertake the PC duties for a construction project under CDM 2015.

### What are the legal duties of a client?

1. The client has significant influence on the management of a project, and can set performance standards expectations from the start, including those relating to health and safety.
2. A client, if a licensee will have duties under CDM 2015, the HSWA and supporting regulations, and also legal duties under the Energy Act 2013. These duties, whilst sit under different families of law, are equally applicable.
3. ONR requires licensees to be an ‘intelligent customer’ (IC). The definition of an IC is set out in ONR’s [Safety Assessment Principles](https://www.onr.org.uk/media/pobf24xm/saps2014.pdf) (SAPs) [19]:

‘The capability of an organisation to understand where and when work is needed; specify what needs to be done; understand and set suitable standards; supervise and control the work; and review, evaluate and accept the work carried out on its behalf’.

1. This requirement is similar to the duties on a CDM 2015 client and other general duties under health and safety legislation.
2. For example:

* the client should consider its own **experience** and **knowledge** of similar construction projects and ensure any gaps are filled when developing its project team and arrangements for managing the project.
* the client brief should clearly **communicate** its expectations to those it appoints to work on the project.
* the client could be able to demonstrate how it is a **learning dutyholder** by engaging with the wider construction industry to assist with maintaining its organisational capability and understanding of foreseeable construction hazards and new industry developments. Examples of forums include the Construction Industry Advisory Committee (CONIAC), Constructing Excellence, the Chartered Institute of Building (CIOB), and the Construction Leadership Council (CLC).

1. Guidance can be found in ONR’s [TAG on licensee core safety and IC capabilities](https://www.onr.org.uk/publications/regulatory-guidance/regulatory-assessment-and-permissioning/technical-assessment-guides-tags/nuclear-safety-tags/technical-assessment-guides-tags-nuclear-safety-full-list/) [20]. This includes guidance on how a licensee can maintain control and oversight of nuclear safety, as required by LC 26 (Control and Supervision of Operations) whilst ensuring the appropriate appointments are made under CDM 2015.
2. A licensee can contribute to meeting the requirements of LC 12   
   (Duly Authorised and Other Suitably Qualified and Experienced Persons) by ensuring only persons with suitable experience, knowledge and training discharge the CDM 2015 duties.

### Suitable arrangements

1. The client must make suitable arrangements for managing their project, enabling those carrying it out to manage health and safety risks in a proportionate way.
2. The arrangements must be maintained and reviewed for the duration of the project, and should include:

#### Relevant appointments

1. For any project involving more than one contractor (i.e., regardless of whether the project is notifiable or not), the client must appoint in writing a PD and PC, making sure they have the skills, knowledge, experience and organisational capability relevant to the type and complexity of the project to fulfil the relevant role (refer to section ‎3.1). This is required whether or not the appointed PD and/or PC are part of the same single legal entity or business group as the client. Appointments should be made as soon as possible to ensure early engagement in design activities. The client should be able to demonstrate how the capabilities of the appointees have been assessed.
2. The client should identify any limitations in its own capabilities relevant to construction projects in assessing the skills, knowledge, experience and organisational capability when tendering for the appointments. A client may need to access additional support to ensure appropriate appointments are made.
3. For example, where a nuclear licensee is acting as client, PD and PC, they must ensure all organisational functions are competent to fulfil those roles, and are able to act independently of each other to avoid conflicts of interest. Written arrangements should be in place demonstrating how the functions of each dutyholder will be met.
4. Where no appointments are made in writing, the law stipulates the client must fulfil the duties of the PD (Regulations 11-12) and/or PC (Regulations 12-14). The above paragraph would then apply by default.
5. The PC and PD for a large or complex project must have the organisational function to fulfil their duties across the whole scope of the project.   
   This should include managing numerous specific work packages and ensuring the co-ordination between, potentially, many different work locations, designers and contractors.

#### Communication

1. The client should ensure there are arrangements in place to facilitate effective communication between those it appoints. It should ensure its expectations for communication are clear including relating to authorisation for work.
2. For example, the client needs to ensure its expectations, for both Nuclear Site Health and Safety (NSHS) and nuclear safety, are communicated and understood throughout the supply chain for the project.
3. Further information on communication and supply chain management can be found in [20] and ONR’s [TAG on supply chain management arrangements for the procurement of nuclear safety-related items or services](https://www.onr.org.uk/publications/regulatory-guidance/regulatory-assessment-and-permissioning/technical-assessment-guides-tags/nuclear-safety-tags/technical-assessment-guides-tags-nuclear-safety-full-list/) [21].

#### Monitoring arrangements

1. Where appointed, the client must take reasonable steps to ensure the PD and PC fulfil their duties under the CDM 2015 Regulations.
2. This should include assuring itself that the appointed PD and PC, and their supply chain, maintain their skills, knowledge, experience and organisational capability throughout the duration of the project.
3. This also includes ensuring designers, including the PD, design out risk for the construction, use and maintenance of the completed project so far as is reasonably practicable, from the very start of the project. Where a design is prepared or modified outside GB these designer duties apply to the person or organisation who commissions it if they are established in GB, or if not, the client.
4. For example, for a nuclear power plant, it is the duty of the licensee (including requesting party in the GDA process) to ensure this duty is fulfilled. This is in addition to the requirements of the licensee to maintain a Design Authority (DA) as detailed in ONR’s [TAG on the licensee’s DA capability](https://www.onr.org.uk/publications/regulatory-guidance/regulatory-assessment-and-permissioning/technical-assessment-guides-tags/nuclear-safety-tags/technical-assessment-guides-tags-nuclear-safety-full-list/) [22].
5. The client must implement adequate assurance arrangements whether or not the PD and/or PC are part of the same single legal entity or business group.
6. For example, where a nuclear licensee is acting as client, PD and PC, the client function must devise and implement management arrangements for internally monitoring compliance of the PD and PC functions.
7. The extent of monitoring varies according to the size and complexity of the project but should include, for example, site level compliance with arrangements and control of hazards, setting of suitable key performance indicators, board level oversight of resourcing and learning and assurance that the PC and PD monitoring arrangements are in place and implemented.
8. The client needs to assure itself that the importance to nuclear safety is understood for the construction activities and that the appropriate behaviours are established and monitored i.e. strict adherence to procedures, questioning attitude, compliance with quality arrangements, generation and retention of build records, oversight and supervision, strict adherence to design change arrangements.
9. When a licensee is undertaking client duties of oversight and governance of activities, these may contribute to meeting the requirements of LC 12 and 26.

#### Sufficient time and resources

1. The client must ensure sufficient time and resources are allocated for each stage of the project – from concept to completion.
2. Further guidance on expectations for appointments, resourcing and monitoring arrangements can be found in paragraphs 30-41 of [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5].

#### Welfare facilities

1. Whilst it is the duty of the PC to provide welfare facilities during the construction phase, the client must monitor the arrangements to ensure suitable and sufficient facilities are provided. This includes provision of toilets, washing facilities, drinking water, rest areas, changing rooms and lockers.
2. Further guidance can be found in:

* Paragraphs 137-138 of [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5];
* HSE’s Construction Information Sheet (CIS) No. 59 on the [provision of welfare facilities during construction work](https://www.hse.gov.uk/pubns/cis59.pdf) [23]; and,
* HSE’s [Construction Welfare Standards](https://www.hse.gov.uk/foi/internalops/og/og-00002.pdf) [24]

#### F10 notification

1. Where the construction work for a project is scheduled to last >30 days and have >20 workers on site at the same time, **or,** >500 person days, the client must complete a ‘F10 notification’ to ONR in writing via [HSE’s online portal](https://www.hse.gov.uk/forms/notification/f10.htm) with details of the project [25].
2. Further guidance can be found in paragraphs 47-52 of [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5].

#### Pre-Construction Information (PCI)

1. The client must collate and provide PCI as soon as practicable to every designer and contractor either bidding for the work or already appointed to the project. This should be relevant to the project and of an appropriate level of detail and proportionate to the risks. It should include planning and management arrangements, design and construction hazards, residual risks and how they can be addressed. There may be an existing relevant health and safety file containing information that should be included or referred to.
2. Further guidance can be found in paragraphs 42-43 and Appendix 2 of   
   [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5].

#### Construction Phase Plan (CPP)

1. The client must ensure the PC (or Contractor) has drawn up a CPP before that phase begins. This requires periodic review and update and should be available on site.
2. Further guidance can be found in paragraph 44 and Appendix 3 of [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5].

#### Health and safety file

1. The client must ensure the PD prepares and provides the health and safety file for the project. This should be revised as necessary and made available to anyone who needs it for subsequent work at the site. If the client chooses to end the appointment of the PD before the end of the construction phase, the PC should take over the development of the file.
2. Further guidance can be found in paragraphs 45-46 and Appendix 4 of [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5].
3. Please note, the information required in the PCI, CPP and health and safety file might be captured in various formats and names. For example, Building Information Modelling (BIM) may be used as part of the CPP to assist identification of risks over time. Further guidance about BIM can be found on the [HSE website](https://www.hse.gov.uk/construction/bim.htm) [26] and ONR’s [TAG on civil engineering](https://www.onr.org.uk/publications/regulatory-guidance/regulatory-assessment-and-permissioning/technical-assessment-guides-tags/nuclear-safety-tags/technical-assessment-guides-tags-nuclear-safety-full-list/) [7].

## The role of the Designer

### Who is a Designer?

1. The definition in CDM 2015 of a designer is very broad. It is **any** person who, as part of a business:

* Prepares or modifies a design for a construction project; or
* Arranges for, or instructs someone else to do so.

1. For example, designers can be individuals such architects, engineers, quantity surveyors, specialist contractors, suppliers or tradespeople; as well as organisations such as engineering firms and other CDM 2015 roles including clients, PDs and PCs.
2. A person who selects products for use in construction is also a designer and must take account of health and safety issues arising from their use. If a product is purpose-built, the person who prepares the specification is a designer and so are manufacturers, if they develop a detailed design.
3. Similarly, there is a broad definition for design. Designs include drawings, design details, specifications, bills of quantity, design calculations, feasibility studies or bids for grants throughout the lifecycle of a construction project.
4. For example, designs for a nuclear power station may include temporary works calculations and drawings, built designs, constructability studies, construction hazard studies (HAZCONs), scheme designs, site lay-out plans and demolition plans (this list is non-exhaustive).
5. Nuclear site license conditions do not require licensees to undertake the role of a designer; similarly CDM 2015 Regulations do not require licensees to appoint external organisations or individuals as designers. However, it is foreseeable that licensees will be actively involved in the design of construction project on the licensed site, and where this occurs, they will take on the role of a designer.

### What are the legal duties of a Designer?

1. A designer has strong influence during the concept and feasibility stage of a project. Early decisions can fundamentally affect the health and safety of those who will construct, use, maintain, repair, clean, modify, refurbish and eventually demolish a building. As such, a designer must have the necessary skills, knowledge, experience (in case of an organisation, organisation capability) relevant to the work they are doing. The regulations requires that an individual or organisation must not accept their appointment unless they are capable and competent to fulfil the designer duties.
2. There are many ways for a designer to demonstrate their competence.   
   For example, a designer may choose to use a third party organisation, or sign-up to recognised schemes such as the Safety Schemes in Procurement (SSIP) Forum and the Contractors Health and Safety Assessment Scheme (CHAS). They can also demonstrate their capability through self-assessment against recognised standards such as the Common Assessment Standard.
3. A designer’s duties apply as soon as designs which may be used in construction work in GB are started. For example, if a design case is completed by a person or an organisation based outside of GB (potentially requesting parties) the designer duties would apply to the person or organisation who commissions this work. If those that commission the work are still not within GB then the designer duty would lie with the client.

#### Making clients aware of their duties

1. A designer must not start any design work unless they are satisfied the client is aware of their duties under CDM 2015. As such, the designer should have sufficient relevant knowledge to give advice about the project. Where a PD is appointed, this would ordinarily fall to them, but the designer should seek confirmation this has occurred. This can be noted in the minutes of an initial meeting between dutyholders.

#### Prepare or modify designs

1. A designer must take account of the general principles of prevention set out in [Schedule 1](https://www.legislation.gov.uk/uksi/1999/3242/schedule/1/made) of the Management of Health and Safety at Work Regulations 1999 [27]. These must be applied ‘so far as is reasonably practicable’ (SFAIRP) to foreseeable risks that may be evident during construction, the on-going use and maintenance of the completed project, as well as during decommissioning and demolition. Further guidance on ONR’s approach to regulating risks SFAIRP (or as low as is reasonably practicable (ALARP)) can be found in the associated [TAG](https://www.onr.org.uk/publications/regulatory-guidance/regulatory-assessment-and-permissioning/technical-assessment-guides-tags/nuclear-safety-tags/technical-assessment-guides-tags-nuclear-safety-full-list/) [6].
2. Designers must aim to eliminate foreseeable risks, and where this is not possible, they must take reasonably practicable steps to reduce the risks or control them through the design process, and provide information about the remaining risks to other CDM 2015 dutyholders. Designers must also take account of the PCI provided when making decisions about the foreseeable risks.
3. For example, it is common for designers to undertake optioneering when designing a structure (structure has a broad definition in CDM 2015).   
   Those involved with optioneering should consider the definition of a ‘designer’ to ensure they do not inadvertently take on any associated duties.
4. Construction and operability reviews can be used to assess designs and record information. A residual risk register can be used to record risks that can't be designed out and communicate information to the PC.
5. Designers must be able to demonstrate risks for constructing, commissioning, using, maintaining, decommissioning and demolishing the structure has been included in the optioneering process. In addition, designers should be able to articulate how they have applied the principles of prevention to eliminate, reduce, control and mitigate the risks to ALARP in the final design.
6. Typical risks on a construction project include health and safety risks such as: working at height, lifting operations, fire, confined space work, carrying out excavations, exposure to hazardous substances including asbestos and lead, exposure to vibration and noise, moving plant and vehicles, contact with electricity including overhead and underground, selection and use of equipment, safe access and egress from working site. This list is non-exhaustive and risks will differ from project to project. Each design must be specific and relevant to the work activity that is carried out on the construction project. Further guidance can be found in paragraphs 79-88 and Appendices 1, 2 and 5 of [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5], as well as in [CITB’s guidance for designers](https://www.citb.co.uk/media/ndlbnb5v/cdm-2015-designers-interactive.pdf) [28] which includes ‘red, amber, green’ (‘RAG’) lists for designers.

#### Communicate and maintain design information

1. A designer must provide comprehensible information in a timely manner to other CDM 2015 dutyholders using or implementing the design.   
   Designers are also required to communicate and record the residual risks arising from implementing the design. This means designers must work closely with other CDM 2015 dutyholders to ensure those risks are clearly understood. This is an ongoing duty, so any changes made to the design, and the implications on associated risks must be considered, managed and communicated to other CDM 2015 dutyholders.
2. For example, depending on the nature and extent of design work, design reviews or hold points may be placed to ensure the project team focus on health and safety alongside other key aspects of the project.
3. There should be agreement between designers and PD (or client) on effective information sharing to avoid omissions and duplication of effort, as well as ensuring the right level of information is provided to the right people at the right time.
4. For example, one way of sharing information is via a design risk register which is used by PD to capture residual risks from a design that can be shared with the PC to aide their development of the CPP.
5. Further guidance can be found in paragraphs 89-93 of [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5] and sections 3-4 of [CITB’s guidance for designers](https://www.citb.co.uk/media/ndlbnb5v/cdm-2015-designers-interactive.pdf) [28].

## The role of Principal Designer

### Who is a Principal Designer?

1. The definition in CDM 2015 of a Principal Designer (PD) is a Designer with control over the pre-construction phase of a construction project that involves more than one contractor. For any project where there is more than one contractor involved, CDM 2015 requires a PD to be appointed in writing by the client as early as possible in the design process, if practicable at the concept stage to perform specific duties.
2. LCs do not require licensees to undertake the role of PD; similarly,   
   CDM 2015 does not require licensees to appoint external organisations or individuals as PD. The regulations emphasise that the client must ensure the PD is capable and competent before making the appointment. The regulations also place duties on the individual or organisation to not accept the appointment unless they are capable and competent to fulfil the PD duties.
3. For example, it is common for nuclear licensees to appoint the Design Authority (DA) or a nominated individual such as Chief Engineer, Architect Engineer, or Head of DA as PD. However, they must be capable and competent to discharge the PD duties in addition to their designer duties. It is also important that the PD should act independently of other CDM 2015 roles to avoid conflict of interest that may compromise their ability to effectively discharge their duties. It is also important that the nominated individual understands their legal responsibilities in accepting this role.

### What are the legal duties of a Principal Designer?

1. A PD has an important role in influencing how the risks to health and safety should be managed and incorporated into the wider management of a project. Decisions about the design taken during the pre-construction phase can have a significant effect on whether a project is delivered in a way that secures health and safety of everyone affected by the work.
2. Inspectors should consult NSHS specialists in judging whether the PD has adequately discharged their duty for a project.

#### Plan, manage, monitor and coordinate the pre-construction phase

1. A PD mustplan, manage, monitor and coordinate the pre-construction phase taking into account the principles of prevention set out [Schedule 1](https://www.legislation.gov.uk/uksi/1999/3242/schedule/1/made) of the Management of Health and Safety at Work Regulations 1999. They must do so by considering any available PCI, CPP and existing health and safety file.
2. For example, a PD may choose to hold project team meetings at key stages such as concept design, scheme design and detailed/technical design, although these are not mandatory requirements of the regulations. PD may also choose to hold meetings with the client and/or PC at different stages of the project. The PD should be able to articulate how they ensure all parties are involved in such meetings, including how concerns about risks are raised and addressed.
3. Further guidance can be found in paragraphs 98-101 and Appendices 2-4 of [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5], as well as [CITB’s guidance for Principal Designers](https://www.citb.co.uk/media/nrnns1l1/cdm-2015-principal-designers-interactive.pdf) [29].

#### Identify, eliminate or control foreseeable risks

1. A PD must aim to eliminate foreseeable risks, and where this is not possible, they must take reasonably practicable steps to reduce the risks or control them through the design process. This should include risks that may be evident during construction, the on-going use and maintenance of the completed project, as well as during modification, refurbishment, decommissioning and demolition.
2. For example, a PD may choose to use a design risk register to record the identified risks, controls and any other relevant information, although it is not mandated by the regulations. Where a risk register is used, the PD must ensure it is reviewed and updated by designers, and identify any overlapping or conflicting areas presented by designs.
3. A PD should also be able to articulate examples of how the principles of prevention have been applied to any significant risks such as health-related issues (e.g., dust, manual handling, hazardous substances) and/or safety issues (e.g., work at height, workplace transport, lifting) (this is a non-exhaustive list).
4. Further guidance can be found in paragraphs 102-103 of [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5], as well as [CITB’s guidance for Principal Designers](https://www.citb.co.uk/media/nrnns1l1/cdm-2015-principal-designers-interactive.pdf) [29] which includes red, amber, green (‘RAG’) lists for designers.

#### Ensure cooperation during pre-construction phase

1. A PD must ensure all parties cooperate with each other so that, so far is as reasonably practicable, the project is carried out without risks to health or safety. This should include establishing effective means of communication to impart relevant information, monitor progress, share concerns and resolve conflicts. It is important that significant and/or unusual risks that cannot be eliminated and design changes are reviewed and managed accordingly.

#### Assist client and provide pre-construction information

1. A PD must make the client aware of their duties under CDM 2015, including where technical advice may be needed, for example when undertaking a fire risk assessment.
2. For example, a PD should be able to demonstrate how they are working with the client to provide progress updates, managing variations, changes to scope and raising risks/concerns. PD should also be able to articulate how they have ensured the client understood the health and safety implications of the project, the influence the client has on the project, and the requirement by the regulations for the client to supply PD with the necessary information from the start.
3. APD must assess the adequacy of [pre-construction information (PCI) provided by the client](#clientPCI) and assist with gathering any necessary additional material. As far as they are able, the PD must provide relevant information in a convenient form to designers and contractors.
4. For example, a PD should be able to articulate at the start to the client what information is required for the PD to discharge their roles. This might include surveys, relevant health and safety files, site boundaries, asbestos registers etc. A PD may also choose to carry out a gap analysis on the PCI as the project progresses through the concept stage to proactively identify any key information that is required at later stages of design and ensure it is provided to designers in a timely manner.
5. PCI is a technical document, inspectors should consult NSHS specialists in making a judgement of its adequacy.
6. Further guidance can be found in paragraphs 105-106 and Appendix 2 of [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5], as well as Annex B of [CITB Guidance for Principal Designers](https://www.citb.co.uk/media/nrnns1l1/cdm-2015-principal-designers-interactive.pdf) [29].

#### Liaise with the Principal Contractor (PC)

1. The PD must liaise with the PC for the duration of their appointment.
2. During the pre-construction phase, this must include sharing information that may affect the planning, management, monitoring and coordination of the construction phase. The PD must assist the PC in preparing the CPP by providing all information they hold that is relevant to the CPP. Liaison between PD and PC should continue throughout the construction phase to manage ongoing design matters, and obtaining information for the health and safety file.
3. For example, a PD may choose to use a checklist to ensure all necessary information has been included in the PCI and effectively handed over to the PC for sign-off. The PD may also decide if the PC should be involved in design review meetings to ensure they are aware of any changes in design that may require a revision of the CPP. The PD may also decide to take part in the site meetings during the construction phase to ensure implementation of the agreed design is progressing well and residual risks are adequately controlled by the PC.
4. Further guidance can be found in paragraph 107 of [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5], as well as [CITB’s guidance for Principal Designers](https://www.citb.co.uk/media/nrnns1l1/cdm-2015-principal-designers-interactive.pdf) [29].

#### Prepare the health and safety file

1. Where there is more than one contractor on a project then the PD must prepare the health and safety file, review and revise it as the project progresses. If their appointment lasts until the end of the project, they must ensure sufficient handover of the file to the client. If their appointment finishes before the end of the project, the file must be handed over to the PC, who assumes this responsibility for the remainder of the project.
2. As with the PCI, the health and safety file is a technical document, so inspectors should consult NSHS specialists for assistance when judging its adequacy.
3. Further guidance about the health and safety file can be found in paragraph 114-115 and Appendix 4 of [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5], as well as   
   [CITB’s guidance for Principal Designers](https://www.citb.co.uk/media/nrnns1l1/cdm-2015-principal-designers-interactive.pdf) [29].

#### Appointment of designers and contractors

1. A PD may act on [the client’s behalf to appoint designers and contractors during the lifecycle of the project](#clientappointments) especially at the pre-construction phase. As such**,** the PD must ensure they are fully aware of the client’s duties and expectations on the selection of capable and competent designers and contractors as well as following the necessary arrangements in making the appointments.

## The role of contractors

### Who is a contractor?

1. CDM 2015 defines a contractor as any person who, in the course or furtherance of a business, carries out, manages or controls construction work. This means anyone who directly employs or engages construction workers or manages construction work is a contractor.
2. For example, a contractor may be an individual, a sole trader, a self-employed worker or a business who carries out, manages or controls construction work in connection with a business. This includes companies that use their own workforce to do construction work on their own premises such as the licensees, and sub-contractors including contractor partners.
3. The duties on contractors apply whether their workers are employees, self-employed or agency workers.
4. The PC is also a contractor and must comply with the duties of a contractor, as well as additional duties as the appointed PC.

### What are the legal duties of a Contractor?

1. Contractors and the workers under their control are most at risk of injury and ill health from construction work. Contractors therefore have a critical role in planning, managing and monitoring their work to ensure any risks are adequately mitigated, managed and controlled.
2. Contractors have a number of specific duties under [Regulation 15](https://www.legislation.gov.uk/uksi/2015/51/regulation/15) of CDM 2015. They must also comply with the requirements of [Regulation 8](https://www.legislation.gov.uk/uksi/2015/51/regulation/8) (refer to sections ‎3.2 and ‎3.3). Furthermore, contractors must comply with the general requirements for all construction sites in Part 4 of CDM 2015 (refer to section 4 in this guidance).
3. Where contractors are involved in design work, for example for temporary works, they must also comply with the designer duties (refer to section ‎3.4).
4. The CDM 2015 requires a Contractor to:

#### Make clients aware of their duties

1. Contractors mustnot carry out any construction work on a project unless they are satisfied that the client is aware of their duties under CDM 2015. This would normally fall under a PC, if one was appointed, however, the contractor should seek confirmation from the PC that it has occurred. In cases where the contractor is the only one involved, they must liaise directly with the client to establish this. Liaison can be done as part of routine business, for example during early meetings with the client to discuss the project.

#### Plan, manage and monitor construction work

1. Contractors must plan, manage and monitor the construction work under their control so it is carried out in a way that controls the risks to health and safety. The effort devoted to planning, managing and monitoring should be proportionate to the size and complexity of the project and the nature of risks involved.
2. On projects involving more than one contractor, the contractor should be coordinating the planning, management and monitoring of their own work with that of the PC and other contractors, and where appropriate the PD.
3. For example, on regular project planning and progress meetings with other dutyholders, a contractor should ensure that their arrangements for planning, managing and monitoring their own work can feed into, and remain consistent with, the project-wide arrangements set out by the PC and/or the client.
4. It is important for a contractor working on a nuclear licensed site to understand the licensee’s work planning process, for example the function of works control centre/office, and how it can have effect on their own planning, and vice versa. It is common that work planning by the licensee is carried out weeks/months in advance for routine and safety/security critical work, and contractor may be asked to change/adapt their work with short notice.   
   A contractor may also be given a limited time window in-between different routine/critical work, or they may be asked to fit their work around those routine/critical work. The contractor must still ensure that their work is scoped, planned, managed and monitored adequately prior to commencing.
5. It is common for a contractor to work in the same area at the same time with other contractors on a construction site. As such, it is important for a contractor to establish the extent of their control on a piece of work prior to starting the work. Where a PC is appointed, this normally should be outlined by the PC, however the contractor should nevertheless confirm this with the PC. Contractors should also cooperate with each other to ensure their work does not endanger others in the area (refer to section ‎3.2).
6. If a contractor has any concerns or encounters challenges in the planning, managing and monitoring so that work under their control can be carried out safely and without risk to health, they must raise it to the PC and/or the client.
7. Further guidance can be found in paragraphs 154-159 of [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5].

#### Comply with directions and the CPP

1. For projects involving more than one contractor, the contractor is required to comply with any directions to secure health and safety given to them by the PD or PC.
2. For example, it is common for PD or PC to hold regular project progress meetings where concerns regarding health and safety, including near-misses, are expected to be raised. It is also common for PC to require contractors to ensure a good order of housekeeping in their areas of work (refer to section 4‎ of this guidance). The contractor should follow those instructions and ensure they comply with the requirements set out by the PD or PC.
3. They are also required to comply with the parts of the construction phase plan that are relevant to their work, including the site rules.
4. For example, it is common for a nuclear licensee or their appointed PC to require their contractors to submit a risk assessment and method statement (RAMS) for their work prior to the project starts. A contractor should ensure their RAMS is fit-for-purpose and aligns with the requirement of the CPP.
5. For example, if working at height is identified in the CPP as a significant risk for the contractor’s work, this must be reflected in the contractor’s RAMS with suitable measures that follow the principles of prevention as outlined in [Regulation 6](https://www.legislation.gov.uk/uksi/2005/735/regulation/6) of The Work at Height Regulations 2005 [30]. If the information in the CPP is insufficient for a contractor to develop an adequate RAMS, they should seek further information and guidance from the PC.
6. Further information can be find in paragraph 160 of [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5].

#### Manage workers under the contractor’s control

1. Before a contractor employs or appoints an individual to work on a construction site, they should ensure the individual:

* has the skills, knowledge, training and experience to carry out the work they will be employed to do in a way that secures health and safety for anyone working on the site (refer to section ‎3.1); or
* is in the process of obtaining them.

1. The contractor must ensure appropriate supervision is provided to the workers under their control.
2. The level of supervision provided will depend on the risks to health and safety involved, and the skills, knowledge, training and experience of the workers concerned. It is possible that a licensee may choose to appoint someone, either from their own organisation or a contractor partner, to oversee the work carried out by a contractor. The arrangement needs to be clearly established and communicated so all parties understand the boundaries of responsibility. This does not absolve the contractor’s duty to ensure appropriate supervision is provided to their workers.
3. For example, workers will require closer supervision if they are young, inexperienced, or starting a new work activity. Other factors that should be considered when assessing the level of supervision needed include the level of individuals’ safety awareness, education, physical ability, literacy, comprehension of English and attitude. Even experienced workers require an appropriate level of supervision to ensure expected standards are maintained or if they do not have some or all of the skills, knowledge, training and experience required for the job and the risks involved.
4. Supervisors are a vital part of effective management arrangements for health and safety. It is common practice on a nuclear licenced site for a supervisor to set the worker to work in the form of pre-job briefing, they may also walk down the work area with the workers and assist them to carry out a point of work risk assessment. Capable supervisors are those who have the skills, knowledge, training, experience and leadership qualities to suit the job in hand (refer to section ‎3.1). As such, good communication and people management skills on site are important qualities for supervisors. Contractors should ensure workers under their control know how to get supervisory help, even when a supervisor is not present.
5. Contractors must provide workers under their control with sufficient information and instruction that meets workers’ needs to carry out their work without risk to health and safety.
6. For example, workers should know how to deal with an emergency situation such as fire, medical, chemo toxic or radiological incidents, the ‘musts and don’ts’ when they are working on site, any requirements and limitations of permit to work systems, any specific risks such as site traffic or lifting they must be aware of, and the arrangements that they must follow to protect themselves from harm.
7. It is common for licensees to provide requirements associated with how they expect a task or project to be carried out. The contractor should ensure relevant information is extracted from the licensee requirements and is communicated effectively to the workers in suitable means of information and instruction. If there is conflicting information between the licensee requirements and the contractor’s own method statement, the contractor should ensure the conflict has been raised and addressed with the licensee via the appointed PC prior to work commencing. Depending on the scope of the licensees requirements, the licensee could be acting as a designer and would therefore need to comply with the designer duties. The contractor would also then need to raise any conflicting information with the PD.
8. Further information on the role of the contractor is available in [CITB’s guidance for Contractors](https://www.citb.co.uk/media/xsycbicc/cdm-2015-contractors-interactive.pdf) [31].

## The role of the Principal Contractor

### Who is a Principal Contractor?

1. A Principal Contractor (PC) is a contractor formally appointed by the client in writing to manage the construction phase of a construction project that involves more than one contractor. This means they have to comply with the duties of a contractor, as well as additional duties as the appointed PC.
2. The PC would normally be a person or organisation carrying out or managing the construction phase of a project to which they are appointed; that is, the main manging contractor or a contractor working on a single contractor project. However, where specialist work is involved, such as demolition, it may be appropriate to appoint the specialist contractor as the PC, as they would be more suited controlling risks of the specialist activity and dependent on the complexity and scale of the project.
3. For example, it is common for nuclear licensees to appoint the works control/construction office as PC. Some licensees may also choose to appoint individuals as PCs. However, they must ensure they have the capability and competence to discharge the PC duties in addition to their licensee duties and the PC arrangements should be documented within the safety management system (refer to section ‎3.1). It is also important that the PC should be able to act independently of other CDM 2015 roles to avoid conflict of interest that may compromise their ability to effectively discharge their duties. The licensee needs to be able to demonstrate they have the skills, knowledge, experience and organisational capability to fulfil the role. Given the complexity of nuclear licensed sites and high hazard nature of the industry, it is unlikely that relying on an individual will be sufficient. In some cases, a joint entity may be appointed as PC. Should any enforcement action be required by ONR, it may be against all companies within the entity.

### What are the legal duties of a Principal Contractor?

1. The PC is in control of the health and safety and site management of the construction phase of a project. This means that a PC, in close cooperation with the client and the principal designer, has an important role in influencing how the risks to health and safety are managed during construction work. This includes the PC providing strong leadership to ensure standards are understood and followed by all those working on the project.
2. The PC should ensure anyone they appoint has the right [[skills, knowledge, experience and, where relevant, the organisational capability](#_Skills,_knowledge,_experience,)](bookmark://_Skills,_knowledge,_experience,) to carry out their work safely and without risk to health (refer to section ‎3.1).

#### Make clients aware of their duties

1. The PC must not carry out any construction work on a project unless they are satisfied that the client is aware of the duties the client has under CDM 2015.
2. For example, the client should appoint the PC as early as possible in a project and prior to when the construction phase begins, to allow PC sufficient time to plan their work and liaise with others. PCs should ensure they have sufficient knowledge of the client duties as they affect the project so they can give suitable advice. The level of advice will depend on the knowledge and experience of the client and the complexities of the project. This can be noted during the initial meeting minutes between dutyholders.
3. Another example would be that the client must submit a notification for a construction that has met the threshold as identified in Regulation 6 of CDM 2015 (refer to section ‎3.3). The PC should ensure that the notification was submitted as soon as possible prior to commencing the construction phase. It is then the duty of the PC to ensure a copy of the F10 form is affixed in a prominent location in the construction site.

#### Plan, manage, monitor and coordinate construction work

1. The PC must plan, manage, monitor and coordinate the entire construction phase taking account of the health and safety risks to everyone affected by the work (including members of the public) and managing the measures needed to mitigate and control those risks. In determining the measures, the PC must demonstrate that they have applied the principles of prevention. The effort devoted to planning, managing, monitoring and coordinating should be proportionate to the size and complexity of the project and the nature of risks involved.
2. Once in post, a PC should liaise with PD and others involved in the project at the earliest opportunity, to identify any risks to health and safety and the control measures that need to be put in place for the construction phase.
3. This requires the PC to have suitable arrangements in place to ensure oversight of all work undertaken by themselves or contractors during the construction phase. This is likely to include holding regular planning and progress meetings with other dutyholders, providing suitable oversight of RAMS supplied by contractors to ensure they have adequately planned and managed for their work, including ensuring suitable arrangements are in place for supervising workers under the contractor’s control. In addition, PC should monitor the work carried out by contractors to ensure it is carried out as planned.
4. A PC has a specific duty to ensure that contractors under their control cooperate with each other so the risks to themselves and other affected by the work are managed effectively. A key part of this process is for the PC to ensure that any work clashes and incompatible work practices are proactively identified and managed. For example, if any work clashes or incompatible designs are identified when planning of work, the PC should liaise with contractors and the PD to ensure solutions identified, any necessary design changes are made and the principles of prevention are applied. It is common that the licensee may need to carry out operation or maintenance work alongside the construction work. A PC must liaise closely with client and PD to coordinate the work and deconflict as appropriate.
5. Further guidance can be found in paragraphs 123-132 of [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5].

#### Prepare the CPP

1. The PC must prepare a written CPP before the construction phase begins. The CPP should incorporate relevant PCI (refer to section ‎3.5) and information from the PD on risks that have not been eliminated and the measures required to control the risks. It must be site specific and proportionate to the size and complexity of the project and risks.
2. No work should be undertaken onsite until the CPP is complete. The CPP needs to be implemented, and regularly reviewed and revised to ensure it remains fit for purpose and relevant to the work being undertaken on site.
3. CPP is a technical document, inspectors should consult NSHS specialists in making a judgement of its adequacy.
4. Further guidance can be found in paragraphs 111-113 and Appendix 3 of [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5]. An example template which can be utilised where appropriate is available on the [CITB website](https://www.citb.co.uk/media/ocsgdlyy/construction-phase-plan-example.pdf) [32].

#### Manage the construction site

*Provide suitable site inductions*

1. The PC has the ultimate control of a construction site during the construction phase. In addition to setting out the site rules, the PC must ensure a suitable site induction is provided to everyone coming on site, including workers and visitors.
2. The induction should be tailored to the needs of the recipient and should be proportionate in relation to the size, risks identified and complexity of the site. It must be in a format that the workers can understand, taking into consideration accessibility and any language barriers.
3. The induction can contribute to meeting the requirements of LC 9 (Instructions to persons on-site) which places a duty to provide instructions on risks and hazards associated with plant and equipment. The PC should ensure relevant nuclear safety information is communicated to the workers during induction.
4. Further guidance can be found in paragraphs 133-134 of [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5] and section 2.5 of [CITB’s guidance for Principal Contractors](https://www.citb.co.uk/media/5dgbe5ol/cdm-2015-principal-contractors-interactive.pdf) [33].

*Prevent unauthorised access to the site*

1. The PC must take reasonable steps to prevent unauthorised access to the construction site. Close liaison with other dutyholders will help the PC to achieve this.
2. Further guidance can be found in paragraphs 135-136 of [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5] and section 2.6 of [CITB’s guidance for Principal Contractors](https://www.citb.co.uk/media/5dgbe5ol/cdm-2015-principal-contractors-interactive.pdf) [33].
3. LC 2 requires a licenced site boundary to be marked and registered as part of the licencing process. The licenced site may have different construction projects occurring at the same time which all require individual construction site boundaries. For further information, refer to ONR’s [TIG on marking the site boundary](https://www.onr.org.uk/publications/regulatory-guidance/regulatory-inspection/technical-inspection-guides-tigs/nuclear-safety-tigs/technical-inspection-guides-tigs-nuclear-safety-full-list/) [34].

*Provide welfare facilities*

1. The PC must ensure suitable and sufficient welfare facilities are provided before any construction work starts and maintained throughout the construction phase. This includes provision of toilets, washing facilities, drinking water, rest areas, changing rooms and lockers etc. What is suitable and sufficient will depend on the size and nature of the workforce involved.
2. Further guidance can be found in:

* Paragraphs 137-138 of [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5];
* HSE’s [CIS No. 59](https://www.hse.gov.uk/pubns/cis59.pdf) [23]; and,
* HSE’s [Construction Welfare Standards](https://www.hse.gov.uk/foi/internalops/og/og-00002.pdf) [24]

*Consult and engage with workers*

1. A vital element to securing health and safety in the construction industry is involving workers in key decisions about their health, safety and welfare.   
   As the leader for the construction phase, the PC has a duty to engage and consult directly with the contractors and the workforce (or their representatives) on site, on measures to ensure health, safety and welfare.
2. For example, a PC may hold meetings with contractors and their workers before work starts to discuss the work planned for the day, identify risks and agree appropriate control measures. It is also common that the licensee or their appointed PC may carry out site walk-downs on a regular basis, which is a good opportunity to engage with the workers directly on any health and safety risks that may impact them.
3. Effective engagement and consultation in a timely manner, i.e., two way communication, also helps to promote a positive culture of cooperation and collaboration focused on improving the health and safety for all working on site.
4. This duty is in addition to the requirement that all employers consult will their employers, or the employee representatives, under [The Safety Representatives and Safety Committees Regulations 1977 (as amended)](https://www.legislation.gov.uk/uksi/1977/500/contents) [35] and [The Health and Safety (Consultation with Employees) Regulations 1996 (as amended)](https://www.legislation.gov.uk/uksi/1996/1513/contents) [36].
5. Further guidance can be found in paragraphs 12-15 and 143-146 of   
   [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5] and section 2.9 in [CITB’s guidance for Principal Contractors](https://www.citb.co.uk/media/5dgbe5ol/cdm-2015-principal-contractors-interactive.pdf) [33].

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# Part 4 of CDM 2015 – General requirements for all construction sites

1. [Part 4](https://www.legislation.gov.uk/uksi/2015/51/part/4) of CDM 2015 sets out requirements for managing specific risks on a construction site and does not include the design element of a construction project. Part 4 is used in conjunction with [Schedule 3](https://www.legislation.gov.uk/uksi/2015/51/schedule/3) of CDM 2015 which identifies work considered to pose particular risks.
2. Whether a licensee is a client on a construction project or the licensee appoints itself undertake the PD role or the PC and/or Contractor role, they should be cognisant of the requirements of Part 4.
3. Part 4 covers many risks within construction projects, all of which are relevant to construction work on nuclear licensed sites. The following regulations are highlighted as relevant risks which inspectors may be less familiar with:

* [Regulation 19](https://www.legislation.gov.uk/uksi/2015/51/regulation/19) – Stability of Structures – it is important to consider the risks of collapsing structures, not only during demolition projects, but also when considering work on or close to degrading structures on decommissioning sites. Inspectors should also consider the stability of temporary works used in construction projects. Further information on structural stability during alteration, demolition and dismantling can be found on the [HSE website](https://www.hse.gov.uk/construction/safetytopics/buildings.htm) [37].
* [Regulation 20](https://www.legislation.gov.uk/uksi/2015/51/regulation/20) – Demolition and Dismantling – in order to prevent danger or reduce risks ALARP, a demolition plan must be prepared in advance of works commencing. Further information on planning demolition work can be found on the [HSE website](https://www.hse.gov.uk/construction/safetytopics/demolition.htm) [38], the HSE’s [CIS No. 45](https://www.hse.gov.uk/pubns/cis45.pdf) on establishing exclusion zones when using explosives in demolition [39], and in the [British Standard](https://knowledge.bsigroup.com/products/code-of-practice-for-full-and-partial-demolition?version=standard) for full and partial demolition [40].
* [Regulation 22](https://www.legislation.gov.uk/uksi/2015/51/regulation/22) – Excavations – dutyholders must control the risks to workers of excavations collapsing or falls into excavations. They must also be inspected by a competent person. Further information on excavations can be found on the [HSE website](https://www.hse.gov.uk/construction/safetytopics/excavations.htm) [41] and in HSE’s [CIS No. 47](https://www.hse.gov.uk/pubns/cis47.pdf) on inspections and reports [42].

1. For the three areas above, the management of temporary works is a key consideration. For further information, refer to the guidance in [HSE’s Sector Information Minutes](https://www.hse.gov.uk/foi/internalops/sims/constrct/2_10_04.htm) (SIMs) on the management of temporary works in the construction industry [43]. It should be noted that the HSE guidance is in the process of being updated so does not reference the current version of BS5975 [44]. However, it still does provide relevant good practice (RGP) regarding arrangements for the management of temporary works.

* [Regulation 25](https://www.legislation.gov.uk/uksi/2015/51/regulation/25) – Energy Distribution Installations – protection of these installations is important in construction work. This regulation covers the risk of working near overhead power cables and also (particularly applicable to many nuclear sites) the risks presented by underground services. Further information can be found in the following HSE guidance documents:
  + [Avoiding danger from overhead power lines](https://www.hse.gov.uk/pubns/gs6.pdf) [45];
  + [Avoiding danger from underground services](https://www.hse.gov.uk/pubns/books/hsg47.htm) [46]; and,
  + [Electrical safety on construction sites](https://www.hse.gov.uk/pubns/books/hsg141.htm) [47].
* [Regulations 27](https://www.legislation.gov.uk/uksi/2015/51/regulation/27) and [28](https://www.legislation.gov.uk/uksi/2015/51/regulation/28) - Traffic Routes and Vehicles – the segregation of pedestrians and vehicles is paramount for maintaining a safe construction site and being struck by a vehicles is one of the major causes of fatalities at GB workplaces. Further information on the safe use of vehicles on construction sites can be found in HSE guidance document, [HSG 144](https://www.hse.gov.uk/pubns/priced/hsg144.pdf) [48].
* [Regulations 30](https://www.legislation.gov.uk/uksi/2015/51/regulation/30), [31](https://www.legislation.gov.uk/uksi/2015/51/regulation/31) and [32](https://www.legislation.gov.uk/uksi/2015/51/regulation/32) – Fire and Emergency Procedures – these regulations impose duties including the requirement to prevent risk from fire. The fire risk from construction site activities, process fire risk, must be assessed and precautions taken to control combustible materials and ignition sources. Further information on process fire risks can be found on the [HSE website](https://www.hse.gov.uk/construction/safetytopics/processfire.htm) [49]. Information on fire safety in construction is available in HSE guidance document, [HSG 168](https://www.hse.gov.uk/pubns/priced/hsg168.pdf) [50]. ONR’s [TIG in the regulation of life fire safety on nuclear licensed sites](https://www.onr.org.uk/publications/regulatory-guidance/regulatory-inspection/technical-inspection-guides-tigs/nuclear-safety-tigs/technical-inspection-guides-tigs-nuclear-safety-full-list/) also provides further information on this topic [51].

1. It should be noted that [The Regulatory Reform (Fire Safety) Order 2005](https://www.legislation.gov.uk/uksi/2005/1541/contents) [52] and the [Fire (Scotland) Act 2005](https://www.legislation.gov.uk/asp/2005/5/contents) [53] set out the law on construction site general fire safety. They set out requirements and duties relating to fire risk assessment, control and practical precautions.

# ONRs approach to regulation of CDM 2015

1. In accordance with [ONR's RITE Policy](https://www.onr.org.uk/publications/regulatory-reports/regulatory-policy/onr-rd-pol-002-risk-informed-and-targeted-engagements-rite-policy/) [3], any CDM 2015 interventions should be targeted to ensure appropriate use of resources. ONR’s nuclear site health and safety (NSHS) annual inspection planning priorities will outline recommendations to prioritise and plan interventions across Directorates.
2. Inspectors should consider whether the arrangements implemented to manage the construction project are effective for controlling risk to a level that is reflective of the scale and complexity of the project and the nature of the health and safety risks involved. The CDM 2015 arrangements should complement the arrangements implemented to meet the requirements of [Regulation 5](https://www.legislation.gov.uk/uksi/1999/3242/regulation/5) of The Management of Health and Safety at Work Regulations 1999.
3. When planning inspections, inspectors must consider the their own health and safety whilst on site (refer to ONR’s internal health and safety instructions and guidance on working safely on site for further information [54]).
4. When carrying out inspections, inspectors should:

* Establish whether the work encountered falls under the scope of CDM 2015 as set out in [Regulation 2](https://www.legislation.gov.uk/uksi/2015/51/regulation/2). Table 3 - Examples of activities that are likely to fall under the scope of CDM 2015, provides a list of non-exhaustive examples of work activities that are likely to fall under the scope of CDM 2015 on an ONR regulated site.
* Establish whether adequate arrangements are in place to identify and manage the non-radiological hazards and risks associated with any of the work activities that fall under the CDM 2015 scope. Inspectors should be cognisant that [Schedule 3](https://www.legislation.gov.uk/uksi/2015/51/schedule/3) of CDM 2015 includes work with ionizing radiation requiring the designation of controlled or supervised areas under [Regulation 17](https://www.legislation.gov.uk/uksi/2017/1075/regulation/17) of The Ionising Radiations Regulations 2017 (IRR 17) [55], and that fire safety on construction work is governed by CDM 2015 and/or, The Regulatory Reform (Fire Safety) Order 2005 in England & Wales, and the Fire (Scotland) Act 2005 in Scotland (whichever is the most appropriate).
* Establish the size and complexity of the construction activities and/or associated projects and take a proportionate regulatory approach.
* Establish whether the key roles have been identified within all dutyholders’ arrangements including client, PD, PC, designers, and contractors and whether reasonable steps have been taken to ensure that those fulfilling the roles have the skills, knowledge, experience and organisational capability to secure health and safety. Inspectors should be cognisant that the scope of CDM 2015 extends to designers working on those designs prepared or modified outside of GB. Early involvement of NSHS inspectors can be important for establishing whether dutyholders have appropriate arrangements.
* Establish whether all dutyholders have understood their duties under CDM 2015 and how they satisfy themselves that they have met the requirements of CDM 2015. Inspectors should be cognisant that the licensee may undertake multiple roles under CDM 2015, and arrangements may be complicated and interwoven with other arrangements by the licensee, for example safety cases, and arrangements by other dutyholders such as designers and contractors.
* Establish whether the licensee has made adequate arrangements in notifying ONR of the construction work.
* Establish what arrangements have been put in place to ensure the key information required by CDM 2015 (pre-construction information, construction phase plan, and health and safety files) have been developed, used, managed, and kept up to date by dutyholders. Inspectors should be cognisant that the information might be captured under various formats and names, including the use of Building Information Modelling (BIM) (Appendix B of [7] provides further guidance on BIM). Inspectors should consider consulting Appendices 2 to 5 of the [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5] to establish whether the information is adequate.
* Establish how dutyholders’ arrangements demonstrate principles of prevention as set out in Appendix 1 of the [HSE guidance, L153](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5].
* Establish what arrangements have been put in place to plan, manage, monitor and co-ordinate the pre-construction and construction phases of the project. The arrangements should include consideration of the interfaces between work sites and dutyholders.

1. Inspectors should consider consulting the CDM 2015 capability map as a framework to evaluate a licensee’s arrangements in compliance with CDM 2015 (refer to Appendix A – CDM 2015 capability map). Inspectors should note that the capability map is neither comprehensive nor exhaustive and should be used as outlined in section ‎6 of this guidance.

Table 3 - Examples of activities that are likely to fall under the scope of CDM 2015

| Principal construction work activities | Specific examples of work that are likely to fall under the scope of CDM 2015 on a ONR regulated site |
| --- | --- |
| Contractor and supply chain management | Use of contractors to design, construct, maintain, inspect, demolish any structures, plant, and facilities on site. |
| Design activities | Design of structures, plant, and facilities. This could include initial design activities of plant, structures, and reactors. |
| Installation and commissioning of new plant | Installation of in-cell plant and equipment, for example cell high pressure wash systems.  Installation of fixed containment barriers.  Upgrade of cell shield doors.  New plant for Post-Operations Clean Out (POCO)/decommissioning |
| Installation and commissioning of new plant | Commissioning of new plant.  Inactive and active commissioning of new plant and facilities.  Reviewing pre-inactive commissioning safety report (PICSR) and pre-active commissioning safety report (PACSR).  Consents to move to the next stage of construction or installation.  Permissioning activities associated with installation of new plant.  Installation of perimeter intrusion detection systems (PIDS) or hostile vehicle mitigation (HVM) |
| Post-Operations Clean-Out (POCO) activities | Cleaning of in-situ pipework etc.  Dismantling of fixed plant to gain access to other pieces of plant.  Temporary works to facilitate construction work.  Permissioning activities associated with general POCO activities. |
| Standard construction activities. | Pouring slabs for new facilities.  Form work and falsework  Civil engineering related work  Structural steel erection  Tunnelling  Excavation work.  Demolition activities and temporary works activities.  Control of high fire risk activities including hot works, use of flammable gases and transient combustibles  Permissioning activities associated with general construction work. |
| Decommissioning activities. | Pond decommissioning.  Size reduction works.  Asbestos removal projects requiring a F10 notification.  Permissioning activities associated with decommissioning activities. |
| Plant Modification Proposal activities (PMPs) | Permissioning activities associated with PMPs including design. |
| Periodic safety reviews (PSR) | Permissioning activities associated with PSR activities involving construction work. |
| Inspection, maintenance and asset management activities. | Maintenance of cooling systems and other existing plant/fixed installations.  Large scale glazing replacement activities.  Outage activities including drum screen inspection/repair/maintenance works.  Permissioning activities associated with inspection, maintenance, and asset management activities. |

1. Inspectors should also consider consulting Appendix B – CDM 2015/LC/TIG/TAG mapping for guidance on how the CDM 2015 can be considered alongside certain LCs.
2. Whilst on site inspectors should consider taking a representative sample based on the size and complexity of construction work activities to establish:

* What information is available and easily accessible to anyone working on site, for example but not limited to, an up-to-date copy of the F10 notice is displayed in a prominent location in the construction site in a form that can be easily understood;
* who controls the site;
* what the arrangements are in managing the site and the people on-site and nearby (for example, site induction, site rules, control of access to site, near miss and incident reporting, liaison and coordination meetings, supervision and how they satisfy the requirements of [Part 4](#_General_Requirements_for) of CDM 2015); and,
* whether the site has adequate welfare facilities as outlined in [Schedule 2](https://www.legislation.gov.uk/uksi/2015/51/schedule/2) of CDM 2015.

1. In the case that inspectors have encountered a situation on a construction site that has potential risk to cause death and/or serious personal injury, Inspectors should consult ONR’s [TIG on dealing with matters of evident concern and potential major concern](https://www.onr.org.uk/publications/regulatory-guidance/regulatory-inspection/technical-inspection-guides-tigs/nuclear-safety-tigs/technical-inspection-guides-tigs-nuclear-safety-full-list/) [56] and take appropriate actions to eliminate or reduce the risk to an acceptable level.
2. Inspectors should be aware that the requirements of CDM 2015 overlap with many other regulations including, for example, The Work at Height Regulations 2005 [30], The Control of Asbestos Regulations 2012 [57],   
   The Lifting Operation and Lifting Equipment Regulations 1998 (LOLER) [58], and many more. This overlap can mean judgement on compliance is complicated and inspectors should consult with NSHS inspectors accordingly.
3. Inspectors should share information and intelligence gathered in relation to CDM 2015 with the allocated NSHS inspector. This should include inviting the NSHS inspector(s) to site liaison meetings etc.
4. Inspectors must apply [ONR's Enforcement Policy](https://www.onr.org.uk/our-work/how-we-regulate/enforcement/) [4] and the enforcement management model (EMM) [59] when considering enforcement action.   
   The NSHS inspector should be consulted with before any enforcement action is taken to ensure appropriate application of the Regulations, the action addresses root causes and also the implication from wider NSHS interventions are considered.
5. Any failure of a licensee in complying with CDM 2015 may be considered an indicator in assigning dutyholder attention levels in accordance with   
   ONR guidance on the [assignment of dutyholder attention level](https://www.onr.org.uk/publications/regulatory-guidance/other-guidance/)s [60].

# Capability map

1. Capability maps were cited as an area of good practice during the 2019 IAEA’s Integrated Regulatory Review Service (IRRS) mission to the UK and ONR is committed to encouraging their use on ONR regulated sites.
2. Capability maps are tools that inspectors and operators can use to record assurance of preparedness and capability when judging a licensee’s ability in managing construction work activities that falls under the scope of CDM 2015.
3. This guide, together with the descriptors in the CDM 2015 capability map (refer to Appendix A – CDM 2015 capability map), are aimed to consolidate and provide examples of the criteria that RGP for the CDM 2015 arrangements should deliver on ONR regulated sites.
4. The structure of the capability map allows capabilities to be compared across licensees (for example, across a fleet) to identify trends and gaps. The capability map can also be used by inspectors and licensees to identify strengths and weaknesses in their arrangements for continual improvement. It is important to note that the capability map is not a checklist that guarantees compliance with CDM 2015.
5. It is usual for inspectors to request that licensees update the map or sections of the capability map and return the completed or updated capability map to ONR at agreed intervals. It is not intended that routine compliance inspections of the entirety of the capability map are undertaken at any one time, rather that inspections target a subset of the descriptors in the capability map. Licensees may also wish to send relevant supporting information as evidence to support the claims made in their return.
6. Following receipt of the information from a licensee, inspectors should confirm the licensee’s claims and evidence to targeted questions prior to or during routine compliance inspections. Inspectors may wish to take a sampling approach targeting the areas where, for example, more evidence is needed to support claims.
7. Site and project inspectors may want to liaise with specialist inspectors within NSHS to assess the information against CDM 2015 requirements. Following any intervention (by inspection, assessment, correspondence) inspectors, together with licensees, can then review, and where necessary, revise the relevant sections in the capability map.
8. Following each intervention, a new revision of the capability map could be made to identify the key changes in a licensee’s arrangements including:

* relevant conclusions of targeted interventions,
* progress that addresses previous areas for improvements identified by ONR inspectors; and,
* the implementation of continuous improvements as a consequence of reviews of its arrangements and tests.

1. The ONR inspector could then determine a RAG rating for each section of the capability map which will assist in highlighting the areas that might need further attention. RAG ratings will be assigned in accordance with the inspection rating contained within ONR’s TIG [61]. Any significant issues identified should be raised and logged in the ONR issues database in addition to being recorded on the capability map.
2. The frequency of revision of each section of the capability map should be determined according to the site risk profile, history of compliance and any other relevant factors, as determined by the nominated site inspector or project inspector. Similarly, not all sections of the maps will be relevant to all sites.
3. ONR’s Technical Directorate will collate and analyse the information across all sites to identify trends and provide feedback on the strengths and weaknesses identified.

# Appendix A – CDM 2015 capability map[[1]](#footnote-2)

**Site/operator**: [Name] **Assessment date**: [DD Month YYYY] **Assessment ref.**: [Ref.]

| **Ref.** | **Ability** | **Supporting guidance** |
| --- | --- | --- |
| **Outcome 1:** | | **Appointment of the right people and organisation at the right time and ensure duties are adequately discharged. The licensee can:** |
| 1.1 | **SHOW** the organisation can provide the resources and commitment necessary to develop, maintain and implement adequate arrangements to manage risks to health and safety associated with construction activities throughout the life cycle of a construction project(s).  [CDM 2015 Regulation 4 and Schedule 2] | As the client, the licensee has duties to make suitable arrangements for managing a construction project, including the allocation of sufficient time and other resources, provision of welfare facilities, and ensure these arrangements are maintained and reviewed throughout the project [CDM 2015 Regulation 4(1) to 4(3) and Schedule 2]. There should be a role with a clear and unambiguous mandate to act on behalf of the licensee as the ‘client’ for CDM 2015 purposes. This role should be at an appropriate level within the organisation, with appropriate authority, to allocate resources as required, including people, financial provision and time.  The client should have clear understanding that they are accountable for the impact their decisions and approach have on health, safety, and welfare on a construction project(s) [para., 29, [5]].  The licensee should be able to show that competent people within the organisation have been appointed to develop, maintain and implement the adequate CDM 2015 arrangements. The licensee should be able to justify the competence of the appointees based on their skills, knowledge, experience, and attributes.  The licensee should ensure all key roles understand both nuclear safety and conventional health and safety matters associated with a construction project(s).  Where competence gaps are identified, the licensee should identify adequate training arrangements to address the gaps [paras., 163-168, [5]].  There should be continuity plans for key CDM 2015 key roles within the licensee’s organisation, for example but not limited to: those who are acting on the licensee’s behalf as the intelligent customer, construction manager, site manager, site engineer in charge of construction projects and/or design. Licensee should consider including these roles as nuclear baseline roles.  The licensee should recognise that expertise may exist within contractor partners and work collaboratively with them to fulfil the duties outlined in CDM 2015. |
| 1.2 | **SHOW** considerations are given to theappointment of Principal Designer (PD) and Principal Contractor (PC) roles.  [CDM 2015 Regulations 5, 8 and 10] | The licensee should be able to show where there is more than one contractor, or if it is reasonably foreseeable that more than one contractor will be working on a project at any time, the appointment made in writing for the PD and/or PC role(s) [CDM 2015 regulation 5(1)]. The appointments must be made as soon as is practicable, and in any event, before the construction phase begins [CDM 2015 Regulation 5(2)].  The licensee should be able to show the due diligence checks have been performed on the designers (including PD) and/or contractors (including PC) role(s) prior to the appointment, taking into account their skills, knowledge, experience, including organisational capabilities [CDM 2015 Regulation 8(1) and 8(3)]. The extent of the checks performed by the licensee should reflect the complexity of the project and the range and nature of the risks involved [para., 36, [5]].  The licensee should be able to show how it recognises and addresses issues such as competence of sub-contractors, application of designer duties for designs that are prepared or modified outside of GB [CDM 2015 regulation 10(1)], and other supply chain issues relevant to the CDM 2015 arrangements. |
| 1.3 | **SHOW** the duties of the client, the Designer, the PD, the PC, and Contractor roles, as defined in CDM 2015 have been appropriately discharged.  [CDM 2015 Regulations 4, 8, 9, 14, and 15] | The licensee should be able to identify situations, where applicable, where there is more than one client in relation to a project and appoint the appropriate representative as the client for CDM 2015 purposes so that the client duties could be discharged adequately [CDM 2015 Regulation 4(8)].  The licensee should be able to show how the client duties have been discharged, including the preparation and timely provision of pre-construction information [CDM 2015 Regulation 4(4)].  The licensee should be able to show how, as the client, it will take reasonable steps to ensure that the PD and PC comply with their separate duties [CDM 2015 Regulation 4(6)]. Including the preparation of key documentations such as the construction phase plan (CPP) and health and safety file [CDM 2015 Regulation 4(5)].  In the case that the licensee appoints itself to undertake the PD and/or PC role(s) or fails to appoint the PD and/or PC role, the licensee should be able to show how it ensures the relevant duties associated with PD and/or PC roles under CDM 2015 are fulfilled [CDM 2015 Regulation 5(3) and 5(4)].  The licensee should be able to show how the roles of ‘designer’ and ‘contractor’ are identified and the duties are effectively discharged [paras., 72-74 and 77-92 for ‘designer’ role, and paragraphs 147-148 and 150-178 for ‘contractor’ role, [5]].  As an intelligent customer, the licensee should be cognisant of the requirements for contractors, including PC, to ensure the competence and provision of training for any workers and/or sub-contractors appointed or employed by those contractors [paragraphs 162-168, [5]]. If the licensee appoints itself to take on the PC and/or contractor role, it must be able to demonstrate it has taken these requirements into consideration when appointing workers and/or sub-contractors.  The licensee should be able to show that it has set and communicated clear expectations to the project team on how to deliver the construction project in a way that secures health and safety throughout the lifecycle.  The licensee should be able to show that effective mechanisms are in place between the key roles to communicate and cooperate with each other and coordinate their work activities [paragraphs 30-33, [5]]. |
| **Outcome 2:** | | **Adequate management of risks by applying the general principles of prevention. The licensee can:** |
| 2.1 | **DEMONSTRATE** using the general principles of prevention as a framework to identify and implement measures to manage risks arisen from a construction project(s).  [CDM 2015 Regulations 9(2), 11(2), 13(2), and Management of Health and Safety Regulations 1999 Regulation 4 and Schedule 1] | The general principles of prevention are:   1. avoiding risks; 2. evaluating the risks which cannot be avoided; 3. combating the risks at source; 4. 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; 5. adapting to technical progress; 6. replacing the dangerous by the non-dangerous or the less dangerous; 7. 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; 8. giving collective protective measures priority over individual protective measures; and 9. giving appropriate instructions to employees.   The licensee should be able to show how health, safety and welfare risks associated with the project are considered, evaluated, and addressed appropriately throughout the lifecycle of the project, in other words, from concept to completion.  The licensee should be able to show, during the design and/or modification process of a concept, the steps the designer has taken to consider and eliminate, so far as is reasonably practicable, the foreseeable risks to the health or safety of a person(s) who are carrying out or liable to be affected by the construction work, maintaining or cleaning the structure, and/or its users [CDM 2015 Regulation 9(2)].  Where it is not possible to eliminate the risks, the licensee should be able to show how reasonable steps have been taken to reduce the risks or control them through the design process and the information of the remaining risks have been provided to others through the health and safety file [CDM 2015 Regulation 9(3)].  The licensee should be able to show how the principles of prevention are applied by the contractors, including PC, to the site controls through the risk assessment and method statement (RAMS) process [CDM 2015 Regulation 13(2)]. |
| **Outcome 3:** | | **Adequate management and provision of key information and/or instructions. The licensee can:** |
| 3.1 | **IDENTIFY** notifiable project and **GIVE** appropriatenotification as soon as possible before the construction phase begins.  [CDM 2015 Regulation 6 and Schedule 1] | The licensee should be able to show that they have given written notification (F10) on any notifiable projects on their site to ONR prior to begin the construction phase [CDM 2015 Regulation 6(1), (2) and (5)].  The licensee should be able to show that an up-to-date notice is clearly displayed in the construction site in a form that contains all necessary information as outlined in Schedule 1 in CDM 2015, where it can be read and easily understood by any worker engaged in the construction work [CDM 2015 Regulation 6(3)]. |
| 3.2 | **PREPARE** and **PROVIDE** up-to-datePre-Construction Information (PCI) in a timely manner.  [CDM 2015 Regulation 4(4) and Appendix 2, [5]]. | The licensee should be able to show that the client has provided the up-to-date PCI to every designer and contractor (including PD and PC) appointed, or is considered to be appointed for the project, in a timely manner [CDM 2015 Regulation 4(4)].  The licensee should be able to show that the PCI prepared and provided to the designers and contractors is up-to-date, relevant to the particular project, has an appropriate level of detail, and is proportionate to the risks involved [Appendix 2, [5]].  The licensee should be able to show how the PCI has been taken into account if they undertake designer duties and prepare or modify designs [Appendix 2, [5]].  The licensee should be able to show how any information on design change is provided to the client by designers via the principal designer [Appendix 2, [5]].  The licensee should be able to show any agreement between the PD and the client on the level of support the client needs to ensure the PCI is provided to each designer and contractor in a timely manner, and the information is made available when others needed it [Appendix 2, [5]]. |
| 3.3 | **SHOW** oversight to the development of up-to-date Construction Phase Plan (CPP) by the Principal Contractor.  [CDM 2015 Regulation 4(5)(a) and Appendix 3, [5]]. | The licensee should be able to show that, as a client, how it discharges its duty to ensure adequate CPP is developed by the PC before the construction phase begins [CDM 2015 Regulation 4(5)(a)]. The plan should outline the health and safety arrangements for the construction phase, site rules, and specific measures concerning any work involving the particular risks listed in Schedule 3 of CDM 2015 [Appendix 3, [5]].  The licensee should be able to show that the PC has been provided with all the available relevant information it needs to develop the CPP, for example the PCI [Appendix 3, [5]].  The licensee should be able to show, as a client, how it ensures the plan is regularly reviewed and revised by the PC to take account of any changes that occur as construction progresses, so that the plan continues to be fit for purpose [Appendix 3, [5]]. |
| 3.4 | **SHOW** oversight to the development and handling of the up-to-date Health and Safety File for projects involving more than one contractor.  [CDM 2015 Regulation 4(5)(b) and Appendix 4, [5]]. | For projects involving more than one contractor, the licensee should be able to show that, as a client, how it has discharged its duty to ensure the health and safety file is developed and kept up to date by the PD, and the file is made available for anyone who needs it to comply with relevant legal requirements [CDM 2015 Regulation 4(5)(b)].  The level of detail of the health and safety file should be proportionate to the risks and the information contained within the file should be relevant, clear, concise, and easily understandable [Appendix 4, [5]].  In the case that the appointment for the PD finishes before the end of the project, the licensee should be able to show that the health and safety file has been passed to the PC, who will become responsible for the file. Once the project is finished, the licensee should be able to show that the up-to-date health and safety file is passed back to the client for retention and the file is made available to anyone who needs it to comply with relevant legal requirements [CDM 2015 Regulation 12(5)]. |
| 3.5 | **SHOW** mechanisms are in place to ensure the timely provision of adequate information and/or instructions that are relevant to ensuring the health, safety and welfare of persons involved and/or affected by the construction project(s).  [CDM 2015 Regulation 8(6)] | The licensee should be able to show that it has mechanisms in place to ensure anyone with a duty under CDM 2015 to provide the relevant health, safety, and welfare information and/or instructions to anyone else provide it in such a way that it is easy to understand and in good time, so that the recipients have sufficient time to understand and take account of it in effectively discharging their duties [CDM 2015 Regulation 8(6), and paras., 69-71 and 173, [5]].  The licensee should be able to show how it ensures the duty to provide the following information have been effectively discharged by a contractor, including a PC:   1. a suitable site induction, where not already provided by the PC; 2. the procedures to be followed in the event of serious and imminent danger to health and safety; 3. information on risks to health and safety—    1. identified by the risk assessment under regulation 3 of the Management of Health and Safety at Work Regulations 1999, or    2. arising out of the conduct of another contractor’s undertaking and of which the contractor in control of the worker ought reasonably to be aware; and 4. any other information necessary to enable the worker to comply with the relevant statutory provisions.   [CDM 2015 Regulation 15(9)]. |
| **Outcome 4:** | | **Adequate identification and adequate management of interface and potential conflicts with other legislation, relevant good practice, and additional requirements. The licensee can:** |
| 4.1 | **SHOW** that it recognises and understand different legislations and requirements will apply at the same time, and the duties placed upon the dutyholders to comply with all applicable legislations where relevant are of equivalent status. | The licensee should be able to show that the applicable legislations and other requirements relevant to the construction project that could have an impact on the health, safety and welfare of persons working on the project and those who are affected by the project are identified.  This could include, but not limited to, nuclear safety, site safety (also known as conventional health and safety or industrial safety), security, safeguards, and transport.  Below is a non-exhaustive list of legislations and requirements that could apply at the same time as CDM 2015:   * The Health and Safety at Work etc Act 1974 * Management of Health and Safety at Work Regulations 1999 * Lifting Operations and Lifting Equipment Regulations 1998 * Provision and Use of Work Equipment Regulations 1998 * Regulatory Reform (Fire Safety) Order 2005 * The Fire (Scotland) Act 2005 * Control of Asbestos Regulations 2012 * Work at Height Regulations 2005 * Confined Space Regulations 1997 * Electricity at Work Regulations 1989 * Dangerous Substances and Explosive Atmospheres Regulations 2002 * Control of Substances Hazardous to Health Regulations 2002 * Control of Major Accident Hazards Regulations 2015 * License Conditions (LCs) (refer to Appendix B – CDM 2015/LC/TIG/TAG mapping) * Nuclear Industries Security Regulations (NISR) 2003.   The licensee should be able to show that overlaps between different legislations and other requirements are understood, and the duties are appropriately discharged.  The licensee should be able to show the risks associated with a construction project(s) are managed holistically in accordance with the applicable legislations and other requirements.  The licensee should be able to show that it has mechanisms in place to proactively identify, manage and resolve potential conflicts between different requirements and duties. |
| **Outcome 5:** | | **Adequate management of key stakeholders. The licensee can:** |
| 5.1 | **DEMONSTRATE** mechanisms are in place to promote effective cooperation, including communication, between all dutyholders, and that the construction project work is carried out in a coordinated manner.  [CDM 2015 Regulation 8(4), and para. 66, [5]]. | The licensee should be able to show that the impact of the key stakeholders’ decisions and actions, which could affect the construction project and the associated health, safety, and welfare for all persons involved in the project, are considered as part of the planning process. Key stakeholders can be both internal and external to the licensee’s organisation. Examples of external key stakeholders include, but not limited to, funding providers including private or government bodies, contractors, designers, regulators. Examples of internal key stakeholders include but not limited to, site manager, building/structure manager, site director, corporate functions, workers and their representatives.  The licensee should be able to show how it promotes effective cooperating, communicating and coordination of work between all dutyholders to ensure health and safety of all persons involved in the project, and that the risks and the measures to control those risks are understood by everyone [paras., 11 and 31(d), [5]]. In the case that the licensee appoints itself to undertake the PD role, it must recognise the PD has a specific duty to ensure all persons working in relation to the pre-construction phase cooperate with each other as well as the client and the PD. [CDM 2015 Regulation 11(1) and 11(5), and para. 104 [5]]. This involves establishing effective communication mechanisms and sharing of relevant information. The licensee should be able to demonstrate how this duty has been effectively discharged.  In the case that the licensee appoints itself to undertake the PC role, it must recognise the PC has a specific duty to ensure that contractors under their control cooperate with each other so the risks to themselves and others are managed effectively [CDM 2015 Regulation 13(1) and 14(a), and paragraphs 117 and 130-132, [5]]. As the PC, licensee must recognise it has additional duty to consult and engage with workers. [CDM 2015 Regulation 14(b), and paragraphs 141 and 143-146, [5]]. The licensee should be able to demonstrate how these duties have been effectively discharged. Examples of mechanisms to promote cooperation, communication and coordination include, but not limited to, engagement meetings ranging from strategic level to operational level, departmental weekly and monthly stand-up meetings, plan of the day meetings, setting to work, pre- and post-job debriefs, deconfliction meetings, workshops, toolbox talks. |
| **Outcome 6:** | | **Adequate management of a construction site and its associated construction work activities so that work is carried out, so far as is reasonably practicable, without risk to health, safety and welfare of the persons working or affected by the construction project and construction work activities.  The licensee can:** |
| 6.1 | **DEMONSTRATE** mechanisms are in place to ensure the work on a construction site is carried out, so far as is reasonably practicable, without risk to health, safety and welfare of the persons working or affect by the construction project and associated construction work activities.  [CDM 2015 Part 4, Regulations 16 to 35, and Schedules 2 and 3]. | The licensee should be able to show how, as an intelligent customer, it ensures the PC plans, manages, and monitors a construction site and its associated construction work activities adequately during the construction phase to ensure work is carried out so far as is reasonably practicable, without risk to health, safety and welfare of the persons working or affect by the construction project and construction work activities.  The licensee should be able to show how, as an intelligent customer, it ensures the contractors, including PC, have taken reasonable steps to prevent unauthorised access to the site [CDM 2015 Regulation 15(10), and paragraphs 174-175, [5]]. If the licensee appoints itself to take on the PC and/or contractor role, it must recognise and demonstrate how it discharged the additional duty to take reasonable steps to prevent unauthorised access to the site.  The licensee should be able to show how, as an intelligent customer, it ensures contractors, including PC, comply with the CDM 2015 Part 4 general requirements for all construction sites.  If the licensee appoints itself to undertake the PC and/or contractor role, it must recognise and effectively discharge the additional duties to plan, manage, monitor and co-ordinate the construction site, including prevention of unauthorised access to site, during the construction phase, including compliance with CDM 2015 Part 4 requirements. |
| 6.2 | **DEMONSTRATE** appropriate level of supervision is provided on a construction site. [CDM 2015 Regulation 15(8)] | The licensee should be able to demonstrate how, as an intelligent customer, it ensures appropriate level of supervision is provided by all dutyholders on a construction site during the construction phase.  If the licensee appoints itself to undertake the PC and/or contractor role, it must recognise the additional duties to provide appropriate level of management and/or supervision, relevant to that role, to each worker under their control, so that construction can be carried out, so far as is reasonably practicable, without risks to health and safety. The licensee should be able to demonstrate how these duties have been effectively discharged [CDM 2015 Regulation 15(8), and paragraphs 169-172, [5]]. |
| **Outcome 7:** | | **Adequate management of change associated with CDM 2015 arrangements and a construction project(s). The licensee can:** |
| 7.1 | **SHOW** how material changes that may affect CDM 2015 arrangements and the health, safety, and welfare of those who are working or affected by a construction project are appropriately identified, understood, and responded to. | The licensee should be able to demonstrate how it adequately recognises and manages material changes that may affect the CDM 2015 arrangements, and the health, safety and welfare of persons working on or affected by a construction project and its associated construction work activities.  Examples of such changes include, but not limited to: organisation structure, project structure, funding, strategy, applicable legislation and/or other requirements, key personnel, competence, design, site layout including work environment, new risks introduced, new technology or equipment, system of work including site rules.  The licensee must ensure the changes are reflected in the relevant key documentation, such as the notification, health and safety file, and CPP so that they continue to be fit-for-purpose [CDM 2015 Regulations 6(3)(c), 12(6), and (9)]. |

# Appendix B – CDM 2015/LC/TIG/TAG mapping

**Note:** Only most appropriate CDM 2015 regulations have been set against each LC, there may be additional applications which apply. Further discussion with NSHS colleagues is recommended. Where a LC is not listed there is no direct correlation with CDM 2015.

| LC | Relevant CDM 2015 regulation | Details | Applicable TAGs and TIGs |
| --- | --- | --- | --- |
| LC 1 Interpretation | Reg 2(1) | ‘Client’ means any person for whom a project is carried out – this would usually be the licensee on GB Nuclear Sites.  'commissioning' is a construction activity as defined in CDM 2015.  ‘maintenance - (including cleaning which involves the use of water or an abrasive at high pressure, or the use of corrosive or toxic substances)’ is a construction activity as defined in CDM 2015.  ‘modification’ means any alteration to buildings, plant, etc could also be subject to CDM 2015 as defined in Reg 2(1).  ‘operations’ which includes maintenance, examination, and testing could also be subject to CDM 2015 as defined in Reg 2(1). | * NS-TAST-GD-017 [7] * NS-TAST-GD-049 [20] * NS-TAST-GD-079 [22] * NS-INSP-GD-028 [62] * NS-INSP-GD-029 [63] * NS-INSP-GD-030 [64] |
| LC 2 Marking of the Site Boundary | Reg 18 (2) | Requires a construction site, so far as reasonably practicable, in accordance with the level of risk, to have the perimeter identified with suitable signs and be fenced off.  Legislation relevant to construction work on nuclear new build sites;   * Reactor site – LCs, the Energy Act 2013 and the HSWA apply. * Wider construction site - the Energy Act 2013 and the HSWA apply – LCs do not apply. * Offsite hostel accommodation for workers – the local authority enforces the HSWA. | * NS-TAST-GD-062 [65] |
| LC 3 Control of Property Transactions | Reg 4(7) | If a client disposes of the client’s interest in the structure, the client complies with the duty in paragraph (5)(b)(iii) by providing the health and safety file to the person who acquires the client’s interest in the structure and ensuring that that person is aware of the nature and purpose of the file. - This may be an issue if ONR consents to the transfer of property under relicensing (e.g., the transfer of AGRs to NRS). |  |
| LC 6 Documents, records, authorities and certificates | Reg. 4 | Defines client duties | * NS-TAST-GD-049 [20] * NS-TAST-GD-077 [21] * NS-TAST-GD-079 [22] * Schedule 2 minimum welfare provision partially covered in [65] * NS-TAST-GD-026 [66] |
| Regs. 4(1) to (6) | require the client to put **ARRANGEMENTS** in place for;   * Managing a project and ensuring construction work can be carried out without risks to health and safety. * Schedule 2 welfare provisions are in place. * Management arrangements are maintained and reviewed throughout the project. * Appointment of the PD and the PC in writing. * PCI is provided to relevant dutyholders. * CPP and Health and Safety File are prepared. * Ensuring the PD and PC are complying with their duties. |
|  | The above requirements will be written or electronic documents which demonstrate the client’s compliance with CDM 2015 and any other relevant health and safety legislation and therefore come under this LC.  The client duties are to make and implement arrangements not necessarily to complete the work themselves. An inspector would expect to see these arrangements set out and the procedures in place to ensure they are implemented.  There should be a process in place for the client to audit the management arrangements for the site. This could be done themselves or by a third party. Using a third party provides a level of separation and independence otherwise the licensee is auditing themselves (possibly).  An inspector would expect to see that all the regulations in Part 4 of CDM 2015 have been included, where appropriate, in the arrangements.  An inspector would expect to see site specific and foreseeable risks identified and measures in place to eliminate or control them. |
| LC 7 Incidents on Site | Reg 4(1) | Requires the client to put **ARRANGEMENTS** in place for;   * Managing a project and ensuring construction work can be carried out without risks to health and safety. * Management arrangements are maintained and reviewed throughout the project. * Ensuring the PD and PC are complying with their duties. | * NS-TAST-GD-049 [20] * NS-TAST-GD-077 [21] * NS-TAST-GD-079 [22] * NS-TAST-GD-026 [66] |
| Reg 13(1) – relevant to the client when they appoint themselves as PC. | The PC is required to plan, manage and monitor the construction phase and coordinate matters relating to health and safety during the construction phase to ensure that, so far as is reasonably practicable, construction work is carried out without risks to health or safety.  Monitoring is considered to include investigating near-miss incidents and injuries.  An inspector would expect to see a process implemented by the PC to comply with this requirement including forwarding details of incidents, injuries and investigation outcomes to the client.  There is also a duty to report specified injuries and dangerous occurrences to ONR via [ONR dutyholder portal](https://onr.powerappsportals.com/riddor/). |  |
| LC 8 Warning Notices | Part 4 Duties on a construction site by Virtue of Reg. 16 | Reg. 17 identify suitable and sufficient safe access and egress.  Reg. 18 requires the perimeter of a construction site to be signed and fenced off.  Reg. 20 prevent unauthorised access to a demolition site and warning signs identifying demolition activity being carried out.  Reg. 21 prevent unauthorised access to an area where explosives are being used or installed.  Reg. 22 identify the location of an excavation to prevent any person falling in.  Reg. 25 warning signs to prevent contact with energy distribution installations (overhead power lines and buried services).  Reg. 26 signs in place when persons are working near, over or on water to identify and prevent risk of drowning,  Reg. 27 identifying traffic routes.  Reg. 28 identifying vehicle movements areas and pedestrian walkways.  Reg. 29 identify areas where there are measures for the prevention of risk from fire, flooding and asphyxiation.  Reg. 30 identifying emergency procedures.  Reg. 31 identifying emergency routes and exits.  Reg. 32 identifying the presence and location of fire detection and fire-fighting equipment. | * NS-INSP-GD-073 [51] * NS-TAST-GD-062 [65] |
| An inspector would expect to see relevant warning notices where the above risks are present. If an inspector identifies a matter of evidence concern relating to the above they should follow the guidance in [56]. |
| LC 9 Instructions to Persons on site | Reg 4(1) to (6) | Requires the client to put **ARRANGEMENTS** in place for;   * Managing a project and ensuring construction work can be carried out without risks to health and safety. * Management arrangements are maintained and reviewed throughout the project. * PCI is provided to relevant dutyholders. * CPP and Health and Safety File are prepared. * Ensuring the PD and PC are complying with their duties. | * NS-TAST-GD-049 [20] * NS-TAST-GD-077 [21] * NS-TAST-GD-079 [22] * NS-TAST-GD-026 [66] * NS-INSP-GD-014 [67] |
| Reg 12 - relevant to the client when they appoint themselves as PC and / or PD. | Requires the PD and PC to work together to prepare the CPP before any activities commence. This must set out the arrangements for securing health and safety during the period construction work is carried out including site rules and any specific measures put in place where work involves one or more of the risks listed in Schedule 3.  An inspector would expect to see a process implemented by the client to ensure this document has been prepared before work commences. | * NS-INSP-GD-014 [67] |
| Reg 13(4)(a) - relevant to the client when they appoint themselves as PC. | Requires the PC to provide a suitable site induction.  An inspector would expect to see a process implemented by the client to ensure this has been completed. | * NS-INSP-GD-009 [68] |
| Reg 15(7), (8) & (9) | Requires contractors to only employ or appoint a person with (or in the process of gaining) the appropriate skills, knowledge, training and experience to carry out the tasks allocated to them. Contractors must also provide suitable supervision, instructions, information and training to ensure work can be carried out in a safe manner. They must also provide a suitable site induction.  An inspector would expect to see a process implemented by the client to ensure this has been completed. | * NS-INSP-GD-009 [68] * NS-INSP-GD-024 [69] * NS-INSP-GD-026 [70] |
| LC 10 Training | Reg 13(4)(a) - relevant to the client when they appoint themselves as PC. | Requires the PC to provide a suitable site induction.  An inspector would expect to see a process implemented by the client to ensure this has been completed. | * NS-INSP-GD-009 [68] |
| Reg. 15(7), (8) & (9) | Requires contractors to only employ or appoint a person with (or in the process of gaining) the appropriate skills, knowledge, training and experience to carry out the tasks allocated to them. Contractors must also provide suitable supervision, instructions and training to ensure work can be carried out in a safe manner. They must also provide a suitable site induction.  An inspector would expect to see a process implemented by the client to ensure this has been completed. | * NS-INSP-GD-009 [68] * NS-INSP-GD-024 [69] * NS-INSP-GD-026 [70] |
| Reg. 8 | General Duties, requires every dutyholder involved in a construction project, including the client, to ensure they have the necessary skills, knowledge, experience, training and where appropriate the organisational capability to fulfil that role.  A client considering taking on the role or PD and / or PC should consider whether they have the necessary organisational capability to do so.  Due diligence checks are also required by those making appointments to ensure appointees to these roles have the necessary requirements.  There is also a duty on all to report to the person in control anything in relation to the project likely to endanger theirs and others health and safety. | * NS-TAST-GD-017 [7] * NS-INSP-GD-010 [15] * NS-INSP-GD-012 [16] * NS-TAST-GD-049 [20] * NS-TAST-GD-077 [21] * NS-TAST-GD-079 [22] * NS-INSP-GD-009 [68] * NS-TAST-GD-057 [71] |
| LC 11 Emergency Arrangements | Reg 13(4)(a) - relevant to the client when they appoint themselves as PC. | Requires the PC to provide a suitable site induction.  An inspector would expect to see a process implemented by the client to ensure this has been completed. | * NS-INSP-GD-009 [68] |
| Regs. 30, 31 & 32 | Requires the PC to put in place suitable and sufficient arrangements to deal with emergency situations, provision of emergency routes & exits and fire detection & fire-fighting equipment located in suitable places.  An inspector would expect to see these measures in place and a process to ensure they are maintained throughout the life of the project. | * NS-TAST-GD-062 [65] |
| LC 12 Duly Authorised and other Suitably Qualified and Experienced Persons | Reg. 8 | General Duties, requires every dutyholder involved in a construction project, including the client, to ensure they have the necessary skills, knowledge, experience, training and where appropriate the organisational capability to fulfil that role.  A client considering taking on the role or PD and/or PC should consider whether they have the necessary organisational capability to do so.  Due diligence checks are also required by those making appointments to ensure appointees to these roles have the necessary requirements.  There is also a duty on all to report to the person in control anything in relation to the project likely to endanger theirs and others health and safety. | * NS-TAST-GD-017 [7] * NS-INSP-GD-010 [15] * NS-INSP-GD-012 [16] * NS-TAST-GD-049 [20] * NS-TAST-GD-077 [21] * NS-TAST-GD-079 [22] * NS-TAST-GD-057 [71] * NS-INSP-GD-009 [68] |
| Reg. 15(7), (8) & (9) | Requires contractors to only employ or appoint a person with (or in the process of gaining) the appropriate skills, knowledge, training and experience to carry out the tasks allocated to them. Contractors must also provide suitable supervision, instructions and training to ensure work can be carried out in a safe manner. They must also provide a suitable site induction.  An inspector would expect to see a process implemented by the client to ensure this has been completed. | * NS-INSP-GD-009 [68] * NS-INSP-GD-024 [69] * NS-INSP-GD-026 [70] |
| LC14 Safety Documentation | Reg 4(1) to (6) | Requires the client to put **ARRANGEMENTS** in place for;   * Managing a project and ensuring construction work can be carried out without risks to health and safety. * Management arrangements are maintained and reviewed throughout the project. * PCI is provided to relevant dutyholders. * CPP and Health and Safety File are prepared. * Ensuring the PD and PC are complying with their duties. | * NS-TAST-GD-049 [20] * NS-TAST-GD-077 [21] * NS-TAST-GD-079 [22] * NS-TAST-GD-026 [66] * NS-INSP-GD-014 [67] |
| Reg 12 - relevant to the client when they appoint themselves as PC and / or PD. | Requires the PD and PC to work together to prepare the CPP before any activities commence. This must set out the arrangements for securing health and safety during the period construction work is carried out including site rules and any specific measures put in place where work involves one or more of the risks listed in Schedule 3.  An inspector would expect to see a process implemented by the client to ensure this document has been prepared before work commences. | * NS-INSP-GD-014 [67] |
| Reg 13(4)(a) - relevant to the client when they appoint themselves as PC. | Requires the PC to provide a suitable site induction.  An inspector would expect to see a process implemented by the client to ensure this has been completed. | * NS-INSP-GD-009 [68] |
| Reg. 15(7), (8) & (9) | Requires contractors to only employ or appoint a person with (or in the process of gaining) the appropriate skills, knowledge, training and experience to carry out the tasks allocated to them. Contractors must also provide suitable supervision, instructions and training to ensure work can be carried out in a safe manner. They must also provide a suitable site induction.  An inspector would expect to see a process implemented by the client to ensure this has been completed. | * NS-INSP-GD-009 [68] * NS-INSP-GD-024 [69] * NS-INSP-GD-026 [70] |
| Regs. 30, 31 & 32 | Requires the PC to put in place suitable and sufficient arrangements to deal with emergency situations, provision of emergency routes & exits and fire detection & fire-fighting equipment located in suitable places.  An inspector would expect to see these measures in place and a process to ensure they are maintained throughout the life of the project. | * NS-TAST-GD-062 [65] |
| Reg. 8 | General Duties, requires every dutyholder involved in a construction project, including the client, to ensure they have the necessary skills, knowledge, experience, training and where appropriate the organisational capability to fulfil that role.  A client considering taking on the role or PD and/or PC should consider whether they have the necessary organisational capability to do so.  Due diligence checks are also required by those making appointments to ensure appointees to these roles have the necessary requirements.  There is also a duty on all to report to the person in control anything in relation to the project likely to endanger theirs and others health and safety. | * NS-TAST-GD-017 [7] * NS-INSP-GD-010 [15] * NS-INSP-GD-012 [16] * NS-TAST-GD-049 [20] * NS-TAST-GD-077 [21] * NS-TAST-GD-079 [22] * NS-INSP-GD-009 [68] * NS-TAST-GD-057 [71] |
| LC 16: Site plans, designs and specifications | Regs 9(2)(3)(4) - duties of designers | Requires designers to take a proactive approach to ‘design the risk out’- both for construction, commissioning, maintenance, operations, decommissioning and demolition - when they are preparing or modifying a design. Designer is also required to assist client and contractors to understand the design so they can better comply with their duties. | * NS-TAST-GD-017 [7] * NS-TAST-GD-057 [71] |
| LC 17 Management systems | Regs. 4(1) to (6) | Requires the client to put **ARRANGEMENTS** in place for;   * Managing a project and ensuring construction work can be carried out without risks to health and safety. * Schedule 2 welfare provisions are in place. * Management arrangements are maintained and reviewed throughout the project. * PCI is provided to relevant dutyholders. * CPP and Health and Safety File are prepared. * Ensuring the PD and PC are complying with their duties.   The client duties are to make and implement arrangements not necessarily to complete the work themselves. An inspector would expect to see these arrangements set out and the procedures in place to ensure they are implemented.  There should be a process in place for the client to audit the management arrangements for the site. This could be done themselves or by a third party. Using a third party provides a level of separation and independence otherwise the licensee is auditing themselves (possibly). | * NS-TAST-GD-049 [20] * NS-TAST-GD-077 [21] * NS-TAST-GD-079 [22] * NS-TAST-GD-062 [65] * NS-TAST-GD-026 [66] * NS-INSP-GD-011 [72] |
|  | Reg. 11(1) to (4) – relevant to the client when they appoint themselves as PD. | The PD is required to plan, manage and monitor the pre-construction phase and coordinate matters relating to health and safety during the pre-construction phase to ensure that, so far as is reasonably practicable, the project is carried out without risks to health or safety.  An inspector would expect to see processes in place;   * to ensure the ‘principles of prevention’ in Appendix 1 are taken into account when design technical and organisational aspects of the project are being decided, * to ensure the PD has identified and eliminated or controlled, so far as is reasonably practicable, foreseeable risks to the health and safety of all persons involved or affected by the construction work, * for the PD to ensure all designers comply with their duties in Reg. 9. | * NS-TAST-GD-057 [71] |
|  | Reg. 12 - relevant to the client when they appoint themselves as PC and / or PD. | During the pre-construction phase, before setting up the construction site, the PC is required to draw up a CPP or make arrangement for it to be drawn up. This should set out all the health and safety arrangements and site rules taking account of the requirements of schedule 3 in dealing with specific risks, and Appendix 3 – the CPP.   * The PD must assist the PC in preparing the CPP by providing all the information they hold which is relevant to the CPP. * The PD must prepare a health and safety file containing information relevant to the project which is likely to be needed for future works or projects. The contents of Appendix 4 – the health and safety file should be taken into account.   An inspector would expect see processes in place to ensure the CPP and health and safety file are reviewed, updated and revised throughout the project.  At the conclusion of the project the health and safety file should be passed to the client. | * NS-INSP-GD-014 [67] |
|  | Reg. 13(1) - relevant to the client when they appoint themselves as PC. | The PC is required to plan, manage and monitor the construction phase and coordinate matters relating to health and safety during the construction phase to ensure that, so far as is reasonably practicable, construction work is carried out without risks to health or safety.  An inspector would expect to see processes in place to;   * to ensure the ‘principles of prevention’ in Appendix 1 are taken into account when design technical and organisational aspects of the project are being decided, * estimate the amount of time required to complete the work stages, * ensure there is co-ordination and co-operation between contractors throughout the project, * ensure the implementation by contractors of the applicable health and safety requirements. |  |
|  | Reg. 15(2) | A contractor is required to plan, manage and monitor construction work carried out either by them or by workers under their control, to ensure that, so far as is reasonably practicable, it is carried out without risks to health and safety. |  |
|  | Part 4 Duties on a construction site by Virtue of Reg. 16 | The requirements of Part 4 of CDM 2015 applies to construction sites. Contractors carrying out construction work must comply with these requirements.  An inspector would expect to see site specific and foreseeable risks identified and measures in place to eliminate or control them.  An inspector would expect to see that all the regulations in Part 4 of CDM 2015 have been included, where appropriate, in the PC site management arrangements.  Reg. 17 requires suitable and sufficient safe access and egress.  Reg. 18 requires the perimeter of a construction site to be signed and fenced off.  Reg. 19 requires all practicable steps to prevent danger and ensure structures do not collapse.  Reg. 20 requires the demolition or dismantling of a structure to be planned and carried out in a manner to prevent, or reduce to as low a level as possible, danger.  Reg. 21 requires the safe use of explosives.  Reg. 22 requires measures to prevent any person falling into an excavation.  Reg. 23 requires cofferdams and caissons to be of a suitable design.  Reg. 24 requires reports of inspections to be completed.  Reg. 25 requires warning signs to prevent contact with energy distribution installations (overhead power lines and buried services).  Reg. 26 requires sufficient measure when working near, over or on water to prevent any person falling in and the risk of drowning,  Reg. 27 requires the organisation of traffic routes to ensure vehicles and pedestrians can move without risks to health and safety.  Reg. 28 requires measures to prevent or control the unintended movement of vehicles and prevention of falling into excavations, pits or water.  Reg. 29 requires suitable and sufficient steps to prevent injury or death arising from fire, flooding and asphyxiation.  Reg. 30 requires suitable and sufficient arrangement to deal with emergency situations including evacuation of the site.  Reg. 31 requires suitable and sufficient emergency routes and exits to be provided..  Reg. 32 requires suitable and sufficient fire detection and fire-fighting equipment to be provided and located in suitable places.  Reg. 33 requires fresh or purified air to be provided.  Reg. 34 requires suitable and sufficient measures to provide a reasonable working temperature.  Reg. 35 requires suitable and sufficient lighting to be provided on site and any approaching traffic route.  The client should have procedures to audit the management arrangements across the entire site and by all dutyholders. | * NS-INSP-GD-073 [51] * NS-TAST-GD-062 [65] |
| LC 19 Construction or installation of new plant | Reg 2(1) | 'Construction work' and 'installation' are construction activities as defined in CDM 2015. | * NS-TAST-GD-017 [7] * NS-TAST-GD-049 [20] * NS-TAST-GD-079 [22] |
| Regs. 4(1) to (6) | Requires the client to put **ARRANGEMENTS** in place for;   * Managing a project and ensuring construction work can be carried out without risks to health and safety. * Schedule 2 welfare provisions are in place. * Management arrangements are maintained and reviewed throughout the project. * PCI is provided to relevant dutyholders. * CPP and Health and Safety File are prepared. * Ensuring the PD and PC are complying with their duties.   The client duties are to make and implement arrangements not necessarily to complete the work themselves. An inspector would expect to see these arrangements set out and the procedures in place to ensure they are implemented.  There should be a process in place for the client to audit the management arrangements for the site. This could be done themselves or by a third party. Using a third party provides a level of separation and independence otherwise the licensee is auditing themselves (possibly).  An inspector would expect to see that all the regulations in Part 4 of CDM have been included, where appropriate, in the arrangements.  An inspector would expect to see site specific and foreseeable risks identified and measures in place to eliminate or control them. | * NS-TAST-GD-049 [20] * NS-TAST-GD-077 [21] * NS-TAST-GD-079 [22] * NS-TAST-GD-026 [66] * NS-INSP-GD-019 [73] |
| Reg 13(1) – relevant to the client when they appoint themselves as PC. | The PC is required to plan, manage and monitor the construction phase and coordinate matters relating to health and safety during the construction phase to ensure that, so far as is reasonably practicable, construction work is carried out without risks to health or safety. |  |
| LC 20 Modification to design of plant under construction | Reg 2(1) | 'Design' is defined in CDM 2015 and includes drawings, design details, specifications and bills of quantities (including specification of articles or substances) relating to a structure, and calculations prepared for the purpose of a design. | * NS-TAST-GD-017 [7] * NS-TAST-GD-049 [20] * NS-TAST-GD-079 [22] |
| Regs. 4(6) | Requires the client to put **ARRANGEMENTS** in place for ensuring the PD and PC are complying with their duties. | * NS-TAST-GD-049 [20] * NS-TAST-GD-077 [21] * NS-TAST-GD-079 [22] * NS-TAST-GD-026 [66] * NS-INSP-GD-020 [74] |
| Reg. 9(2) | Requires a designer (including the PD) modifying a design to take into account the principles of prevention (Appendix 1 of CDM) and any PCI to eliminate, so far as is reasonably practicable, foreseeable risks to health and safety. | * NS-TAST-GD-057 [71] |
| Reg. 10(1) | Relates to designs prepared or modified outside Great Britain for use in construction work.  It states either the person who commissions the designs, if established within Great Britain, or if that person is not so established, the client for the project, must ensure that the requirements of CDM 2015 Reg. 9 (designer duties) are complied with. | * NS-TAST-GD-057 [71] |
| Reg. 11(2) | Requires the PD to take account of the general principles of prevention (Appendix 1 of CDM) when design and technical aspects are being decided. |
| An inspector would expect to see a written procedure detailing how designers the PD, and the licensee where appropriate, deal with design changes during the entire life of the construction project. | |
| LC 21 Commissioning | Reg 2(1) | 'Commissioning' is a construction activity as defined in CDM 2015. | * NS-TAST-GD-017 [7] * NS-TAST-GD-049 [20] * NS-TAST-GD-079 [22] |
| Reg 4(1) to (6) | Requires the client to put **ARRANGEMENTS** in place for;   * Managing a project and ensuring construction work can be carried out without risks to health and safety. * Schedule 2 welfare provisions are in place. * Management arrangements are maintained and reviewed throughout the project. * PCI is provided to relevant dutyholders. * CPP and Health and Safety File are prepared. * Ensuring the PD and PC are complying with their duties. | * NS-TAST-GD-049 [20] * NS-TAST-GD-077 [21] * NS-TAST-GD-079 [22] * NS-TAST-GD-026 [66] * NS-INSP-GD-021 [75] |
|  | The client duties are to make and implement arrangements not necessarily to complete the work themselves. An inspector would expect to see these arrangements set out and the procedures in place to ensure they are implemented.  There should be a process in place for the client to audit the management arrangements for the site. This could be done themselves or by a third party. Using a third party provides a level of separation and independence otherwise the licensee is auditing themselves (possibly).  An inspector would expect to see that all the regulations in Part 4 of CDM 2105 have been included, where appropriate, in the arrangements.  An inspector would expect to see site specific and foreseeable risks identified and measures in place to eliminate or control them. |  |
| LC23 Operating rules | Reg. 8(5) | A person working on a project under the control of another must report to that person anything they are aware of in relation to the project which is likely to endanger their own health or safety or that of others. | * NS-TAST-GD-017 [7] * NS-INSP-GD-010 [15] * NS-INSP-GD-012 [16] * NS-TAST-GD-049 [20] * NS-TAST-GD-077 [21] * NS-TAST-GD-079 [22] * NS-INSP-GD-009 [68] * NS-INSP-GD-026 [70] * NS-TAST-GD-057 [71] * NS-INSP-GD-023 [76] |
| LC 26 Control and supervision of operations | Reg 4(1) to (6) | Require the client to put **ARRANGEMENTS** in place for;   * Managing a project and ensuring construction work can be carried out without risks to health and safety. * Schedule 2 welfare provisions are in place. * Management arrangements are maintained and reviewed throughout the project. * PCI is provided to relevant dutyholders. * CPP and Health and Safety File are prepared. * Ensuring the PD and PC are complying with their duties.   The client duties are to make and implement arrangements not necessarily to complete the work themselves. An inspector would expect to see these arrangements set out and the procedures in place to ensure they are implemented.  There should be a process in place for the client to audit the management arrangements for the site. This could be done themselves or by a third party. Using a third party provides a level of separation and independence otherwise the licensee is auditing themselves (possibly).  An inspector would expect to see that all the regulations in Part 4 of CDM 2015 have been included, where appropriate, in the arrangements.  An inspector would expect to see site specific and foreseeable risks identified and measures in place to eliminate or control them. | * NS-TAST-GD-049 [20] * NS-TAST-GD-077 [21] * NS-TAST-GD-079 [22] * NS-TAST-GD-026 [66] |
| Reg 13(1) – relevant to the client when they appoint themselves as PC. | The PC is required to plan, manage and monitor the construction phase and coordinate matters relating to health and safety during the construction phase to ensure that, so far as is reasonably practicable, construction work is carried out without risks to health or safety. | * NS-INSP-GD-026 [70] |
| LC 35 Decommissioning | Reg 2(1) | 'Decommissioning' is a construction activity as defined in CDM 2015.  ‘Structure’ is defined in CDM 2015 as any building, timber, masonry, metal or reinforced concrete structure, railway line or siding, tramway line, dock, harbour, inland navigation, tunnel, shaft, bridge, viaduct, waterworks, reservoir, pipe or pipeline, cable, aqueduct, sewer, sewage works, gasholder, road, airfield, sea defence works, river works, drainage works, earthworks, lagoon, dam, wall, caisson, mast, tower, pylon, underground tank, earth retaining structure or structure designed to preserve or alter any natural feature, and fixed plant; (b) any structure similar to anything specified in paragraph (a); (c) any formwork, falsework, scaffold or other structure designed or used to provide support or means of access during construction work. | * NS-TAST-GD-017 [7] * NS-TAST-GD-049 [20] * NS-TAST-GD-079 [22] |
| Reg 4(1) to (6) | Requires the client to put **ARRANGEMENTS** in place for;   * Managing a project and ensuring construction work can be carried out without risks to health and safety. * Schedule 2 welfare provisions are in place. * Management arrangements are maintained and reviewed throughout the project. * PCI is provided to relevant dutyholders. * CPP and Health and Safety File are prepared. * Ensuring the PD and PC are complying with their duties.   The client duties are to make and implement arrangements not necessarily to complete the work themselves. An inspector would expect to see these arrangements set out and the procedures in place to ensure they are implemented.  There should be a process in place for the client to audit the management arrangements for the site. This could be done themselves or by a third party. Using a third party provides a level of separation and independence otherwise the licensee is auditing themselves (possibly).  An inspector would expect to see that all the regulations in Part 4 of CDM 2015 have been included, where appropriate, in the arrangements.  An inspector would expect to see site specific and foreseeable risks identified and measures in place to eliminate or control them. | * NS-TAST-GD-049 [20] * NS-TAST-GD-077 [21] * NS-TAST-GD-079 [22] * NS-TAST-GD-026 [66] * NS-INSP-GD-035 [77] |
| Reg 13(1) – relevant to the client when they appoint themselves as PC. | The PC is required to plan, manage and monitor the construction phase and coordinate matters relating to health and safety during the construction phase to ensure that, so far as is reasonably practicable, construction work is carried out without risks to health or safety. |  |
| Reg. 20 | Requires the demolition or dismantling of a structure to be planned and carried out in such a way as to prevent danger or, where it is not practicable to prevent it, to reduce danger to as low a level as is reasonably practicable.  The arrangements for carrying out such demolition or dismantling must be recorded in writing before the demolition or dismantling work begins.  An inspector would expect to see a written plan for the demolition or dismantling of the structure in place before work has commenced, prepared by the specialist contractor appointed to carry out the work.  An inspector would expect to see site specific and foreseeable risks identified and measures in place to eliminate or control them. |  |
| LC 36 Organisational capability | Reg. 8 | This applies to all dutyholders working on a project. They require every dutyholder involved in a construction project, including the client, to ensure they have the necessary skills, knowledge, experience, training and where appropriate the organisational capability to fulfil that role.  A client considering taking on the role or PD and/or PC should consider whether they have the necessary organisational capability to do so.  Due diligence checks are also required by those making appointments to ensure appointees to these roles have the necessary requirements.  There is also a duty on all to report to the person in control anything in relation to the project likely to endanger theirs and others health and safety.  An inspector would expect to see the licensee has policies, procedures and systems in place to set acceptable health and safety standards which comply with the law, and the resources and people to ensure the standards are delivered. | * NS-TAST-GD-017 [7] * NS-INSP-GD-036 [17] * NS-TAST-GD-049 [20] * NS-TAST-GD-077 [21] * NS-TAST-GD-079 [22] * NS-TAST-GD-057 [71] |

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# Glossary

| Term/acronym | Description |
| --- | --- |
| Authorised defence site | as defined in Regulation 2 of the Health and safety (Enforcing Authority) Regulations 1998: “a site in England and Wales or Scotland —  (a) that is used for any purpose which, if section 1 of the Nuclear Installations Act 1965 applied to the Crown, would require the authority of a nuclear site licence in respect of that site; and  (b) for which there is in force an authorisation granted by or on behalf of the Secretary of State having responsibility for defence authorising it to be used for that purpose.” |
| CDM 2015 | The Construction (Design and Management) Regulations 2015. |
| Client | as defined in Regulation 2 of CDM 2015: any person for whom a project is carried out. |
| Construction Phase Plan (CPP) | required by Regulation 12 (and 15) of CDM 2015 and is a plan which outlines the health and safety arrangements, site rules and specific measures concerning any work involving the particular risks listed in Schedule 3 of CDM 2015 |
| Construction site | as defined in Regulation 2 of CDM 2015:  ‘includes any place where construction work is being carried out or to which the workers have access, but does not include a workplace within the site which is set aside for purposes other than construction work.’ |
| Construction work activity | as defined in Regulation 2 of CDM 2015: the carrying out of any building, civil engineering or engineering construction work and includes:  ‘(a) the construction, alteration, conversion, fitting out, commissioning, renovation, repair, upkeep, redecoration or other maintenance (including cleaning which involves the use of water or an abrasive at high pressure, or the use of corrosive or toxic substances), de-commissioning, demolition or dismantling of a structure;  (b) the preparation for an intended structure, including site clearance, exploration, investigation (but not site survey) and excavation (but not pre-construction archaeological investigations), and the clearance or preparation of the site or structure for use or occupation at its conclusion;  (c) the assembly on site of prefabricated elements to form a structure or the disassembly on site of the prefabricated elements which, immediately before such disassembly, formed a structure;  (d) the removal of a structure, or of any product or waste resulting from demolition or dismantling of a structure, or from disassembly of prefabricated elements which immediately before such disassembly formed such a structure;  (e) the installation, commissioning, maintenance, repair or removal of mechanical, electrical, gas, compressed air, hydraulic, telecommunications, computer or similar services which are normally fixed within or to a structure,  but does not include the exploration for, or extraction of, mineral resources, or preparatory activities carried out at a place where such exploration or extraction is carried out.’ |
| Design | as defined in Regulation 2 of CDM 2015:  ‘includes drawings, design details, specifications and bills of quantities (including specification of articles or substances) relating to a structure, and calculations prepared for the purpose of a design*.’* |
| Generic Design Assessment (GDA) | a process used by the nuclear regulators (ONR and the environment agencies) to assess the new nuclear power station designs following a request from the government.  It allows the regulators to assess the safety, security, and environmental implications of new reactor designs, separately from applications to build them at specific sites. Further information on GDA can be found on ONR’s website: <https://www.onr.org.uk/new-reactors/background.htm>. |
| Great Britain (GB) nuclear site | as defined in Section 68 of the Energy Act 2013:  ‘a nuclear site in England, Wales or Scotland.’ |
| HSWA | The Health and Safety at Work etc. Act 1974. |
| Intelligent customer (IC) | as defined in the SAPs (ref. [78]):  ‘the capability of an organisation to understand where and when work is needed; specify what needs to be done; understand and set suitable standards; supervise and control the work; and review, evaluate and accept the work carried out on its behalf’. |
| Licensee | for the purpose of this document, licensees also include ‘operators’ and those organisations in control of a ONR regulated site, organisations operating on an authorised defence site, as well as organisations undergoing the GDA process that is known as the requestion parties. |
| Must | Is used only where there is an absolute duty, i.e. an explicit legal requirement to take a certain action which is not qualified by terms such as ‘so far as reasonably practicable’. |
| New nuclear build site | as defined in Regulation 2A of the Health and safety (Enforcing Authority) Regulations 1998:  ‘a site which, subject to paragraphs (3) and (4) —  (a) is immediately adjacent to a GB nuclear site (“the associated site”);  (b) is, or forms part of, a construction site where construction work is being carried out —  (i) wholly or mainly for the purpose of the installation of one or more nuclear installations on the associated site; and  (ii) by or on behalf of the person to whom the nuclear site licence for the associated site has been granted.  (3) A site is not a new nuclear build site if, on the date construction work starts on that site, there is a nuclear installation installed on the associated site.  (4) A site ceases to be a new nuclear build site on the completion of the construction work mentioned in paragraph (1)(b).’ |
| Nuclear Internal Hazards and Site Safety (NIHSS) | a specialism in ONR. |
| Nuclear Site Health and Safety (NSHS) | a sub-specialism within the NIHSS specialism in ONR. |
| Optioneering | During the lifecycle of a project, dutyholders may need to consider a selection of design options at any stage of the project. This could include choosing between different design concepts for the whole project at initial stage, more detailed design options at a later stage, and different methodologies to realise the design at the implementation stage.  This process is known as ‘optioneering’. |
| Organisational capability | As defined in [HSE Guidance L153 - Managing health and safety in construction](https://www.hse.gov.uk/pubns/priced/l153.pdf) [5]:  ‘the policies and systems an organisation has in place to set acceptable health and safety standards which comply with the law, and the resources and people to ensure the standards are delivered.’ |
| Other requirements | includes industrial guidance, codes of practices, company standards, contractual arrangements, insurance arrangements. |
| Pre-construction information (PCI) | required by Regulation 4 CDM 2015 and is information in the client’s possession or which is reasonably obtainable by or on behalf of the client, which is relevant to the construction work and is of an appropriate level of detail and proportionate to the risks involved. |
| Principal Contractor (PC) | as defined in Regulation 2 of CDM 2015:  ‘the contractor appointed under Regulation 5(1)(b) to perform the specified duties in Regulations 12 to 14*.’* |
| Principal Designer (PD) | as defined in Regulation 2 of CDM 2015:  *‘*the designer appointed under Regulation 5(1)(a) to perform the specified duties in Regulations 11 and 12.’ |
| Project team | a team with clear roles and responsibilities assigned to plan and execute a construction project. Members would include, for example, but not limited to, PD, PC, representatives of the client, designers, and contractors. |
| Should | is used to indicate what to do to comply with legal requirements which are qualified by terms such as ‘so far as reasonably practicable’. |
| Structure | as defined in Regulation 2 of CDM 2015:  ‘(a) any building, timber, masonry, metal or reinforced concrete structure, railway line or siding, tramway line, dock, harbour, inland navigation, tunnel, shaft, bridge, viaduct, waterworks, reservoir, pipe or pipeline, cable, aqueduct, sewer, sewage works, gasholder, road, airfield, sea defence works, river works, drainage works, earthworks, lagoon, dam, wall, caisson, mast, tower, pylon, underground tank, earth retaining structure or structure designed to preserve or alter any natural feature and fixed plant;  (b) any structure similar to anything specified in paragraph (a);  (c) any formwork, falsework, scaffold or other structure designed or used to provide support or means of access during construction work,  and any reference to a structure includes part of a structure;’ |
| Temporary works | as defined in BS5975 [44] as:  “providing an ‘engineered solution’ that is used to support or protect either an existing structure or the permanent works during construction, or to support an item of plant or equipment, or the vertical sides or side-slopes of an excavation during construction operations on site or to provide access. It is used to control stability, strength, deflection, fatigue, geotechnical effects and hydraulic effects within defined limits.  This description of temporary works includes, but is not limited to:  a) supporting or protecting either an existing structure or the permanent works during construction, modification or demolition;  b) provision of stability to the permanent structure during construction, pre-weakening or demolition (e.g. propping, shoring, facade retention etc.);  c) securing a site, or providing access to a site or workplace on site or segregation of pedestrians and vehicles (e.g. hoarding, haul roads, fencing, stairs);  d) supporting or restraining plant, materials or equipment, including stability of water-borne craft;  e) provision of earthworks or slopes to an excavation or supports to the side or roof of an excavation or supports or diversions to watercourse during construction operations;  f) providing a safe platform for work activity on land or water (e.g. jetty, scaffolding, edge protection or towers);  g) providing measures to control noise, dust, debris, fume, air quality, groundwater or any site discharges during construction or demolition (e.g. screens, bunds, de-watering, demolition debris);  h) providing protection or support to services; and  i) facilitating testing (e.g. pressure testing pipes, pile testing, pre-demolition floor load capacity testing).". |

1. This word version of the template has been published with the TIG to control the content of the descriptors (the ability and the supporting guidance). Inspectors and operators should complete the corresponding MS Excel spreadsheet template (ONR record ref.: 2021/60904) with the supporting claims and evidence. [↑](#footnote-ref-2)