



The Construction (Design and Management) Regulations 2015 Performance Design Seminar NTS Rockvilla, 6th February 2020

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Learning Aims and Objectives

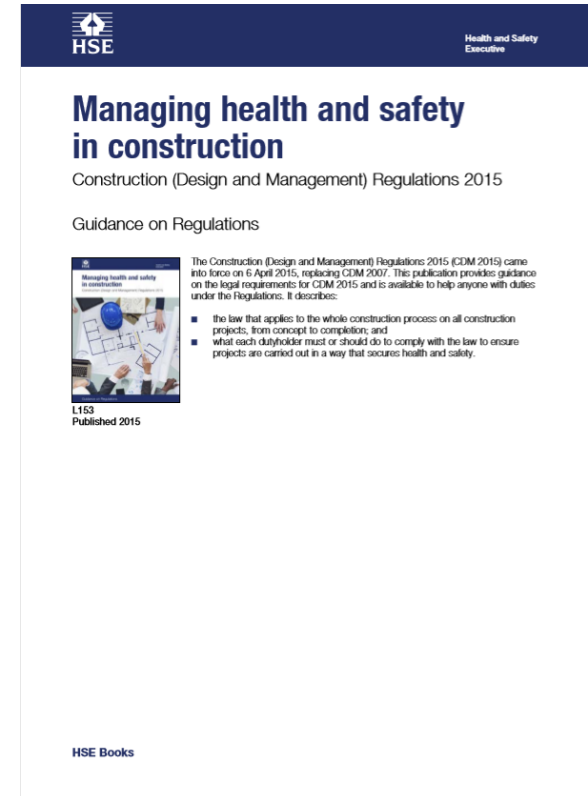
- To underpin the principles and application of the CDM Regulations 2015 and how they apply to the entertainment sector.
- To highlight the roles and responsibilities of the 5 key parties (the duties).
- To understand the principals of information provision, co-ordination and co-operation in respect of CDM.
- To understand the requirements of a Construction Phase Plan.
- To understand the requirements for a Health and Safety File and what to do with it.
- To ultimately raise awareness of the Regulations to help improve H&S performance, and aid compliance.

Key Changes from the 2007 Regs

- Regulations apply to all construction work, including set builds and fit-ups.
- CDM Coordinator role replaced by Principal Designer.
- Notification requirements changed (Now 30 days and 20 workers simultaneously).
- Construction phase plans required for all projects.
- Additional duties:
 - Principal Designer and Principal Contractor required when there is more than one contractor on a project.
 - Health and safety file required when above exists.

CDM Regulations: 5 Parts

- Part 1 - contains definitions and application.
- Part 2 - covers Client Duties for managing projects (productions).
- Part 3 - covers other health and safety duties and roles.
- Part 4 - contains general requirements for all construction sites.
- Part 5 - contains transitional provisions and revocations and enforcement in respect of fire.



**HSE CDM in Entertainment
Web Page:**

<https://www.hse.gov.uk/entertainment/cdm-2015/index.htm>

Definitions: Construction

“Construction work” means 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.

Construction (cont.)

- (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.

What is a Structure?

“**Structure**” means –

- (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 pipe-line, cable, aqueduct, sewer, sewage works, gasholder, road, airfield, sea defence works, river works, drainage works, earthworks, lagoon, dam, wall, caisson, mast, tower, pylon, underground tank, earth retaining structure, or structure designed to preserve or alter any natural feature, 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.

What is CDM Trying to Achieve?

- Improve the health and safety record in construction work.
- Involve all parties in making health and safety contributions.
- Encourage the integration of health and safety into project/production management.
- Ensure all appointees (designers / contractors etc.) have the necessary skills, knowledge, experience and organisational capability to manage health and safety risks.

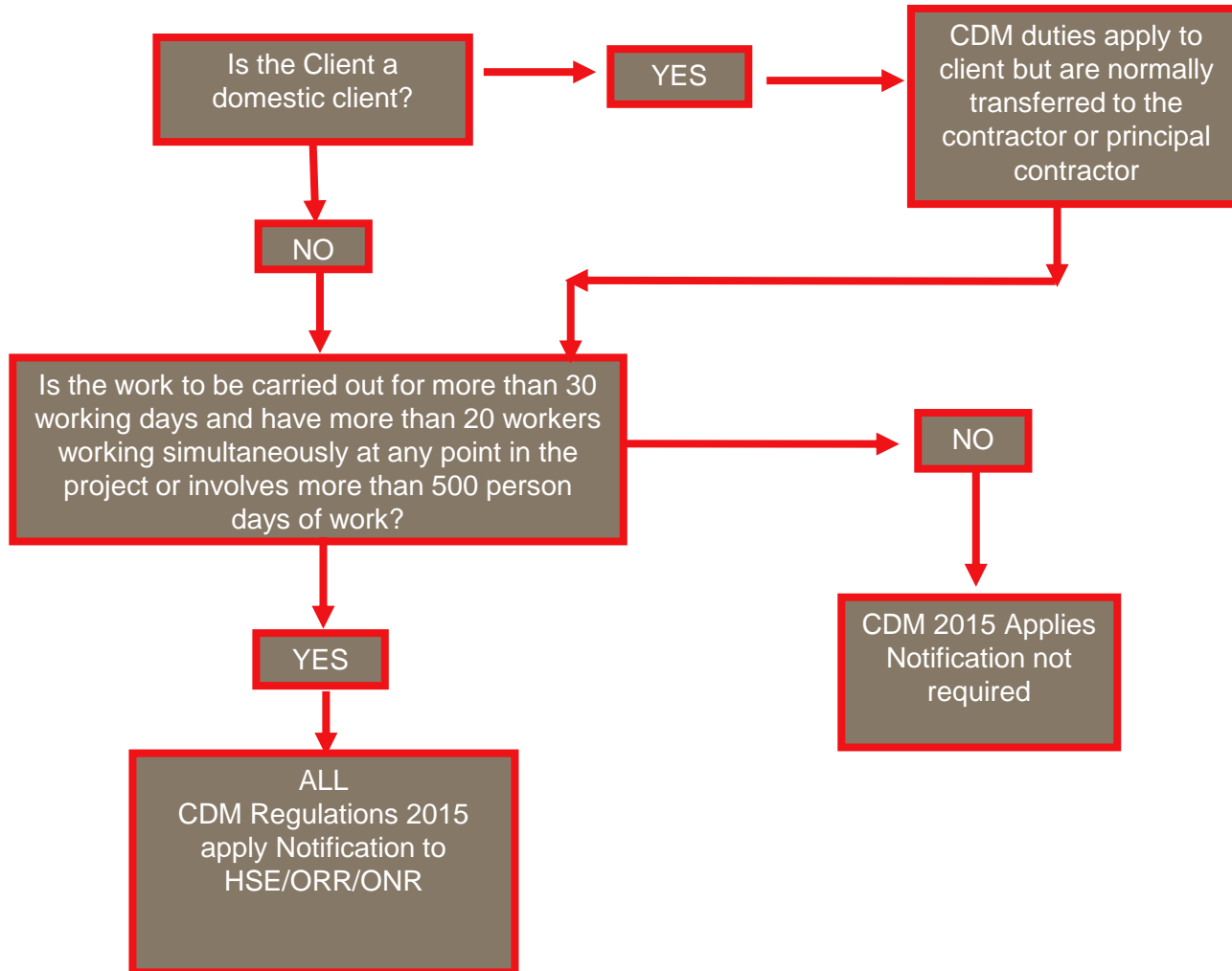


Accidents can be Related Primarily to:

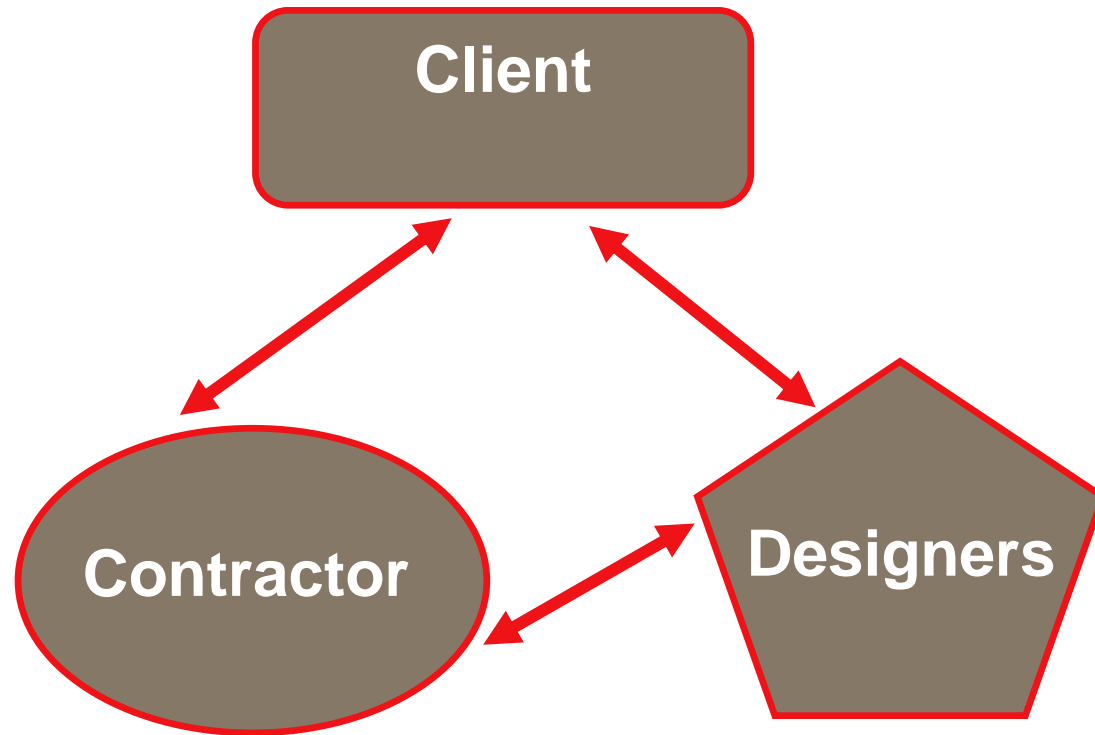
- Poor management of Health and Safety.
- Poor planning.
- Poor communication.
- Lack of training.
- Inadequate organisational control.



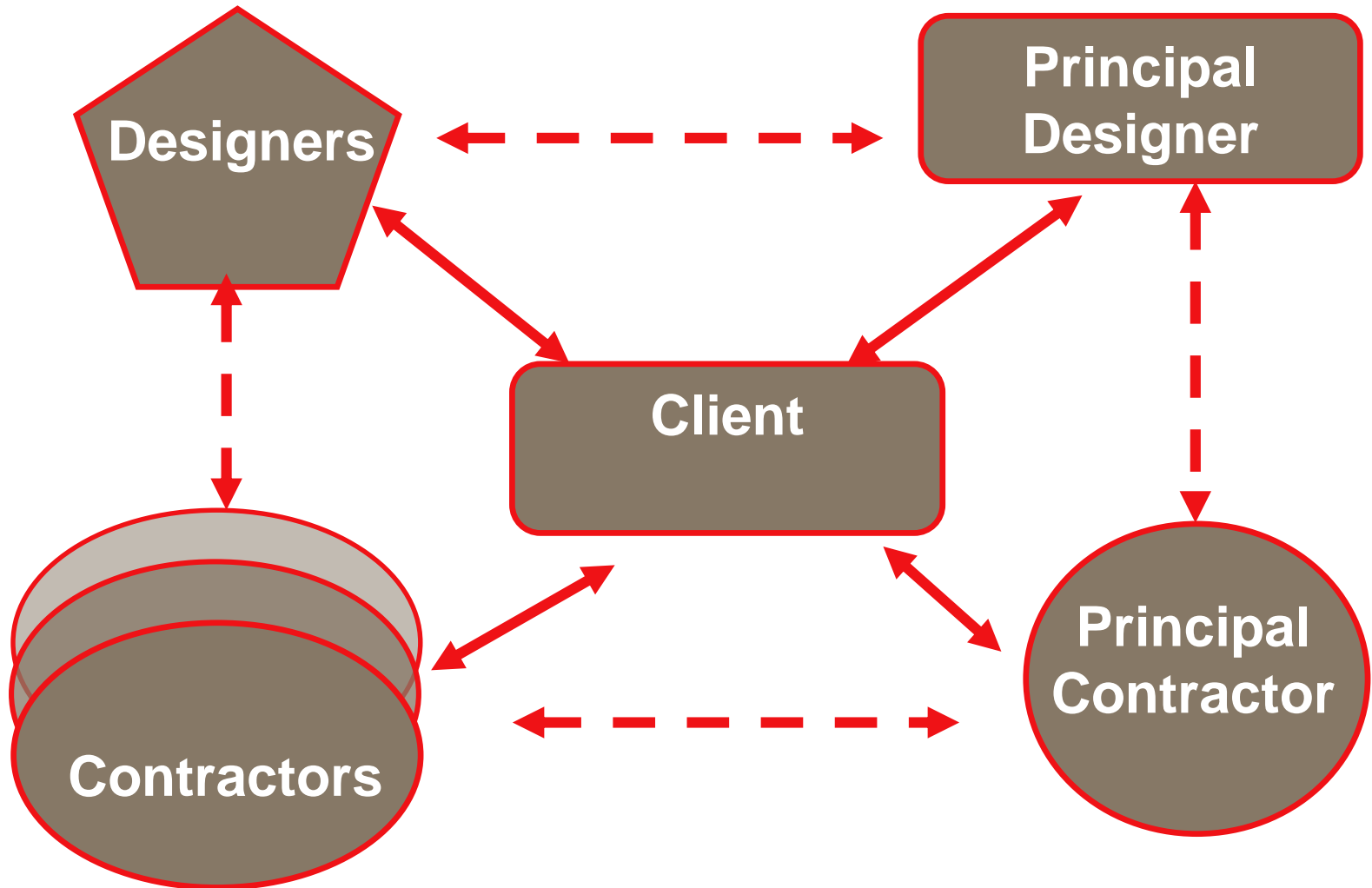
Does CDM 2015 Apply To Your Project/Production?



The Key CDM Parties – Projects with only one Contractor



The Key CDM Parties- Projects with More than One Contractor



The Key CDM Parties

1. The Client.



2. The Designer.



3. The Principal Designer.



4. The Principal Contractor.

5. Contractors and Self Employed.

Who Are Clients?

- Clients are organisations or individuals for whom a construction project/production is carried out. Often, the company who is directly funding it.



Client Duties

- If you are having building work done, you have duties under CDM. Clients should consider developing policies and procedures to meet the requirements. (E.g. NTS Sample Policy: ..\..\Clients\NTS\Policy\Health and Safety Policy_Final Draft_AE-GS_15Jan20.docx, NTS Sample Procedures: <..\..\Clients\NTS\CDM\CDM\CDM\CDM Process for National Theatre of Scotland.docx>)
- By choosing the right people for the job and appointing them early, your team can make sure that your project is safe to build, safe to use, safe to maintain, and deliver you good value.
- Invest in your team, not in paper. Give them enough time and resources and you will get the building/structure/set you want, when you want it, and on budget.
- Remember CDM 2015 makes the client accountable for the impact their decisions and approach have on health, safety and welfare on the project (their acts and omissions).

What Clients Must Do on ALL Projects

- All appointees (designers / contractors etc.) to have the necessary skills, knowledge, experience and organisational capability (if an organisation) to manage health and safety risks.
- Ensure that arrangements for managing the project are in place (including co-operation and co-ordination processes).
- Promptly provide pre-construction information e.g. client/designer brief (e.g. NTS sample: <..\..\Clients\NTS\CDM\CDM\CDM\Design brief Template.docx>)



What Clients Must Do on ALL Projects

- Allow sufficient time for all stages of the project.
- Ensure that welfare facilities are in place (Schedule 2).
- Ensure that a **Construction Phase Plan** is drawn up (contractor / principal contractor) and adequately addresses the management of risks.



Additionally where there is more than one contractor employed, Clients must:

- Appoint a competent Principal Designer (if more than one contractor envisaged – in writing)).
- Appoint a competent Principal Contractor (if more than one contractor envisaged – in writing).
- Take reasonable steps to ensure that both Principal Designer & Principal Contractor comply with their duties. Failure to appoint requires the client to fulfil the duties of the parties not appointed.



Sample appointment letters.....

<..\..\Clients\NTS\CDM\CDM\CDM\CDM app letter.docx>

Client Duties and Responsibilities (cont.)

- Where a project is notifiable give notice to the HSE (in writing) as soon as is practicable before the construction phase begins.
- Ensure the Principal Designer provides the Health and Safety File at the end of the project.
- Regularly revise or update any H&S File and make it available to ALL who need it (future work).
- Note: Client checklist:
<..\..\Clients\NTS\CDM\CDM 2015-Pre-construction Checklist.docx>



Notification to HSE

- Submitted electronically to HSE Bootle (HSE Webpages).
- As soon as resources required for project are known (timescale and number of workers).
- Provides PD details.
- Additionally, if any details not submitted become available and before PC starts work.

HSE Health and Safety Executive

Notification of construction project Zoom 100% KS ? ?

*Is this the initial notification of the project or are you providing additional information not previously available?

Initial notification Update information

Check this box if this project has multiple site locations

What is the exact address of the construction site (If there are multiple locations you must enter the main site office address)?

*Address Line 1 (address, location, grid ref) ?

(e.g. building name)

*Address Line 2

(e.g. street)

Address Line 3

(e.g. district)

*Town

County

*Post Code (The first part of the postcode is required)

*Country *Geographical Area *Local Authority

Select One Select Country First Select Geographical Area First

The Health and Safety File

Who is responsible for the provision of information?

- The Client.
- The Designers, including the Principal Designer (As Built Drawings etc.).
- The Principal Contractor.
- Contractors (via the Principal Contractor).

Maintained by the Principal Designer on behalf of Client.

The Key CDM Parties

1. The Client.



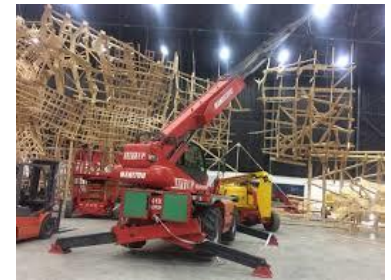
2. The Designer.



3. The Principal Designer.



4. The Principal Contractor.



5. Contractors and Self Employed.

Designers

- If you design, specify or modify a design for a construction project or arrange for or instruct someone else to do it, then you are a designer CDM 2015.
- Competent designers eliminate hazards and reduce risks – *manage the risk, not the paperwork.*
- Design for safety and health for those that build, use, maintain and demolish – *it's safer by design.*
- Tell others about significant risks which remain – give the right information to the right people at the right time.

Designers Key Tasks (all projects)

- Not commence work unless satisfied the client is aware of their duties.
- Take account of the general principles of prevention and any pre-construction information to eliminate SFARP foreseeable risks.
- Provide information on any residual risks.
- Co-operate with all other duty-holders in the project.
- Design with regard to inherent safety issues.
- Provide relevant information for the H&S File.



Designers

- Must eliminate hazards and reduce risks from the start of the design process.
- Designs should be safe to build; safe to use; safe to clean and maintain; safe to demolish/dismantle/strike.
- Should inform others of significant or unusual risks which remain.
- Amount of effort put in to risk reduction should be proportionate to the risk.



Identify Hazards and Risks in Design Work

- Identify the generic hazards in the design.
- Where feasible eliminate each hazard.
- Where it is not feasible to eliminate consider reduction measures.
- Designers must provide the information necessary to identify and manage the remaining risks.
- E.g. NTS sample templates.....
- <..\..\Clients\NTS\Arrangements-procedures\1. White card risk assessment.doc>
- <..\..\Clients\NTS\Arrangements-procedures\4.Set Risk Assessment.doc>
- <..\..\Clients\NTS\Arrangements-procedures\2.Final Design Assessment copy.doc>

Hazard Identification

Designers have direct influence over the following and should, where possible:

- Select the position and design of structures to minimise risks from site hazards.
- Design out health hazards.
- Design out safety hazards.
- Design to simplify safe construction.
- Design to simplify future maintenance and cleaning work.
- Identify demolition hazards for inclusion in the health and safety file.
- Consider prefabrication to minimise hazardous work.

Co-ordination and Co-operation

Designers MUST co-operate with duty holders and other designers. This can be encouraged by:

- Consultation and liaison with the Principal Designer where many designers are involved.
- Agreeing a common approach to risk reduction during design.
- Regular meetings of all the design team, contractors and others.
- Regular reviews of developing designs.
- Joint meetings to review designs, where there is a shared interest in an issue.
- Site visits/recces

Designer Prosecution - Example

A design practice and a construction company involved in a Somerset development were fined a total of £195,000 following a fatality on a site. Express Park Construction Company Limited (EPCC), pleaded guilty to breaching Section 3(1) of HASAWA 1974 for failing to safely manage contractors working for it.

The architects, Oxford Architects Partnership, pleaded guilty to breaching Regulations 13, and 14, of CDM 1994, which require designers to take safety considerations into account.

EPCC was fined £75,000 and ordered to pay costs of £68,000 and Oxford Architects Partnership was fined £120,000 and ordered to pay costs of £60,000.



The Key CDM Parties

1. The Client.



2. The Designer.



3. The Principal Designer.



4. The Principal Contractor.



5. Contractors and Self Employed.



Principal Designer

- The CDM Co-ordinator is no longer a duty holder in the CDM 2015 Regulations, the duties transferring to the other duty holders primarily the Principal Designer
- You must plan, manage and monitor the pre-construction phase and co-ordinate matters relating to health and safety during the pre-construction phase.
- Duty to plan, manage, monitor and co-ordinate H&S matters during the pre-construction phase taking account of the general principles of prevention, and where relevant, content of:
 1. Pre-construction information
 2. Any construction phase plan, and
 3. Any existing health and safety file.



Principal Designer

- Identify, eliminate or control foreseeable risks.
- Ensure co-ordination and co-operation.
- Provide pre-construction information.
- Liaise and assist the Principal Contractor for duration of appointment (ongoing design issues).
- Prepare the health and safety file and pass to client.

Pre-Construction Information

- The Principal Designer is expected to provide the pre-construction information to those that require it as soon as is reasonably practicable, and...
- advise the client on any further information that is required or could be ascertained by commissioning surveys, etc.
- Defined as 'information about the project that is already in the client's possession or which is reasonably obtainable by or on behalf of the client'. It must be:
 - Relevant to the particular project,
 - Have an appropriate level of detail, and
 - Be proportionate to the health and safety risks involved.

Pre-Construction Information

When complete this should include:

- Client brief and key dates of construction phase.
- Planning and management of project e.g. resources, time allocated to each stage of project, arrangements for cooperation and coordination.
- Health and safety hazards of the site, including design and construction hazards and means of addressing them.
- Relevant information from any existing H&S File.

Information Contained in the H&S File

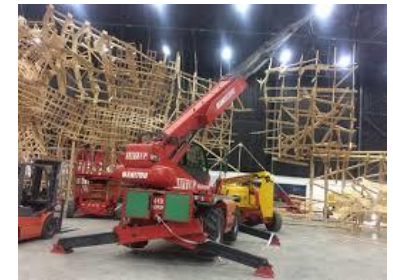
- A brief description of work carried out.
- Details of hazards not eliminated and how they have been addressed.
- Key structural principles.
- Hazardous materials used.
- 'Record' or 'As built' drawings.
- Information regarding the removal or dismantling of the set and associated equipment.
- H&S information in respect of cleaning or maintaining the structure/set.
- Nature, location and marking of significant services (e.g. Lx).
- Any other relevant material.

Lifecycle of the H&S File

- When is the File required?
 - At the end of the project given to the client.
- When is the end of the project?
 - At practical completion.
 - At end of defects period.
 - At end of maintenance period.
 -or end of the run/tour?

The Key CDM Parties

1. The Client.
2. The Designer.
3. The Principal Designer.
4. **The Principal Contractor.**
5. Contractors and Self Employed.



The Role of the Principal Contractor

- A Principal Contractor is the organisation or person that coordinates the work of the construction phase of a project involving more than one contractor so that it is carried out in a way that secures health and safety.
- The changes to the CDM Regulations mean they are involved in the project earlier, working to designs that are safer and healthier to build, receiving more relevant information and less paperwork.
- They manage health and safety on site – *manage the risk, not the paperwork.*

The Role of the Principal Contractor

- Plan, manage and monitor the construction phase and coordinate matters relating to health and safety (includes planning, sequencing and time issues).
- Satisfy themselves that any appointees have necessary skills, knowledge and experience and organizational ability in respect of health and safety.
- Ensure contractors cooperate with each other.



The Role of the Principal Contractor

- Provide suitable training (e.g. site inductions - NTS Sample template: <..\..\Clients\NTS\Arrangements-procedures\5.Pre-fit up Briefing Checklist.doc>)
- Prevent unauthorised access to the site.
- Provide suitable and sufficient welfare facilities (Schedule 2).
- Liaise with the Principal Designer (duration of project)
- Consult and engage with workers.



The Role of the Principal Contractor

- Provide the Principal Designer promptly with information relevant for the H&S File and ensure all contractors are aware what is required from them.
- Give reasonable directions to any contractor so far as is necessary to enable the principal contractor to comply with his duties.
- Provide relevant information to contractors.
- Ensure every contractor is provided with sufficient time and resources for planning and preparation before they begin construction work.



The Role of the Principal Contractor

Ensure a Construction Phase Plan is drawn up:

- As soon as is practicable **before** the construction site is set up.
- Is available to the client prior to commencement.
- Is kept up to date, reviewed and revised as the project progresses.
- Is implemented throughout.



This plan is in effect, a Site Safety management system, is an interactive, living document and must be made available to all throughout the project.

Construction Phase Plan

Must Record:

- Health and Safety Arrangements for the construction phase.
- Site Rules; and
- Where relevant specific control measures concerning any of the following items as detailed within Schedule 3 to the Regulations.
- Be relevant to the project.
- Have sufficient detail to set out clearly the arrangements, site rules and special measures.
- Be proportionate to scale and complexity of risks.

Suggested topics for inclusion within the construction phase plan

- a) A description of the project such as:
 - I. Key dates
 - II. Details of key members of the project team
- b) The management of the work including;
 - I. Health and safety aims of project
 - II. Site rules
 - III. Arrangements for cooperation and coordination
 - IV. Arrangements for involving workers
 - V. Site inductions
 - VI. Welfare facilities; and
 - VII. Fire and emergency procedures
- c) The control of any specific issues listed in schedule 3 to the regulations where relevant.

CPP for Entertainment

- Specific Statutory Requirements** - e.g. CDM provides a health and safety management framework (or system) for the management of construction projects, including productions and set-builds that involve construction work.

<https://www.hse.gov.uk/entertainment/cdm-2015/index.htm>

	CDM 2015 - Construction Phase Plan (Event/production template for simple projects)
PLAN	Client details:
	Principal Designer Details:
	Principal Contractor Details:
	Description of work/ project:
	Key dates:
WORKING TOGETHER / ORGANISE	Key members of the project team during construction and their role/ responsibilities (insert name, role and summary of responsibilities)
	How the work will be managed safely (include details of the site rules, arrangements to ensure cooperation between project team members and coordination of their work (eg regular site meetings), site inductions, welfare facilities and fire and emergency procedures. Also include arrangements for the control of any specific risks such as falls from height / collapse of structures/ handling heavy components)
	Key Arrangements:
	Key safety risks on this project are:

Prosecutions

- a) Prosecution of Black Country Builders Ltd. – failed to ensure the arrangements for carrying out demolition or dismantling work were recorded in writing before the work began.

Guilty fine £4000 under the Construction (Design & Management) Regulations 2007 Reg. 29 (2)

- b) Prosecution of Esh Construction Ltd. - Inadequate control of plant working near overhead power lines leading to cable strike.

Guilty fine £3,000 under The Construction (Design & Management) Regulations 2007 Reg. 22 (1)

Fine £2,000 under The Construction (Design & Management) Regulations 2007 Reg. 34 (2).

Prosecutions

- c) Prosecution of Vincents (Shopfitters) Ltd. Workers at a Topshop store were exposed to asbestos fibres as they removed air conditioning, sprinklers and other equipment next to ceiling beams, which had previously been coated with sprayed asbestos. The refurbishment work was allowed to go ahead despite a survey, carried out before the project started, identifying asbestos as being present in the building. Attempts were initially made to seal off access to the first floor of the building on 9 June 2008, when the sprayed asbestos on the ceiling beams was disturbed but work was allowed to continue elsewhere in the six-story building, which also houses Topman and Miss Selfridge. Vincents (Shopfitters) Ltd, **the principal contractor, failed to identifying the risks from asbestos and to take action to address them. They also failed to properly plan, manage and monitor the project.** Guilty – Fine 5,000.00 the Construction (Design & Management) Regulations 2007 Reg. 22. Fine 5,000.00 the Construction (Design & Management) Regulations 2007 Reg. 23 (2).

The Key CDM Parties

1. The Client.
2. The Designer.
3. The Principal Designer.
4. The Principal Contractor.
5. **Contractors and Self Employed/Freelancers**



Contractors – All Projects

- Plan, manage and monitor construction work.
- Cooperate with other duty holders.
- Comply with directions given by Principal Designer or Principal Contractor to secure health and safety.
- Draw up a construction phase plan as soon as practicable before construction site set up if only one contractor on project.



Contractors – All Projects

- Ensure any appointees have the necessary skills, knowledge and experience to carry out work employed for.
- Assess and where necessary provide training for workers.
- Provide adequate supervision.
- Provide information and instruction to employees and workers under their control.
- Do not commence work unless unauthorised access to site is in place (PC involvement where more than one contractor employed).
- Provide welfare facilities (own employees also refer to PC duties).



ACOP and Industry Guidance

- Regulations currently supported by industry produced guidance and new L153 – Managing health and safety in construction.
- Industry guidance co-ordinated through CONIAC working group.
- Contains examples (general construction).
- HSE Web pages – CDM 2015 in the entertainment industry - <https://www.hse.gov.uk/entertainment/cdm-2015/index.htm>
- CITB CDM Web Pages: <https://www.citb.co.uk/about-citb/partnerships-and-initiatives/construction-design-and-management-cdm-regulations/cdm-regulations/>

CDM 2015 – Part 4 – Key parts

- General requirements for construction work.
- Safe places of construction work.
- Good order and site security.
- Stability of structures.
- Demolition, dismantling (including strikes).
- Explosives (including pyro).
- Reports of inspections.
- Energy distribution
- Prevention of drowning

CDM 2015 – Part 4 – Key parts – Cont'd

- Traffic routes
- Vehicles
- Prevention of risk from fire, flooding or asphyxiation.
- Emergency procedures.
- Emergency routes and exists.
- Fire detection and fire fighting
- Temperature and weather protection.
- Lighting

Key Messages

- The focus is on effective planning and management of risk.
- Paperwork should be risk focussed and project specific.
- Provide the right information to the right people at the right time.
- All duty holders will need to have the necessary skills, knowledge, training and experience to carry out the work.



Questions?

