Science and Technology Facilities Council

The Construction (Design and Management) Regulations 2015 (CDM^{2015})

STFC Safety Code No 13

Rev. 2.0, Issued November, 2018

Revisions

1	Initial Launch	December 2007
1.1	Update to include SWMP	January 2009
1.2	Further minor update to include SWMP	January 2012
1.3	Minor amendment to training section	May 2013
2	Major update in line with CDM2015	September 2018

Contents

1. PURPOSE

The purpose of this SHE Code is to define how the STFC will manage projects where the Construction (Design and Management) Regulations 2015 (CDM^{2015}) apply.

CDM^{2015} applies to all projects involving any construction work on a structure. Where any project activity involves construction processes, requires construction skills and uses construction materials, it is likely to fall within the term 'construction work' (see Section 3 Definitions for more info.)

CDM^{2015} is primarily about following good health and safety practices, including communicating, cooperating and being aware of potential hazards.

If CDM does not apply (ie the project does not fit the definition of construction work) other health and safety legislation will still apply and risks must still be managed – see SHE Code 15.

STFC must have management arrangements in place for all projects that are proportionate to the risks arising from the work and are suitable to ensure that the project can be carried out at minimised risk to the health and safety of any person.

Under CDM^{2015}

All projects involving **construction work** must be overseen by a Client.

For projects with more than a single contractor:-

- the Client must appoint a Principal Designer (PD) to manage the health and safety aspects of the design / pre-construction phase.
- the Client must appoint a Principal Contractor (PC) to manage the health and safety aspects of the construction phase.
- if the Client does not appoint a PD or a PC then the Client takes on all the duties of these roles.

For projects with only one contractor:-

- the Principal Designer (PD) and Principal Contractor (PC) are not required.
- the Contractor must still produce a construction phase plan.

Note - If STFC staff are carrying out construction work alongside an external contractor the project is classed as having more than one contractor.

2. SCOPE

This Code applies to all building, science and engineering construction work as defined by the CDM2015 Regulations. (See definition of construction work in Section 3).

Many types of maintenance and repair work also fall within the definition of construction work and there are no exemptions for short duration work, but the controls should be proportionate to the risks.

Under CDM2015 the STFC will have duties as the Client; and could take on the duties of Principal Designer, Designer, Principal Contractor or Contractor.

Some large construction projects carried out by STFC may need to be notified to the HSE. See Appendix 2 on how to determine whether the work is notifiable.

Note: this Code may need to be considered in association with the STFC Project Management Framework:
https://staff.stfc.ac.uk/prog/project/Documents/ProjectFramework.pdf

3. DEFINITIONS

Table 3.1

Client	A Client is an organisation or individual for whom a construction project is carried out. For the purposes of this Code, the Client is the STFC.
Appointed Client	For the purpose of this Code, an Appointed Client is an STFC employee who has been appointed by the Department Director to carry out all the duties of the Client as described in CDM2015.
Construction phase plan (CPP)	A document prepared by the Principal Contractor (or Contractor) recording the health and safety arrangements, site rules and any special measures for construction work. (see Appendix 6) The CPP should be proportionate to the scale and risks of the project. For single contractor work and for maintenance/repair work the Risk Assessments and Method Statement (RAMS) may form the CPP.
Construction work	Where any project activity involves construction processes, requires construction skills and uses construction materials, it is likely to fall within the term 'construction work'.(1) This covers any building, civil engineering or engineering construction work and will include: • The construction, alteration, conversion, fitting out,

	commissioning, renovation, repair, upkeep, redecorating or other maintenance (including high pressure cleaning), de-commissioning, demolition or dismantling of a structure; • Site preparation – site clearance, exploration, investigation (but not site survey) and excavation; • The assembly on site of prefabricated elements to form a structure or the disassembly on site of prefabricated elements which, immediately before disassembly formed a structure; • The removal of a structure or of any product or waste resulting from demolition or dismantling of a structure; • The installation, commissioning, maintenance, repair or removal of mechanical, electrical, gas, compressed air, hydraulic, telecommunications, computer or similar services which are normally fixed within or to a structure. Notes: • The above is likely to include scientific projects involving equipment, building and infrastructure changes. • Where maintenance activity involves construction processes, requires construction skills and uses construction materials, it is likely to fall within the term 'construction work'. • General maintenance of fixed plant which mainly involves mechanical adjustments, replacing parts or lubrication is unlikely to be construction work. • Work on a piece of experimental equipment is unlikely to be construction work.
Contractor	An external organisation, or the STFC itself, carrying out works. Note – 'contractor' is the organisation and not individual employees.
Principal Contractor **(PC)**	An external organisation, or the STFC itself, undertaking the duties of Principal Contractor as set out in CDM[2015]. The Principal Contractor is in overall control of the construction phase of the project. Note – 'the Principal Contractor' is the organisation and not an individual. For some projects (especially smaller projects) the Principal Contractor may also be the Principal Designer.
Competency	This is the demonstration by an individual or organisation that they have sufficient experience, knowledge and other skills to carry out their duties to a satisfactory standard.

Design	This covers specifications, drawings, construction details, experiment requirements, scientific limitations, bills of quantities etc. relating to a structure, and calculations prepared for the purpose of a design.
Principal Designer **(PD)**	An external organisation, or the STFC itself, undertaking the duties of Principal Designer as set out in CDM[2015]. The Principal Designer is in overall control of the pre-construction phase of the project. Note – 'the Principal Designer' is the organisation and not an individual.
Designer	An external organisation, or the STFC itself, who: • Prepares or modifies a design; or • Arranges for, or instructs any person under its control to do so.
General Principles of Prevention	a) avoid risks; b) evaluate the risks which cannot be avoided; c) combat the risks at source; d) adapt the work to the individual, especially regarding 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, work at a predetermined work rate and to reducing their effect on health; e) adapt to technical progress; f) replace the dangerous by the non-dangerous or the less dangerous; g) develop a coherent overall prevention policy which covers technology, organisation of work, working conditions, social relationships and the influence of factors relating to the working environment; h) give collective protective measures priority over individual protective measures; and i) give appropriate instructions to employees.
Health and safety file	A document containing significant health and safety information relating to the project which is likely to be needed during subsequent project / construction work, maintenance and decommissioning (see Appendix 8).
Notifiable project	A notifiable project is one that meets certain criteria (see Appendix 2) such that it needs to be notified to the HSE.
Pre-construction information	Information required by CDM[2015] to be given by STFC to Designers and Contractors appointed by the Client. Information includes: • Information affecting the site of the works e.g. known hazards • Information concerning the proposed use of the finished product. • The amount of time to be provided to the Contractor to make preparations before starting on site

	• Information in any existing health and safety file.
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 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, false work, 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;

Table 3.2 **Examples of projects classed as construction work**

	Description
1	Major new building or extension.
2	Preparation of an area or building to house a new beamline/experiment including for example: partitions, ceilings, structural modifications, shielding, piped services, fire and alarm systems and isolatable services.
3	Installation of major equipment that can reasonably be considered to be a structure (for example an ISIS target blockhouse) or is integral to the structure/fabric of the building.
4	Re-organising or redesigning machinery, experiments or physical layouts within a facility involving the alteration of “hard wired / hard piped” mains services which are integral to the structure.
5	Dismantling experiments which are structures for repair, refurbishment or decommissioning.
6	Modifying internal facility areas by installing or removing structures such as walls (this would include radiation shielding forming a shielded enclosure, bunker, block house or tunnel).
7	Installation, commissioning, maintenance, repair or removal of services (electrical, gas, compressed air, hydraulic, heating, cooling, ventilation, telecommunications, computer or similar services) which are normally fixed within or to a structure.
8	Project involving the erection of scaffolding by specialist scaffold contactors (for example, tube & clip scaffolds).

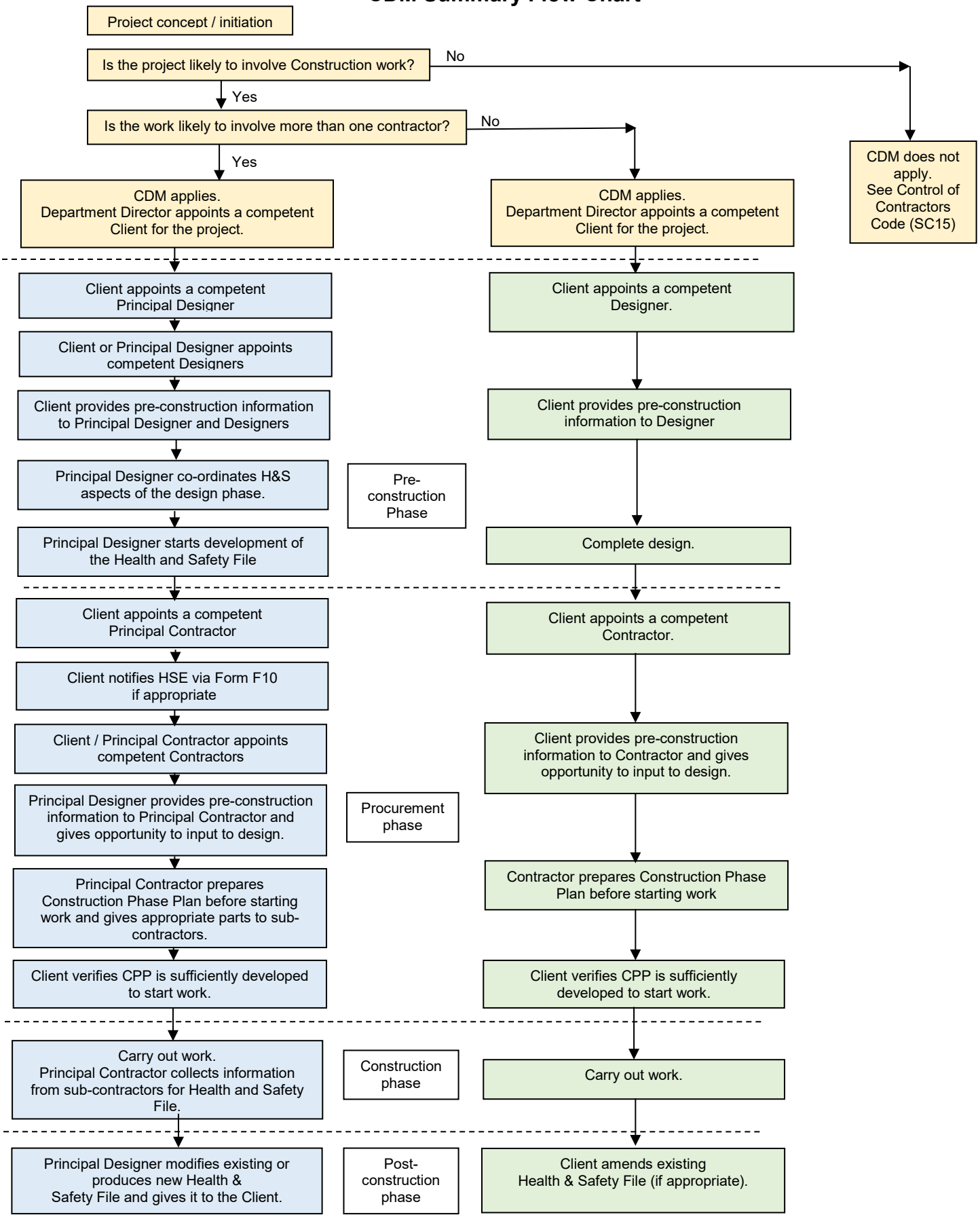
Table 3.3 **Examples of projects <u>not</u> classed as construction work**

	Description
1	Surveying – this includes taking levels, making measurements and examining a structure for faults.
2	Installation, assembly and commissioning of scientific and other equipment, for example; vacuum chambers, optics tables, smaller scale experimental apparatus, equipment in a beam line.
3	Work on or maintenance of experimental equipment and machinery e.g. bench top equipment which is plugged-in, wheeled equipment, battery operated equipment or stand-alone items.
4	Movement or removal of a section of a structure which has been specifically designed for movement or removal (e.g. a section of shield wall)
5	Tree planting and general horticultural work (unless as part of a larger construction project).
6	Putting up and taking down marquees and similar temporary structures.

Example of CDM application with escalating project complexity

Works to be Undertaken	Comments	Construction work?	More than one contractor?	Duty Holder Required					Notifiable?
				Client	Principal Designer	Principal Contractor	Designer	Contractor	
Initial survey work.	Not construction work CDM2015 does not apply. Follow SHE Code 15	No	No	Yes	No	No	Possibly	Yes	No
Project with work fitting the definition of construction work carried out on a structure by a single contractor.	A construction phase plan must still be produced by the contractor and agreed by STFC client.	Yes	No	Yes	No	No	Yes	Yes	Possibly
Project with work fitting the definition of construction work carried out on a structure by more than one contractor.	Documented appointment required for the PD and PC	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Possibly
Project with work fitting the definition of construction work carried out on a structure Project duration is more than 30 days with at least 20 workers on site on one or more days, or more than 500 person days of construction work.	Project must be notified to the HSE by the Client before work starts (form F10).	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

CDM Summary Flow Chart



Notes:

For simple construction works requiring only one Contractor company:-

- The Client - Contractor relationship can easily be managed on a one to one basis.
- The STFC Client will be responsible for confirming that a Contractor company has the right competence (skills, knowledge, training and experience) to carry out the intended works (see Appendix 7), and has a clear plan of how this will be achieved. The latter will be evidenced by the presence of a construction phase plan (CPP).
- The CPP need not be excessively detailed but it must show that the contractor has planned the work and understands the significant hazards and controls. The Risk Assessment and Method Statement may sufficiently fulfil this requirement.

4. RESPONSIBILITIES

Any of the following roles (apart from Departmental Director) can be undertaken by any person e.g. Division Heads, Group Leaders, Line Managers, Project Managers, etc. They are not position, functional or departmental dependant, but are based on competency for the role to be performed.

The following responsibilities are based on the CDM2015 duty holders and not specific roles within the STFC. Hence the role of the Project Manager is not included here. The Project Manager could carry out all or some of the duties on behalf of the duty holder.

4.1 Directors shall:

4.1.1 Ensure an appropriate STFC staff member is appointed to act as Client for each identified project. (Annual appointments can be made if appropriate.) These appointments will be recorded (see Appendix 11).

4.1.2 Ensure the person chosen has adequate experience and knowledge to carry out the duties of the Client.

4.1.3 Ensure Appointed Clients are provided with sufficient time and resources to carry out their duties.

4.2 The Appointed STFC Clients shall:

4.2.1 Ensure duty holders from an external organisation, or other STFC appointed staff members, assigned roles under CDM2015 are provided with sufficient time and resources to carry out their duties.

4.2.2 Appoint a competent Principal Designer to plan and manage the pre-construction phase early enough to work with the project team on issues relating to design, buildability, usability and maintenance. The appointment should be in writing, and may be transferred to other parties through the project (see Appendix 11).

4.2.3 Appoint a competent Principal Contractor to plan and manage the construction phase early enough to work with the project team on issues relating to buildability, usability and maintenance. The appointment should be in writing, and may be transferred to other parties through the project (see Appendix 11).

4.2.4 Ensure that any STFC staff appointed as a duty holder (ie Principal Designer, Designer, Principal Contractor, Contractor) is aware of their duties under CDM2015 and are able to carry them out.

4.2.5 Check competence and resources of all appointees – internal as well as external.

4.2.6 For Notifiable projects ensure an F10 is prepared and updated for the project and submitted to the HSE.

4.2.7 Ensure there are suitable management arrangements for the project. Refer to Appendix 3 for Client's Management Arrangements.

4.2.8 Provide pre-construction information to Designers and Contractors. Refer to Appendix 4.

4.2.9 Ensure, as far as the Appointed Client is able, that all duty holders carry out their duties.

4.2.10 Ensure that Contractors are told the minimum notice that they will be given before they are expected to start construction work, to ensure that Contractors have sufficient time to plan and prepare.

4.2.11 Ensure that the construction phase does not start unless suitable welfare facilities; a suitable construction phase plan; and a Waste Management Plan are in place.

4.2.12 Ensure that the health and safety file is prepared, reviewed, or updated ready for handover at the end of the construction work. The completed file should be kept available for inspection by any person who may need information after the project is completed.

Note: Appointed Clients may require support to satisfy the delivery of these duties. Support can be provided by external CDM specialist companies who operate as advisors to the process. The use of such advisors can ensure that all the regulatory requirements have been met, but the legal responsibility remains with the Appointed Client.

4.3 Designers shall:

4.3.1 Ensure sufficient time and resources are set aside to carry out their duties.

4.3.2 Assess their designs during all design stages, and then throughout the design process, to ensure the general principles of prevention are applied to eliminate hazards and reduce risks during design.

4.3.3 Provide information about remaining risks within the construction documentation.

4.3.4 Check that the STFC as the Client is aware of their duties.

4.3.5 Take account of any pre-construction information provided.

4.3.6 Provide any information needed for the health and safety file.

4.3.7 Co-operate with all other duty holders

4.3.8 Consider the hazards and risks to those who:
- Carry out construction work including demolition
- Undertake maintenance activities
- Use the building / area / facility
- May be affected by the work – visitors or the general public.

4.4 Principal Designers shall:

4.4.1 Plan, monitor and co-ordinate health and safety in the pre-construction phase of a project.

4.4.2 Check that designers have the necessary competence to carry out their role.

4.4.3 Apply the general principles of prevention (see Table 3.1) to eliminate risks to the health and safety of any person:-
- carrying out or liable to be affected by construction work
- maintaining or cleaning a structure / equipment, or
- using a structure / equipment designed as part of a workplace.

The emphasis is on prevention, as hazards can be designed out at this stage

4.4.4 Ensure other Designers carry out their duties**.**

4.4.5 Provide pre-construction information to other duty holders.

4.4.6 Co-ordinate health and safety aspects of design work and cooperate with others involved with the project.

4.4.7 Provide relevant information to the Principal Contractor to help them plan, manage, monitor and coordinate health and safety in the construction phase.

4.4.8 Prepare and, during the pre-construction phase of the project, update the health and safety file (see Appendix 8), ensuring it is passed to the Client at the end of the project.

Note: Principal Designers may require support to satisfy the delivery of these duties. Support can be provided by external CDM specialist companies who operate as advisors to the process. The use of such advisors can ensure that all the regulatory requirements have been met, but the legal responsibility remains with the Principal Designer.

4.5 Principal Contractors shall:

4.5.1 Plan, manage and monitor the construction phase in liaison with other

Contractors and persons involved in the project.

4.5.2 Prepare, develop and implement a written construction phase plan and site rules. (Note that the Initial plan needs to be completed before the construction phase begins). See Appendix 6 for guidance on preparing the Construction Phase Plan.

4.5.3 Give Contractors relevant information from the plan before they start work (for example the minimum amount of time which will be allowed for planning and preparation prior to commencing work on site).

4.5.4 Check competence of all their appointees.

4.5.5 Ensure all workers have site inductions and any further information and training needed for the work (see Appendix 5).

4.5.6 Consult with the workers on Health, Safety and Welfare matters.

4.5.7 Ensure the welfare facilities are provided throughout the construction phase,

4.5.8 Liaise with the Principal Designer regarding ongoing design and ensuring Designers co-operate during the construction phase.

4.5.9 Secure the site to ensure only authorised persons gain access and implement appropriate site rules.

4.5.10 Ensure information for the health and safety file is identified from each contractor and that it is promptly provided to the Principal Designer.

4.5.11 For notifiable projects (Appendix 2), display the F10 Notification so that it can be seen by all on site.

4.5.12 Plan, co-ordinate, manage and monitor the work of themselves, other contractors and the interface to others working in surrounding areas.

4.6 Contractors shall:

4.6.1 Ensure they are competent to carry out their duties and that they set aside sufficient time and resources to complete the duties.

4.6.2 Plan, manage and monitor their own work

4.6.3 Check competence of all staff working for them.

4.6.4 Ensure staff receive any necessary training.

4.6.5 Provide relevant information to staff

4.4.6 Co-operate with the Principal Contractor in planning and managing work, including reasonable directions and site rules.

4.6.7 Provide details to the Principal Contractor of any sub-contractor they engage in connection with carrying out the work.

4.6.8 Provide any information needed for the health and safety file.

4.6.9 Only start work when they receive relevant information from the Construction Phase Plan from the Principal Contractor.

4.6.10 Inform the Principal Contractor if they consider that the Construction Phase Plan does not adequately identify and mitigate risks.

4.6.11 Inform the Principal Contractor of accidents, diseases and dangerous occurrences.

4.6.12 Co-operate with all other duty holders.

5. REEFERENCES

L153 – Managing Health and Safety in Construction, HSE, 2015
Industry guidance for Clients, CITB, 2015
Industry Guidance for Principal Designers, CITB, 2015
Industry Guidance for Designers, CITB, 2015
Industry Guidance for Principle Contractors, CITB, 2015
Industry Guidance for Contractors, CITB, 2015
RIBA Plan of Work, 2013
(1)Definition of Construction Work – IOSH Magazine 23 Feb 2016

Appendix 1. Training requirements for STFC staff who have CDM duties

This Appendix identifies the suggested training requirements arising from the implementation of the CDM SHE Safety Code. It specifically relates to the requirements of each CDM duty holder.

This is for STFC staff undertaking CDM roles.

Role	Initial Training	Refresher Training	Frequency
Departmental Directors	• Briefing by STFC SHE Team. • On-line BiteSize CDM package.	• On-line BiteSize CDM package.	5 Yearly
Appointed Clients	• CDM Overview Awareness Course (eg CITB - CDM for Clients) • STFC 3 day Technical Managers Course • Briefing by Designer / Principal Designer on CDM Client duties.	• CDM Overview Awareness Course. • At the beginning of each project.	5 Yearly At 1st briefing meeting on project.
Designers	• CDM Overview Awareness Course (eg CITB - CDM for Designers) • Demonstration of specific design competence to a particular discipline. • STFC 3 day Technical Managers Course or NEBOSH Construction Certificate	• CDM Overview Awareness Course. • As part of a CPD training programme. • No refresher requirement	5 Yearly

Principal Designer	• CDM Overview Awareness Course. (eg CITB - CDM for Principle Designers) • Demonstration of specific competence to operate as a Principal Designer. • STFC 3 day Technical Managers Course or NEBOSH Construction Certificate	• CDM Overview Awareness Course. • As part of a CPD training programme. • No refresher requirement	5 Yearly
Principal Contractor	• CDM Overview Awareness Course (eg CITB - CDM for Principle Contractors) • STFC 3 day Technical Managers Course or NEBOSH Construction Certificate • CITB – Site Management Safety Training Scheme certificate (if required)	• CDM Overview Awareness Course • No refresher requirement. • CITB – Site Management Safety Training Scheme certificate refresher	5 Yearly
Contractor	• CITB Construction Skills test.	• CITB Construction Skills test.	5 Yearly
Employees involved with projects	Via an awareness campaign and at induction		

Notes:

Training needs to be proportionate and appropriate to the risks of the work.

For STFC experimental work, existing training, skills and experience may be valid

Alternative courses/competencies should be validated with STFC SHE Team.

The CDM Awareness course needs to address the specific duties of individual attendees dependant on their roles.

Appendix 2. Notification

Notifiable Projects:

CDM2015 requires certain construction projects to be notified to the HSE. A project is notifiable if the construction phase is likely to:

a) Last more than 30 days and have 20 workers on site simultaneously at any point during the project; or

b) involve more than 500 person days of construction work.

An example would be 50 people working for over 10 days.

Clarification issues:

1. Note that the 10 days in the above example relates to all days on which construction work takes place not to them being on consecutive days.
2. For a non-notifiable project which requires a short extension, or short-term increase in the number of people, there is no need to notify HSE. However, if the work or scope changes significantly so that it becomes notifiable, HSE should be informed as soon as possible.

Who notifies the HSE?

The Appointed Client is responsible for notifying the HSE using the F10 Notification form as soon as is practicable after the Principal Contractor is appointed, but before the construction phase begins.

The F10 form should be re-issued when updates are required, for example when any significant changes occur or there is a change to one of the duty holders etc.

The easiest way to notify any project to the HSE is to use the electronic F10 notification form at https://www.hse.gov.uk/forms/notification/f10.htm.

Appendix 3. STFC CDM Project Management Arrangements

The purpose of CDM2015 is to ensure that health and safety is co-ordinated and managed throughout all stages of the project including; design, procurement, construction, commissioning and handover in order to reduce accidents, ill health and latent risks.

STFC must have arrangements in place for effectively managing construction projects that are proportionate to the risks arising from the work, and are suitable to ensure that construction can be carried out with minimal risk to the health and safety of any person.

These checks should be carried out by the Appointed Client (or someone appointed on their behalf) for all projects undertaken.

Guidance on the checks required to ensure that effective management arrangements are in place is outlined below. For smaller projects and/or single contractor projects some of these items are not required and can be answered as N/A or deleted.

Any activity which is initially indicated as 'No' must be addressed and confirmed on completion.

Project Name:			
Project Number:			
Date Prepared:		**By Whom:**	

Item No.	Project Specific Management Arrangements	Confirmed		Date confirmed
		Yes	No	
1	Has a Client been appointed for this project by the Department Director?			
2	Is the person acting as Appointed Client is aware of their CDM duties and what is expected of them?			
3	Has a clear brief been prepared by the Appointed Client including; project objectives, timescales, finance arrangement, health, safety and environmental performance etc.?			
4	Has the relevant information been obtained and issued to provide pre-construction information as per SHE Code 13 Appendix 4?			

5	Are all members of the project team aware and clear about their roles and responsibilities?			
6	Have all required appointments been made for designers, principal designer, contractor and principal contractor?			
7	Can the Appointed Client demonstrate that appropriate time is available for all phases of the project (e.g. through milestones plans); feasibility, design, construction commissioning, handover etc.?			
8	Does the Appointed Client have processes in place to confirm the Principal Designer and Principal Contractor comply with their duties?			
9	Has the format of the health and safety file been agreed with the STFC Appointed Client?			
10	Do all duty holders have an effective process in place for consultation during the project?			
11	Has the Principal Designer confirmed and evidenced that co-ordination and design reviews will be built into the design programme?			
12	Does the Principal Designer have arrangements in place for signing off variations / instructions?			
13	Do the Principal Designer / Contractors with design responsibilities have arrangements in place to co-operate with STFC's design team?			
14	Does the Principal Designer have arrangements are in place for collecting the health and safety file information?			
15	Are processes in place to confirm that all designers will work together without causing danger to either construction workers, maintenance staff or users of the facility?			
16	Are arrangements in place to alert the Appointed Client to significant / late design variations?			
17	Are the arrangements and format of the health and safety file determined, including whether it is to be hard copy or electronic?			

18	Is sufficient time allowed for the Principal Contractor to plan and mobilise the construction work? (Note – to be confirmed by PC)			
19	Has the Principal Contractor arrangements in place for providing welfare facilities on site?			
20	Are the welfare arrangement in place from the start of construction?			
21	Has the Principal Contractor prepared a Construction Phase Plan (CPP) that addresses the main risks during all stages of construction? (Note – this document will require regular review and assurance to confirm it remains up to date and applicable to the works carried out).			
22	Does the Principal Contractor have suitable arrangements in place for site induction, including any STFC specific requirements?			
23	Has a project directory been completed?			

Appendix 4. Guidance on providing Pre-construction information

Project specific health and safety information

STFC have procedures in place to ensure that there is timely release of project specific health and safety information needed by Designers and Contractors to identify hazards and risks associated with the design and construction work. This will be known as – 'the Pre-construction Information'.

Pre-construction information

- The Client and the Principal Designer will provide Designers and Contractors with project specific health and safety information needed to identify hazards and risks associated with the design and construction work.
- The information should be provided as part of the tendering or early procurement process. Responses from tendering Designers or Contractors to the issues should always be sought as they will help in the evaluation of competence during this stage.
- The information needs to be identified at an early design stage and issued to those who are either tendering for work or preparing to carry out construction work.
- Where there are gaps in the information STFC will arrange to carry out the necessary surveys in advance and provide complete and accurate information to those who need it.
- The information should be sufficient to identify the significant risks during the construction work. The focus should be on those issues that Designers and Contractors could not reasonably be expected to anticipate or identify.
- Where design work continues during the construction phase, the pre-construction information will need to be provided to Designers before work starts on each new element of the design.
- Generally information from STFC will consist of all or some of the following:
    - A health and safety file from earlier work;
    - Previously carried out surveys or assessments;
    - Existing drawings covering construction, electrical and mechanical information.

The level of detail in the information should be proportionate to the risks involved in the project.

Example CDM Pre-Construction Safety Information for Small Projects

1	**Description of the works**	New small power and comms installations in connection with office refurbishment.
2	**Location of works**	Room G.63, Building R25, RAL, Chilton, Oxon, OX11 0QX
3	**HSE notification of construction project F10**	Not applicable (project does not exceed thresholds).
	Start date	dd / mm / yyyy
	Finish date	dd / mm / yyyy
4	**Access information**	No special arrangements.
	A Delivery arrangements	Contractor arrangements.
	B Emergency escapes and arrangements	Follow directional signs to final exit doors, comply with STFC policy as per induction procedures.
	C Security	No special security requirements. Normal STFC rules apply.
5	**Risks identified by Client**	
	A Ionising radiation	N/A
	B Asbestos	Refer to the Asbestos Management Survey attached with Order. The Contractor should not start work unless they are satisfied that they have been provided with adequate information on any asbestos that may be present. Should any suspect materials be encountered works should cease immediately and the Project Manager advised.
	C Working at height	N/A
	D Overhead cranes	N/A
	E Mechanical services	N/A
	F Electrical services	Yes – *as installed electrical services drawings and distribution details can be issued on request*
	G Gases	N/A
6	**Client Health & safety plan**	Inclusive of RAL induction and pre-construction information provided by Principal Designer.
7	**Environmental considerations**	No special requirements.
8	**Welfare**	Use of toilets and wash facilities.
9	**Project team & roles**	
	A Client	STFC – *(name of appointed client)*
	B Principal Designer	STFC – *(name of contact person)*
	C Principal Contractor	Contractor name and contact person
	D Designers	As required
	E Other Contractors	N/A
	F Customer liaison	As required

Example CDM Pre-Construction Safety Information for Larger Projects

Project Name:			
Project Number:			
Date Prepared:		**By Whom:**	

Item No.	Pre-construction Information	Required		Date provided
		Yes	No	
1.0	**Description of project:**			
1.1	Provide key dates (including planned start and finish of the construction phase)			
1.2	Define the minimum time to be allowed between appointment of the Principal Contractor and instruction to commence work on site			
1.3	Project Directory compiled including details of Client, Principal Designer, Designers, Principal Contractor and other appointed consultants (where applicable).			
1.4	If the structure is to be used as a workplace, confirm from the Designers that the finished design has taken account of the relevant requirements of the Workplace (Health, Safety and Welfare) Regulations 1992.			
1.5	Identify the extent and location of existing records and plans			
2.0	**STFC's CDM management requirements:**			
2.1	State project planning requirements and provide health and safety goals for the project.			
2.2	Are there any specific communication and liaison requirements between STFC and others associated with the project?			
2.3	Are there any specific or special security requirements for the site / area?			
2.4	Who will provide the welfare provision and where will it be located?			

2.5	What will be the site / area hoarding requirements?			
2.6	Identify site transport arrangements limitations e.g. laydown areas.			
2.7	Identify any vehicle movement restrictions.			
2.8	Will a permit-to-work system be required?			
2.9	Will there be any special fire precautions required and will a fire risk assessment be required to comply with the STFC policies?			
2.10	Identify any emergency procedures and means of escape.			
2.11	Will there be any “No-go” areas or other authorisation requirements for those involved in the project?			
2.12	Are there any areas that have been designated as confined spaces?			
2.13	Are there any parking restrictions?			
3.0	**Environmental restrictions and existing on-site risks**			
	Safety hazards			
3.1	Will temporary access be required?			
3.2	Are there any narrow roads preventing turning or storage space?			
3.3	Will there be any restrictions on deliveries or waste collection or storage?			
3.4	Identify the adjacent land uses and determine if they will have any effect on the project?			
3.5	Is there any existing storage of hazardous materials adjacent to the site?			
3.6	Identify the location of existing services particularly those that are concealed – water, electricity, gas, comms etc.			

3.7	Have ground conditions been determined?			
3.8	Are there any existing underground structures or water courses adjacent or under the site that might affect the safe use of plant, e.g. cranes, or the safety of groundwork			
3.9	Provide information about existing structures covering the following areas: • stability of the structure • Structural form • Fragile surfaces or hazardous materials • Anchorage points for fall arrest systems (particularly where demolition is involved)			
3.10	Have there been any previous structural modifications? (Including the weakening or strengthening of the structure - particularly where demolition is involved)			
3.11	Has there been any of the following issues: • Fire damage • ground shrinkage • movement of the structure • poor maintenance which may have adversely affected the structure			
3.12	Are there any difficulties relating to plant and equipment e.g. overhead gantries whose height restricts access.			
3.13	Provide any health and safety information contained in earlier design, construction or “as-built” drawings, such as details of pre-stressed or post-tensioned structures.			
	Health hazards			
3.14	Confirm situation regarding asbestos, including results of surveys (particularly where demolition is involved).			

3.15	Existing storage of hazardous materials.			
3.16	Contaminated land, including results of surveys.			
3.17	Identify any existing structures containing hazardous materials.			
3.18	Identify any hazards and health risks arising from STFC's activities. Specifically: • Ionising radiation • Non-ionising – e.g. lasers, electromagnetic fields • Biohazards • Chemicals • Legionella			
4.0	**Significant design and construction hazards**			
4.1	Ensure that significant design assumptions and suggested work methods, sequences or other control measures are provided to those who need the information.			
4.2	Identify the arrangements for co-ordination of on-going design work and handling design changes.			
4.3	Ensure that design information on significant risks identified during design is provided to those who need the information.			
4.4	Identify any materials that will require any particular precautions.			
5.0	**The Health and Safety File**			
5.1	Provide a description of its format and any conditions relating to its content.			
6.0	**Waste Management Plan**			
6.1	Ensure that a Waste Management Plan is generated and a person nominated to ensure that it is maintained throughout the life of the project.			

Appendix 5. Site Induction Arrangements

STFC Site Specific Induction:

STFC induction will be required for all persons coming onto site including Principal Designer, Designers, Principal Contractor, and Contractors associated with a project. The STFC induction is to be completed and passed before being allowed on the STFC site.

CDM Site Specific Induction (e.g. by the Principal Contractor):

This needs to be specific to the project with information about particular risks associated with the CDM site and arrangements that have been made for their control.

The site induction should include a site specific explanation of the following:

1. STFC commitment to health and safety
2. An outline of the project
3. Any site specific health and safety risks
4. Control measures on the site, including:
    - site rules
    - any permit to work systems
    - traffic routes
    - security arrangements
    - hearing protection zones
    - arrangements for personal protective equipment
    - housekeeping
    - materials storage
    - welfare facilities and
    - emergency procedures
5. Arrangements for first aid
6. Arrangements for reporting accidents and other incidents
7. Any planned training including ‘toolbox’ talks
8. Arrangements for consulting with the workers
9. Information about the individual’s responsibilities for health and safety.

Appendix 6. Construction Phase Plan

Construction Phase Plan (CPP) - When is the Plan required?

The plan is required for all construction works before the start of the construction phase. The plan sets out how health and safety is to be managed during the construction phase.

What level of detail is required in the CPP before work commences on site?

The CPP should be proportionate to the scale and risks of the project.

The plan should demonstrate that:

1. The construction phase will be planned, managed and monitored to enable the work to commence without causing risk to health and safety
2. Adequate regard is paid to the information provided by the Designers and
3. The pre-construction information provided by the Principal Designer to the Principal Contractor has been included.

Note – For single contractor work and for maintenance/repair work the Risk Assessments and Method Statement (RAMS) may form the CPP.

How often should the plan be revised during the construction phase?

The plan should always be a live document so that it is addressing risk to health and safety of all persons who may be affected as the construction work proceeds.

What level of detail is required during the construction phase?

The Principal Contractor needs to take reasonable steps to ensure that the construction phase plan has:

1. Identified risks to health and safety generally
2. Identified the risks specific to the particular type of construction work concerned
3. Included suitable and sufficient measures to address such risks and
4. Provided any site rules.

When generating the construction phase plan the content and level of detail should be proportionate to the risks involved in the project.

The following topics are examples of what should be considered.

1. Description of Project

Project description and programme details including any key dates;

- Details of Client, Principal Designer, Designers, Principal Contractor and other consultants
- Extent and location of existing records and plans that are relevant to health and safety on site, including information about existing structures when appropriate.

2. Management of the work

Management structure and responsibilities;

- Health and safety goals for the project and arrangements for monitoring and review of health and safety performance:

Arrangements for:

- Regular liaison between parties on site
- Consultation with the workforce
- The exchange of design information between the Appointed Client, Designers, Principal Designer and Contractors on site
- Handling design changes during the project
- The selection and control of contractors
- The exchange of health and safety information between Contractors
- Site security
- Site induction
- On-site training
- Welfare facilities and first aid
- The reporting and investigation of accidents and incidents including near misses
- The production and approval of risk assessments and written systems of work
- Site rules
- Fire and emergency procedures.
-

3. Arrangements for controlling significant site risks

Safety risks, including:

- Delivery and removal of materials (including waste) and work equipment taking account of any risks to the public, e.g. during access to or egress from the site
- Dealing with services – water, electricity and gas, including overhead power lines and temporary electrical installations
- Accommodating adjacent land use
- Stability of structures whilst carrying out construction work, including temporary structures and existing unstable structures
- Preventing falls
- Work with or near fragile materials
- Control of lifting operations
- The maintenance of plant and equipment
- Work on excavations and work where there are poor ground conditions
- Traffic routes and segregation of vehicles and pedestrians
- Storage of materials (particularly hazardous materials) and work equipment and
- Any other significant safety risks.

Health risks, including:

- The removal of asbestos
- Dealing with contaminated land
- Manual handling
- Use of hazardous substances, particularly where there is a need for health monitoring
- Reducing noise and vibration
- Work with ionising radiation and
- Any other significant health risks.

4. The health and safety file

- Layout and format
- Arrangements for the collection and gathering of information;
- Storage of information.

Appendix 7. Evaluation of Competence of External Companies (not STFC)

Core criteria for demonstration of competence:

STFC, as a Client organisation, has a duty to make sure that those appointed for a project are competent. This will include Designers / Principal Designers (both in-house and external), and Contractors / Principal Contractors (internal and external).

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

Organisations within the Crown Commercial Services (CCS) Procurement Framework have already been evaluated and classed as generically competent by UKSBS, but should be selected based on the specific competence for the particular project.

Any evidence of lack of competence by a Framework organisation should be fed back to UKSBS for review and re-evaluation.

Core criteria for demonstration of competence:

Project Name and reference:					
Date:		**By Whom:**		**Stage One**	

Ref.	**Criteria**	**Standard to be achieved and evidence of compliance**	**Evidence Provided**		**Suitable**	
			Yes	**No**	**Yes**	**No**
Organisations						
1	Health and Safety Policy and organising for health and safety	1. A signed, current copy of the policy. 2. It identifies the roles and responsibilities at all levels				
2	Arrangements	1. Sets out the risk profile of the company / organisation 2. Sets out how the company / organisation will discharge its duties under CDM2015. 3. There is a clear indication as to how the arrangements are communicated to the workforce.				
3	Has access to competent advice. This needs to be both corporate and construction related.	1. Is access to competent advice indicated? 2. Does the advisor provide general health and safety advice? 3. Does the advisor (from the same source or elsewhere) provide construction health and safety advice? 4. Name and competency details of the advice source provided? 5. Obtain examples of the advice over the last 12 months				

Ref.	Criteria	Standard to be achieved and evidence of compliance	Evidence Provided		Suitable	
			Yes	No	Yes	No
4	Training and information.	1. Arrangements indicate that a training policy and programme is in place including CPD 2. Training is aimed at everyone in the organisation 3. Employees have the skills and understanding necessary to discharge their duties 4. Training records including certificates of attendance 5. Induction training for site-based workforce 6. Sample 'toolbox talks'.				
5.1	Individual qualifications and experience For STFC and contractors	1. Employees have the appropriate qualifications and experience 2. Details of qualifications and/or experience – corporate level including health and safety advisor 3. Other key roles identified with details of relevant qualifications and experience				
5.2	Competence For Contractors	1. Individuals – CITB Construction Skills test or similar and S/NVQ certificates 2. For site managers – CITB – 'Site Management Safety Training Scheme' certificate or equivalent 3. For professionals – qualifications / institution membership 4. Evidence of company based training programme				

Ref.	Criteria	Standard to be achieved and evidence of compliance	Evidence Provided		Suitable	
			Yes	No	Yes	No
5.3	For Designers:	1. Individuals – CITB Construction Skills test or similar schemes 2. For professionals – qualifications / institution membership 3. Specific qualifications – NEBOSH Construction Certificate; APS Design Register etc.				
5.4	Principal Designers	1. Individuals - CITB Construction Skills test or similar schemes 2. For professionals – qualifications / institution membership 3. Specific qualifications – NEBOSH Construction Certificate; APS Design Register, IMaPS, CMaPS etc.				
6	Monitoring, audit and review	Procedures in place to: 1. Monitoring the safety management system 2. Auditing the safety management system at periodic intervals 3. Reviewing the safety management system at periodic intervals 4. Evidence of recent monitoring / audits / reviews 5. Copies of site inspection reports				
7	Workforce involvement	1. Clear evidence of how consultation takes place with the workforce 2. Health and safety committee meeting notes / records 3. Names of safety representatives				

Ref.	Criteria	Standard to be achieved and evidence of compliance	Evidence Provided		Suitable	
			Yes	No	Yes	No
8	Accident reporting and enforcement action; follow-up investigation	1. Last 3 years records of all RIDDOR reportable events 2. Evidence of a system in place for reviewing all incidents, and recording the action taken as a result 3. Any enforcement action taken against the company over the last 5 years and the actions taken to remedy matters 4. For large companies – statistics showing incidence rates of major injuries over 3 days – for the last 3 years				
9	Sub-contracting / consulting procedures (if applicable)	1. Arrangements in place for appointing competent sub-contractors / consultants 2. Be able to demonstrate how the sub-contractors / consultants appointed also have arrangements in place for appointing competent organisations 3. Examples provided of assessments 4. Evidence relating to how monitoring of sub-contractor performance is undertaken				
10	Hazard elimination and risk control – Designers only	1. Demonstration of Arrangements for CDM^{2015} Regulation 9 – covering the following areas: 2. methods for co-operation and co-ordination with other Designers / Contractors 3. methods for hazard elimination and how remaining risks will be controlled 4. Examples of how risk was reduced through design 5. A short summary on how changes to design will be managed				

Ref.	Criteria	Standard to be achieved and evidence of compliance	Evidence Provided		Suitable	
			Yes	No	Yes	No
11	Risk assessment leading to a safe method of work – Contractors only	1. Clear procedures for carrying out risk assessments and for developing and implementing safe systems of work / method statements 2. Sample risk assessments / safe systems of work / method statements 3. How health and safety issues will be identified				
12	Co-operating with others and co-ordinating work with that of other Contractors – Contractors only	1. Demonstrate how co-operation and co-ordination is achieved with other companies 2. Demonstrate how the workforce is involved in drawing up method statements / safe systems of work				
Stage 2						
1	Work experience	1. Relevant experience provided 2. Recent projects / contracts with contact details				

Appendix 8. Health and Safety File

Introduction:

A Health and Safety File (HSF) is legally required for projects involving more than one contractor, however STFC may choose to require a Health and Safety file for any construction projects irrespective of scale.

Only information likely to be significant for health and safety in future use, construction work, maintenance of the fabric, plant and equipment and demolition should be included.

Who does what?

All duty holders have a legal obligation to provide information for the health and safety file:

- The Principal Designer prepares, reviews, amends or adds to the file as the project progresses, and hands over to STFC at the end of the project
- All parties must supply the information necessary for compiling or updating the file
- STFC must keep the file to assist with future construction work and
- Everyone providing information should make sure that it is accurate, and provide promptly.

Clarification issues:

- The generally agreed scope, structure and format for STFC Health and Safety Files is that promoted by CITB.
- All parties are to ensure that the information is prepared and handed over in the required form and at the right time.
- Generally, the Principal Designer compiles the file, unless they have completed their appointment prior to the end of the project in which case the duty transfers to the Principal Contractor.
- With design and build contracts, it will be more practical for the Principal Contractor to obtain the information from the Contractors. In this situation, the Principal Contractor should assemble the information and pass to the Principal Designer as the work progresses (unless they have completed their appointment).
- For traditional contracts (where the Principal Designer remains part of the Client team), it would make sense for the Principal Designer to remain in control of information gathering.

The contents of the health and safety file:

The information needs to be relevant to the health and safety of any future construction work, and the level of detail should allow the likely risks to be identified and addressed by those carrying out the work.

Consideration should be given to the following information:

- A brief description of the work carried out
- Any residual hazards which remain and how they have been dealt with
- Key structural principles e.g. bracing, pre-tensioned members, safe working loads of floors etc.
- Any hazardous materials used
- Information regarding the removal or dismantling of installed plant and equipment e.g. any special arrangements for lifting, order of removal / installation or other special instructions for dismantling etc.
- Health and safety information about equipment provided for cleaning or maintaining the structure
- The nature, location and markings of significant services
- Information and as-built drawings of the structure, its plant and equipment.

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

- The pre-construction information, or construction phase health and safety plan
- Construction phase risk assessments and safe systems of work
- Details about the normal operation of the completed structure
- Construction phase accident statistics
- Details of all the Contractors and Designers involved in the project (although it may be useful to include details of the Principal Contractor and Principal Designer)
- Contractual documents
- Information about structures, or parts of structures, that have been demolished – unless there are any implications for remaining or future structures, e.g. underground voids
- Information contained in other documents, but relevant cross-references should be included.

Including too much material may hide crucial information about risks.

Appendix 9. Audit Checklist

Reference	
1 (Section 4.1)	Was a STFC Client appointed for all projects with sufficient resources?
2 (Section 3)	Were all construction projects managed under the Code 13 (or Code 15 where only one contractor)?
3 (Section 4.2.3)	Was a Principal Designer appointed to all projects in writing if required?
4 (Section 4.2.4)	Was a Principal Contractor appointed to all projects in writing if required?
5 (Section 4.2.8 and Appendix 3)	Were the STFC management arrangements confirmed for all projects?
6 (Section 4.4.5 and Appendix 4)	Was suitable and sufficient pre-construction information generated for all projects?
7 (Section 4.2.6, Appendix 1 and Appendix 7)	Is there evidence that the competence of duty holders have been checked?
8 (Section 4.2.12 and Appendix 6)	Was a Construction Phase Plan reviewed prior to construction commencing in all projects?
9 (Section 4.2.7 and Appendix 2)	Was an F10 produced (if required) and displayed as required?
10 (Section 4.5.12)	Evidence that the Principal Contractor has managed the interface between contractor's works and on-going STFC activities for all projects.
11 (Section 4.2.10 and Appendix 6)	Are Construction Phase Plans regularly updated during the construction phase to manage risk effectively?
12 (Section 4.5.9 and Appendix 5)	Were all contractors and visitors inducted by the STFC and the Principal Contractor?
13 (Section 4.3.8)	Did all Principal Contractors report all SHE incidents?

14 (Section 4.4.6, Section 4.5.10 and Appendix 8)	If required, were Health and Safety Files produced as part of construction projects?
15 (Section 4.2.4)	Was the SHE performance of the projects reviewed on completion?

Appendix 10. Document retention requirements

This is for health and safety purposes only. Some information may have importance for commercial consideration and may need to be retained e.g. guarantee information, performance information, etc.

Records established	Minimum retention period	Responsible record keeper	Location of records
Appointment of Client	Duration of the contract and its successful conclusion.	Director	STFC Local record systems
Contract tender documentation		Appointed Client	
Pre-contract information			
Pre-construction information		Principal Designer / Principal Contractor	
Letters of appointment for Principal Designer and Principal Contractor		Appointed Client	
F10		HSE website	Displayed on CDM site
Construction Phase Plan		Principal Contractor	CDM Site records
Competency Criteria		STFC	STFC Local record systems
Health and Safety File	Life of the asset or until modified.	STFC	Local record systems

Appendix 11. Letters of appointment

See the SHE Directory (on the STFC SHE website) for letter templates

- Client
- Principle Designer
- Principle Contractor