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Health and Safety Authority

**Guidelines on the Design and
Management of Construction
Projects**

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1. Introduction

These guidelines aim to give practical guidance to clients, designers, project supervisors, contractors and workers on how they can comply with the design and management aspects of the Safety Health and Welfare at Work (Construction) Regulations 2005.

Regulation 1 to 14 of the Safety Health and Welfare at Work (Construction) Regulations, 2005 (Construction Regulations) give legal effect to EC Council Directive 92/57/EEC. These guidelines refer to those regulations which are concerned with the duties on clients, designers, project supervisors and the general duties of contractors. The regulations are aimed at protecting workers from accidents and ill health in the construction industry. These provisions apply to all forms of construction work but the client duties only apply to construction work undertaken in the course of trade, business or other undertaking.

These guidelines aim to clarify important issues such as the roles of the various duty holders, how to assess competence and resources, how to prepare safety and health plans and what should be in the safety and health file.

This guidance is issued by the Health and Safety Authority. Following the guidance is not compulsory and you are free to take other actions to achieve compliance. But if you do follow the guidance you will normally be doing enough to comply with the law. Health and Safety Authority inspectors seek to secure compliance with the law and may refer to this guidance as illustrating good practice and compliance.

The Regulations were made under the Safety Health and Welfare at Work Act, 2005 and the provisions of this Act and of the Safety, Health and Welfare at Work (General Applications) Regulations, 2005 apply to all construction projects. A range of other regulations also apply to construction projects, including regulations relating to chemical agents, asbestos, lifting equipment, noise, vibration, optical radiation, electricity, manual handling, work equipment and workplace conditions. .

The Safety Health and Welfare at Work (Construction) Regulations, 2001 are revoked, except where they relate to work at height, Lifting Equipment or project supervisors for the Design Process who were already appointed to projects before the coming in to force of the Regulations.

The Regulations come into effect on 1st Nov 2005 except for a proposal to allow the for a Project Supervisor Design Stage appointed under the 2001 Construction Regulations to remain in place until June 2008 (and until June 200) if a special exemption is applied for) and that a Project Supervisor for the Design Process would be universal on projects after that date.

The construction industry covers a wide range of activities, hazards, materials techniques, employment patterns and contractual arrangements. In such

circumstances good management of construction projects is essential from concept through to design, construction, use and eventual demolition if health and safety standards are to improve. Poor management of the design or construction process is a prime cause of the unacceptable accident and occupational health record of the construction industry.

Actions taken at an early stage of the design process have a significant potential to reduce the level of risk on construction projects. Good co-ordination of activities and co-operation between all parties during design and construction is essential in reducing the high levels of risk found on many construction projects.

Regulations 3 to 14, in particular aim to improve health and safety in the construction industry by focussing on planning, management and co-ordination and by establishing a chain of responsibility from the client through to the contractor and to each individual employee.

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1. What is covered by the Regulations ?

Construction work is very broadly defined, the Regulations apply to construction projects involving people at work

The definition includes:

- the associated preparations, cleaning, maintenance (including repair, renovation, upkeep and redecoration), demolition and dismantling of structures;
- the installation, commissioning, decommissioning or dismantling of fixed plant (e.g. silos, chemical reactors, boilers, air-conditioning units, lifts and telecommunications) that would involve a risk of a person falling more than 2 metres. Plant includes any machinery, equipment or appliance (in this context *fixed plant* would mean plant that is fixed in one position and is not intended to be moved frequently);
- The installation, commissioning, maintenance, repair or removal of mechanical, electrical, gas, compressed air, hydraulic, telecommunications systems, computer systems, or similar services which are normally fixed within or to a structure .
- Exploratory site preparation work, including drilling bore holes (but not site surveys);
- The construction of temporary structures during construction work (eg. formwork, falsework, scaffolds or similar support or access structure).

The Regulations apply to all demolition and dismantling work, including the deliberate pulling down, destruction or taking apart of a structure, or a substantial part of a structure, or the dismantling of a structure for re-use

The Regulations apply to all design work for construction, including design work for domestic clients (ie. those outside the definition of *client* as set out in the Regulations).

A **project** includes all associated preparation, design, planning and construction work. Several structures may be involved in a single project. Where the work is phased, with significant and substantial periods of time in between the phases, it may be appropriate to consider each separate phase as an individual project. An example of this would be a demolition operation far in advance of further site work. It may also be appropriate to use this approach on complex or lengthy projects that pass through several distinct stages, each requiring a specialist managerial input. Where structures are being constructed in different locations with separate sites and access and egress points and where there is minimal interaction between the work of each site it may be appropriate to consider each separate site as an individual project

The **Construction stage** is that period of a project when the construction work is undertaken. It includes site preparation (including demolition). The definition also encompasses fitting-out or commissioning work. However, repairs and remedial work carried out after completion of the project would be regarded as a separate project. [H](#) |

For the purposes of compliance with the Regulations to ***co-ordinate*** means to put in place systems that operate effectively so that information flows freely between designers and to contractors, as necessary, there are monitoring systems in place to so that designers or contractors fulfil their duties under the regulations and take account of the principles of prevention, and that work is organised to take account of the interaction of different activities, with potential conflicts that could affect health and safety being anticipated and resolved.

For the purposes of the guidelines, ***'reasonably practicable'*** in relation to the duties of any person or organisation, means that person or organisation has exercised all due care by putting in place the necessary protective and preventive measures appropriate to their level of involvement, having identified the hazards and assessed the risks to safety and health likely to result in accidents or injury to health at the place of work concerned and where the putting in place of any further measures is grossly disproportionate having regard to the unusual, unforeseeable and exceptional nature of any circumstance or occurrence that may result in an accident at work or injury to health at that place of work.

For the purposes of the guidelines, a person or organisation is deemed to be ***competent*** where, having regard to the task he or she is required to perform and taking account of the size or hazards (or both of them) of the undertaking or establishment in relation to which or in which the person or organisation undertakes work, the person or organisation possesses sufficient training, experience and knowledge appropriate to the nature of the work to be undertaken.

2. Roles and Responsibilities

2.1 The Client and others who appoint Designers and Contractors

Summary of Duties of the Client

The Client must

- Appoint a competent Project Supervisor for the Design Process for every project before the commencement of design work
- Appoint a competent Project Supervisor for the Construction Stage for every project before the commencement of construction work
- Keep the Safety File available
- Co-operate with the Project Supervisor in relation to the time for completion and in relation to the provision of information
- Provide a copy of the preliminary Safety and Health Plan to prospective and actual Project Supervisors for the Construction Stage
- Reasonably satisfy themselves that that Designers, Project Supervisors and Contractors who they appoint, have allocated sufficient resources to enable them to perform their duties

(The bullet points above are a brief summary, for information only, and are not a legal interpretation of the Regulations)

2.1.1 What is a “Client”

A client is a person or company for whom construction work is undertaken for the purposes of trade, business or undertaking and who has effective control over key aspects of the project. The client for a project is the entity who has effective control over who is appointed as

- the designers of the main elements of the project,
- the Project Supervisor for the Design Process,
- the Project Supervisor for the Construction Stage and
- the Contractor or Contractors who will undertake or manage the main elements of the project.

The Client is the person or company with the controlling interest in the entire project. Generally the client will retain a significant level of control over the appointment of other designers and contractors appointed for that project.

Persons who commission work on their private domestic premises are not ‘clients’ under the Regulations, because the project does not relate to a trade, business or undertaking. If, however, the building under construction or modification is to be used for trade or business e.g. a guesthouse, then the client duties apply. Similarly, work on a domestic premises owned by a housing association, landlord or local authority would be regarded as being for the purposes of trade, business or undertaking, and the owner would be considered to be a client within the meaning of the Regulations. The determining factor is the status of the client rather than the type of property under construction.

The definition of *client* encompasses those in effective control of large undertakings commissioned by a Local Authority, and relatively small projects such as an extension to a local shop. Clearly, the resources available to the former will outweigh those open to the latter. There are also likely to be great disparities in experience and

in-house expertise and competence of clients. Many clients may be functioning in that capacity for the first time. It is particularly important that less experienced clients, are careful in their choice of those appointed as the Project Supervisor for the Design Process (PSDP) and the Project Supervisor for the Construction Stage (PSCS), as they will have a greater need to rely on the competence of those duty holders, particularly in terms of the advice that may be given to them by those professionals.

When more than one organisation is involved in a project it is particularly important that each organisation has a common understanding of who the client is. The client for the purposes of the Regulations is the person or organisation who commissions or procures the project and who is in effective control over key aspects of the project.

The use of Engineer-Procure-Construct (EPC) and Design-Build (DB) or variations of this type of arrangement as a project delivery method has increased significantly (and may increase further) in both the public and private sectors.

The movement away from the typical "design/bid/build" method to EPC and DB has altered the traditional relationships among the owner, the owner's representative, the architect/engineer, the construction manager, and the contractor. These altered relationships have shifted the responsibilities assumed by each party as compared to traditional construction contracts.

Some examples of the type of situations that might arise with different types of contract are outlined below.

Contract: type A: Design/Bid/Build.

This is where a client employs designers to specify and design:

- a new facility, or
- the maintenance works for an existing facility.

A contractor is then employed to manage the construction work. This is generally considered as the traditional approach to the commissioning of a construction project. The client in this case is the person who commissions or procures the carrying out of the project.

Contract type B: Design and Build.

In recent times Design and Build construction contracts has become more widespread. There are generally three main variations to this type of contract ~~in which the role of the client's professional designers varies from non-involvement to providing part design services~~ which can be described in the following general terms:

B1. Works not designed by the body commissioning the Project.

This is where a number of companies are invited to compete for the complete design and the construction activities of a project in a tender competition.

The main component in the tender documents is the output specification. The focus of this material is on what the end product needs to be rather than on the specifics of how it is delivered. The output is the end user requirements or what is actually consumed by users of a service rather than the facility used to provide the service. At a minimum it is a statement of the essential functional and operational requirements that need to be put in place to enable a service to be provided. The output specification may be expressed in a combination of diagrammatic, textual and numerical terms. The diagrams identify client constraints within which designs must be developed.

During the proposal stage designers would be employed by each different entity tendering for an individual proposal. These tendering companies would be “clients” and would appoint a PSDP for their proposal. The successful tenderer would on appointment be given effective control over the design and construction of the project and would thus proceed to appoint a PSCS at the appropriate time prior to construction work commencing on site

B.2. Outline design by the body commissioning the Project

In this situation design professionals are employed to produce an outline design [i.e. schematic plans, sections, elevations and an outline specification] particularly in relation to spatial planning. The body employing the design professionals is the Client for this initial design phase of the work and thus is obliged to have a PSDP in place during this element of the design process.

After the outline design is approved a number of parties are invited to tender for the main proportion of design work remaining and the complete construction activity of a project: The two main components in the tender documents are the client’s output specification and the outline design. The successful tenderer would then take over complete control of the management of the design process and the project execution.

In this scenario the successful tenderer becomes the Client and should either retain the appointment of the previous PSDP or may select a different PSDP. The successful tenderer must also nominate a PSCS to manage and co-ordinate the construction phase of the works. When the contract is awarded the successful tenderer’s PSDP is responsible for the co-ordination of all design work [including earlier design work done by the previous Client’s designers] and the PSCS is responsible for the construction element of the project.

B.3. Developed design by the body commissioning the Project

In this situation Design Professionals (including a PSDP) is employed to produce a developed design [i.e. preliminary plans, sections, elevations and an outline specification] up to and including the Statutory Approval stage. When the developed design is approved and a number of companies are invited to tender for the remaining main proportion of design work [i.e. the detailed design; working drawings; comprehensive specifications and methods of working and the complete construction activity of a project.

The two main components in the tender documents are the output specification and the developed design. After preparation of tender documents the original body commissioning the construction work ceases to employ design professionals. They would either be taken over by successful tenderer or have their services terminated, with the successful tenderer employing his own professional designers to finish the design work. At this stage the successful tenderer has gained effective control over the project and becomes the Client for the purposes of the Regulations. He must either retain the PSDP that had been in existence during the preparation of the tender documents or appoint a new PSDP to supervise and co-ordinate the design process going forward. He must also appoint a PSCS at the appropriate time but prior to the commencement of Construction. Once the contract is awarded the PSDP of the successful tenderer is responsible for the coordination of all design work [including earlier work done carried out pre-tender] and the tenderer's PSCS is responsible for the construction part of the project.

In every case where these design and build type of contracts are used there must be clarity at all times as to who the client is at any particular time. Where a design and build type contract is sent for tender or awarded, there must be a clear written undertaking by the person receiving the tender or being awarded the contract that they are assuming the duties of the client for the project.

2.2 What Regulations apply to the Client and others who appoint Designers and Contractors?

General duties of clients and others

Regulation 3. (1) It is the duty of a client to appoint, (except as noted in paragraph 13 and 14), in writing, in respect of every project, a project supervisor for the design process and a project supervisor for the construction stage and confirmation of acceptance of such appointments shall be obtained in writing by the client.

Reg 3.1

In order to co-ordinate the design and construction work being undertaken the client must put in place persons or organisations to oversee the co-ordination of the design and construction work. These appointees are called the Project supervisor for the Design Process (PSDP) and the Project Supervisor for the Construction Stage (PSCS). The appointment of the PSDP & PSCS must be in writing by the Client with a written acknowledgement from the chosen candidates that they accept the appointment. Any changes that are made to these appointments should be formally made in writing and acknowledged by the new appointees.

The Client should keep copies of these appointments on file. There can only be one Project Supervisor for the Construction Stage for one project at a given time. That requires that where various types of construction work overlaps (geographically and in time) on a site one Project Supervisor for the Construction Stage should be appointed for this work and the work should be considered part of one project.

Sometimes two or more developments take place on a site at the same time. This can happen if different clients commission adjacent work or if a client procures two unrelated packages of work. In the context of the regulations, there is more than one project on site only if the packages of work are truly independent and do not interact with each other to any significant degree or rely upon one another for their stability or completion. Where there are clearly more than one project there can be more than one PSCS or PSDP.

(2) Nothing in paragraph (1) shall:

- (a) prevent a client appointing him, or her as project supervisor if competent to undertake the duties involved, or*
- (b) prevent the client appointing one person as project supervisor for both the design process and construction stages if that person is competent to undertake the duties involved.*

*Reg 3.2
(a)&(b)*

The client may appoint himself as PSDP and PSCS or the client may appoint a single other party to carry out both roles, again if the appointees have the requisite competence to take on either or both roles.

(3) The project supervisor for the design process shall be appointed at or before the start of design work.

Early appointments should be made to ensure that the health and safety implications of decisions taken at the earliest stages of a project are considered . *Reg 3.3*

The PSDP can bring about the greatest reduction in risk at the concept and scheme design stages. As the scheme moves further into the detailed design stage it becomes more difficult to make fundamental changes that eliminate hazards and reduce resulting risks. The PSDP must be appointed at or before the start of design work to enable him to:

- advise clients on the competence and resources of their appointees
- ensure that early design decisions fully address significant health and safety issues
- enable the development of an adequate preliminary safety and health plan
- enable the safety file to be produced in a user friendly format suitable for future use.

(4) The project supervisor for the construction stage shall be appointed prior to the commencement of construction work.

Early appointment of the PSCS if feasible, allows him to contribute to the design process and gives time to develop the safety and health plan and coordinate the provision of welfare facilities. *Reg 3.4*

(5) The appointments mentioned in paragraph (1) shall be made and shall be terminated, changed or renewed as necessary.

During the design or construction of a project the need to change the appointed PSDP or PSCS may arise. This may happen for contractual reasons or because appointees have manifestly failed to carry out their appointed role.. Clients should allow themselves this facility in any contracts entered into between themselves and potential Project Supervisors. *Reg 3.5*

Any changes that are made to these appointments should be formally made in writing and acknowledged by the new appointees. The Client should keep copies of these appointments on file. In general if a competent person (or organisation) has been appointed, the guidelines do not seek to give the client an ongoing monitoring responsibility of the design or construction. However, where it comes to the attention of the client that the Project Supervisor(s) appointed are not discharging their duty then the client has the authority to terminate or change the appointment as appropriate. Where the client wishes to take on a monitoring role, then the regulations or the guidelines will not preclude this.

(6) It is the duty of a client to keep available any safety file referred to in Regulation 4(1)(c)(iv) and any information delivered to the client in relation to the file for inspection by any person who may need information in the file for the purpose of compliance by that person with any duties imposed under the relevant statutory provisions.

Reg3.6

The Safety File is a key document produced during the construction of a project but primarily intended for the safety of end users of the structure or those who will extend or maintain the structure in future. The PSDP must pass the “ Safety File” to the client at completion and thereafter the client must make the File available, if necessary, e.g. to subsequent designers or contractors engaged in relation to the maintenance or renovation of the structure, or pass it on to any new owner of the built structure.,.

(7) It is sufficient compliance with paragraph (6) by a client who disposes of his or her interest in the property involved in the project if the delivers the safety file for that property to the person who acquires such interest in that property and such person shall keep available such safety file in accordance with paragraph (6).

Where the client sells or otherwise disposes of his interest in a structure that has been constructed then the client must pass on the safety File to the new owner. Where a client disposes of his interest in part of a structure or development then he should ensure that he passes on the relevant section of the Safety File for the element being disposed of. This might happen in the case of the selling of an office floor of a building or the selling of a house or a number of houses in a new estate.

Reg3.7

(8) (a) A client shall co-operate with the project supervisor appointed for the design process and the project supervisor appointed for the construction stage as appropriate to enable the relevant project supervisor to comply with this Regulation, including in relation to the period of time required for the completion of the project and the provision of information about the state or condition of any premises at or on which construction work included or intended to be included in the project is being or is intended to be carried out.

The Client should not make unreasonable demands from appointees regarding timescales. The Client should also co-operate in making information available to the appointees.

Reg3.8(a)

The Client may be in a position to effectively control matters, e.g. traffic, (vehicular and pedestrian), in the environs of the construction project. Where the Client can control such matters, the client should exercise this control in such a manner to minimise the risk to those working on the construction site and to those not involved in the construction process.

Where a client appoints a Contract Administrator in the form of a Resident Engineer or Project Manager, to oversee the project on behalf of the client, then that appointee must co-operate with the Project Supervisors in order that they may comply with these

regulations. Such an Administrator represents the client and therefore has a duty to co-operate. For example, where the Contract Administrator or Client has authority for road closures and the PSCS raises a concern regarding the safety of such closures, the Administrator or Client should co-operate with the PSCS in order that the requirements of the Construction Regulations can be met. If the client, or his appointed administrator as above, has independently appointed subcontractors to carry out works under the direction of the client, then co-operation is required of both client, (or his Contract Administrator) and that contractor to allow the Project Supervisors to fulfill their role.

(b) The information required to be provided under subparagraph (a) is information which is relevant to the duties of the project supervisors under these Regulations which a client has in the client's possession or could ascertain by making enquires which it is reasonable for a person in the client's position to make.

The Client must cooperate with the project supervisors to enable them to carry out their duties. This means providing them with information that a client may reasonably have within his possession or that he can obtain with reasonable enquiry which the project supervisors need to perform their role. The information that they will require would be any hazard that might impact upon the health and safety of any parties working on the site or affected by the construction process and that would be needed to help to reduce or manage that risk.. In general this sort of information will already have been given to the PSDP who will have included it in the Preliminary Health and Safety Plan.

Reg3.8(b)

(9) A client shall provide or arrange to be provided, at the time of project preparation, a copy of the preliminary safety and health plan to every person being considered or tendering for the role of project supervisor for the construction stage.

The preliminary Safety and Health Plan is discussed in depth in the chapter on the project supervisor for the design process. It's purpose is to 'flag-up', at a relatively early stage, any health and safety issues specific to that project. This provision should ensure that those tendering for the role of Project Supervisor for the construction stage would have access to relevant information, so as to enable them to take health and safety into account in making their tender submissions. This, in turn, will assist the client (or the client's representative) in assessing the competence and resources of those making the submissions. Where the nomination of the PSCS will involve a negotiation rather than a tendering procedure, then the Preliminary Safety and Health Plan should be available to the prospective PSCS during the negotiations.

Reg3.9

(10) (a) A client shall not appoint any person as project supervisor for the design process in respect of a project unless the client is reasonably satisfied that the person the client intends to appoint has allocated or, as appropriate, will allocate resources to enable the person to perform the duties of project supervisor for the design process under these Regulations in respect of that project.

(b) A person shall not arrange for a designer to prepare a design unless the person is reasonably satisfied that the designer has allocated or, as appropriate, will allocate resources to enable the designer to comply with Regulation 5.

*Reg3.10
(a) & (b)*

Resources as it relates to the PSDP (and designers) include staff with the requisite expertise and competence to assist in the execution of the role of PSDP (or designer) for a project or part of a project. Regulation 3.10(a) and 3.10(b) require that assurance is sought by the person or company appointing a PSDP or Designer that these resources will be deployed to the project at a suitable time and in an appropriate manner to allow the role of PSDP/Designer be executed in accordance with the Regulations. Resources may also include infrastructure within or available to a company such as information technology, communication systems, in-house safety management systems and other items of infrastructure which facilitates the execution of the role of PSDP/Designer in accordance with the Regulations.

The assessment of resources is an important aspect of the Regulations. To reasonably assure himself of the resources that will be deployed to a project by the successful appointees, the client is expected to make reasonable enquiries in relation to potential appointees made by the client. These reasonable enquiries might take the form of enquiries to the potential appointees themselves and/or of others who are familiar with the competence and capabilities of the proposed appointee or members of the proposed appointee's team.

An assessment may include enquiries on the following:

- Details of the personal competence of the individual persons proposed to be involved (eg. qualifications, training and practical experience);
- The organisation having a developed and functioning system for managing health and safety
- Previously established relationship with the candidate where they have performed the role
- The ability of the candidate organisation to supply key personnel, essential equipment and appropriate managerial systems to the project (and to be able to do this over the required time-scale);
- Past performance on health and safety terms, including enforcement record and previous need for remedial action.

(c) A client shall not appoint any person as project supervisor for the construction stage in respect of a project unless the client is reasonably satisfied that the person whom the client intends to appoint has allocated or, as appropriate, will allocate resources to enable the person perform the duties of project supervisor for the construction stage in respect of that project.

(d) A person shall not arrange for a contractor to carry out or manage construction work unless the person is reasonably satisfied that the contractor has allocated or, as appropriate, will allocate resources to enable the contractor comply with the requirements and prohibitions imposed on the contractor by or under the relevant statutory provisions.

*Reg3.10
(c) & (d)*

In a similar manner to appointments (of PSDP and Designer) required under Regulation 10 (a) and (b) anyone appointing a PSCS or contractor must make reasonable enquiries regarding potential PSCS's/Contractor's resources and the deployment of these resources. Resources for a PSCS or Contractor will also include staff of suitable competence deployed as necessary to execute the project in accordance with the Regulations. In addition to the other resources such as IT and Management Systems as required for a PSDP/Designer, additional resources, which might be necessary for a PSCS/Contractor, include plant and machinery, material of the requisite type and quantity, potential availability competent sub-contractors and adequate welfare facilities.

In making reasonable enquiries regarding a potential PSCS or Contractor, the person making the appointment should use equivalent sources as suggested for the PSDP/Designer. These enquiries could be made to the potential appointees themselves and/or of others who are familiar with the competence and capabilities of the proposed appointee. In addition, enquiries could also be made of the PSDP if he is in place or other members of the Design team. Once the PSCS is in place, his opinion may also be sought regarding other appointments being contemplated.

An assessment may include enquiries on the following

- Details of the personal competence of the individual persons proposed to be involved (eg. qualifications, training and practical experience);
- The organisation having a developed and functioning system for managing health and safety
- Previously established relationship with the candidate where they have performed the role
- The ability of the candidate organisation to supply key personnel, essential equipment and appropriate managerial systems to the project (and to be able to do this over the required time-scale);
- Past performance on health and safety terms, including enforcement record and previous need for remedial action.

(11) A client shall ensure that the construction stage of any project does not start unless a health and safety plan has been prepared.

The safety and health plan should set out in writing the arrangements for health and safety management during the actual construction work on the project. The client should ensure that this is prepared by the PSCS prior to commencement of construction work.

Reg 3(11)

(12) (a) A client shall not appoint any person as project supervisor for the design process in respect of a project unless the client is reasonably satisfied that the person whom the client intends to appoint has the competence to perform the duties of project supervisor for the design process in respect of that project.

(b) A person to whom these Regulations apply shall not arrange for a designer to prepare a design unless the person is reasonably satisfied that the designer has the competence to prepare that design in compliance with these Regulations.

(c) A client shall not appoint any person as project supervisor for the construction stage in respect of a project unless the client is reasonably satisfied that the person whom the client intends to appoint has the competence to perform the duties of project supervisor for the construction stage in respect of that project.

(d) A person to whom these Regulations apply shall not arrange for a contractor to carry out or manage construction work unless the person is reasonably satisfied that the contractor has the competence to carry out or, as the case may be, manage, that construction work in compliance with these Regulations.

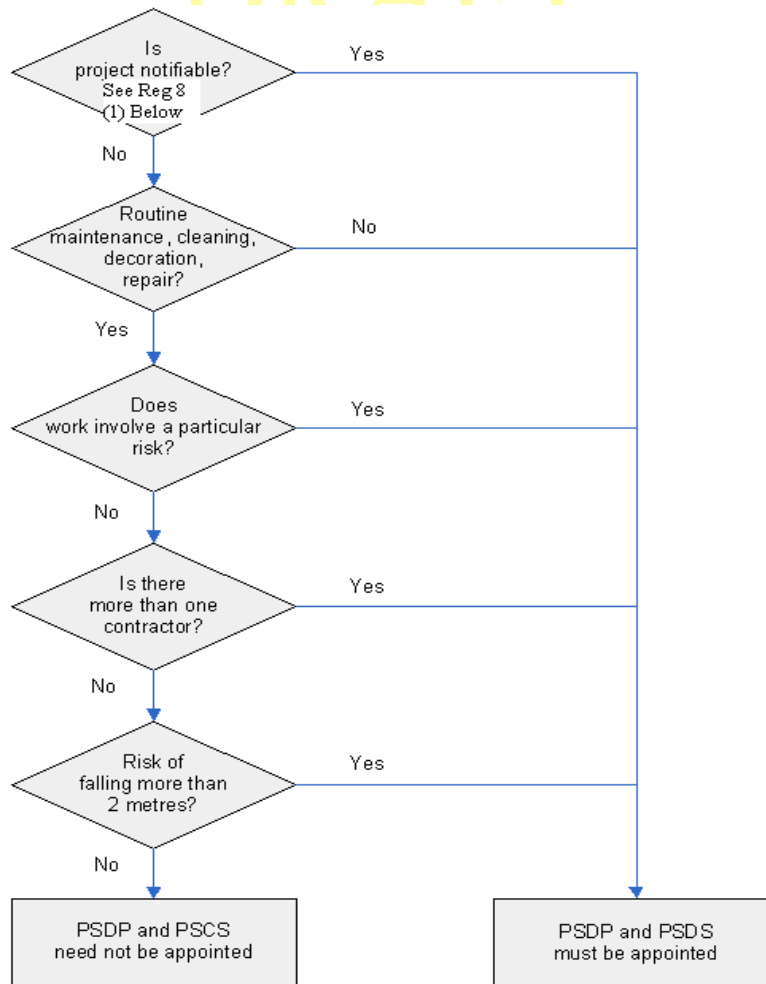
As in the case of enquiries regarding “resources”, enquiries regarding “competence” must enable the client, or others making appointments, to be reasonably satisfied as to the competence of those he is appointing to undertake the different roles within the project. Reasonable enquiries about competence must be made of the potential appointees and others who will be in a position and willing to supply pertinent information. In large scale projects or where panels of contractors are used, a prequalification procedure might be an integral part of the enquiry into competence of

Reg 3(12)
(a)(b)
(c) & (d)

certain potential appointees.

When assessing competence, the following general guidelines should be considered.

- Only those competencies and resources that relate to the duties of the person being assessed need to be considered;
- The matter to be considered is the capacity of the person being assessed to comply with the duties that they would carry under the Regulations;
The assessment should relate to the project under consideration but may also focus on previous projects executed and experience gained elsewhere.
- The assessment should be proportionate and should concentrate on the main issues, rather than being generic;
- It follows that a relatively minimal assessment should suffice for what will clearly be a relatively low-risk project;
- An extensive assessment should not be necessary when dealing with a person who you have recently subjected to the process on a similar project;
- An excellent guide should be a proven track record of competence within the duty-holder's field.



(13) Paragraph (1) does not apply to routine maintenance, cleaning, decoration and repair within or to a building except where the work involves a particular risk referred to in Schedule 1 or where there is a risk of falling a distance of greater than two metres or where there is more than one contractor involved or where Regulation 8 applies.

There is no obligation to appoint a PSDP and PSCS if the work involved is routine maintenance and

Reg 3(13)

- Does not include a “particular risk” (a “particular risk” within the Regulations has a specific meaning and is derived from a non-exhaustive list in Schedule 1 of the Regulations)
- Has only one contractor
- Does not put personnel at risk of falling more than 2 metres and
- Does not require notification to the Health and Safety Authority.

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(14) In accordance with Section 58 (4)(d) of the 2005 Safety Health and Welfare at Work Act, a person who commissions or procures construction work of his or her own primary domestic dwelling or renovations, repairs or modifications to his own primary domestic dwelling, where such domestic dwelling will not constitute a place of work after completion of construction, is exempted from the requirements of Section 17 (1) of the Act in relation to written appointments for any construction work carried out on that dwelling.

This provision exempts domestic construction jobs from the need to appoint in writing persons for the purpose of ensuring, so far as is reasonably practicable, that the project—

Reg 3(14)

- (a) is designed and is capable of being constructed to be safe and without risk to health,
- (b) is constructed to be safe and without risk to health,
- (c) can be maintained safely and without risk to health during subsequent use, and
- (d) complies in all respects, as appropriate, with the relevant statutory provisions.

However if one is commissioning the construction of a domestic house or construction work on a domestic house then the person appointed should have adequate health and safety arrangements in place for the workers involved.

2.1.3 Does any other legislation apply?

In accordance with the 2005 Safety health and Welfare at Work Act, anyone who exerts control to any extent over a place of work must exert that control in such a fashion as to ensure so far as is reasonably practicable the safety health and welfare of workers at the place of work and those affected by the work being carried out at the place of work. Obviously a client (or others appointing contractors & designers) may

exert control (to a greater or lesser extent) over workplaces and so their duty is governed by the extent that they have control.

Section 17 of the Act also requires

A person who commissions or procures a project for construction work to appoint in writing a competent person or persons for the purpose of ensuring, so far as is reasonably practicable, that the project

- (a) is designed and is capable of being constructed to be safe and without risk to health,
- (b) is constructed to be safe and without risk to health,
- (c) can be maintained safely and without risk to health during subsequent use, and
- (d) complies in all respects, as appropriate, with the relevant statutory provisions.

The appointments under this section will generally mirror the requirement to appoint a competent PSCS and a competent PSDP.

If clients specify materials or methods of working this may make them designers under the Regulations with the additional duties of a designer in relation to those specific matters. Clients must ensure that they understand and fulfil such duties where their requirements have significant health and safety implications.

2.1.3 Examples

Example of a client on a small project.

A shop owner sought to extend his comparatively small retail premises. He had never been involved in a construction project before, nor did he have any knowledge of the Regulations. The architect who was commissioned to design the extension briefed the shop owner on the implications of the Regulations as part of his professional service to the client. The architect then agreed to assume the role of project supervisor for the design process, and was then in a position to advise the client on the choice of building contractor. The contractor selected was appointed project supervisor for the construction stage.

Example of a client acting as a designer

A designer specified tilt and turn windows to reduce risks during window cleaning. The client overruled this on the grounds of cost. The designer pointed out that the client was taking over his duties under Regulation 5 and needed to address how the risk to window-cleaners could be minimised and how the duties under the regulations would be complied with

2.2. The Project Supervisor for the Design Process (PSDP)

Summary of Duties of the Project Supervisor for the Design Process

The Project Supervisor for the Design Process must:

- Co-ordinate the assessment of risks, aim to avoid hazards where feasible, and co-ordinate the use of risk reduction measures for remaining hazards
- Organise the co-ordination of the activities of persons engaged in design work
- Take reasonable measures to achieve co-operation between designers
- Prepare a Preliminary Safety and Health Plan, where required
- Provide the Preliminary Safety and Health Plan in ample time for supplying to tenderers
- Keep the Preliminary Safety and Health Plan available for inspection
- Prepare a Safety File
- Give directions to designers where necessary

(The bullet points above are a brief summary, for information only, and are not a legal interpretation of the Regulations)

2.2.1 Who should be appointed as project supervisor for the design process?

The person (or company) appointed to the position should be competent having regard to the task, the size of the project and the hazards and have (or have within it's ranks persons who have);

- extensive knowledge of the design process
- familiarity with the type of construction work involved with the project;
- a sound understanding of the health and safety issues associated with that work
- good communication skills and systems
- sufficient training appropriate to the type of work e.g. a recognised certificate, higher certificate or degree in Health and Safety awarded as part of the national framework of qualifications .

Though the project supervisor design process must have an extensive knowledge of the design process, that person does not necessarily carry out design work, nor even be a designer. The important point is that the person appointed is competent in health and safety, and is adequately resourced for the role. The project supervisor design process will generally be an organisation rather than an individual person for all but the smallest contracts. The organisation would typically be an architectural practice, a contractor, a firm of consulting engineers or a specialist project management group.

2.2.2 What Regulations apply to the Project Supervisor Appointed for the Design Process?

4. (1) It is the duty of the project supervisor appointed for the design process to -

(a) (i) take account during the design of a project and when estimating the period of time required for completion of a project, and where appropriate for stages of a project, of the general principals of prevention specified in the Schedule 3 of the Act and of any safety and health plan or safety file, and to ensure, so far as is reasonably practicable, the co-ordination of the activities of other persons engaged in work related to the design of the project, and

The principles of prevention set out a key hierarchy with regard to the prevention of accidents and ill health. In the context of the Construction Regulations the Principles of Prevention apply to construction work and its associated preparation. During the design process the Project Supervisor Appointed for the Design Process (PSDP) is required to estimate a realistic timeframe for the safe completion of the project. The PSDP should consult with the Client and Designers when establishing the timeframe. However both are obliged to cooperate with the PSDP and not to seek that work be completed within unreasonable time frames.

Reg
4(1)(a)(i)

The principles of prevention are set out in descending order of preference as follows.

(a) *the avoidance of risks,*

(b) *the evaluation of unavoidable risks*

(c) *the combatting of risks at source.*

(d) *the adaptation of work to the individual, especially as regards the design of places of work, the choice of work equipment and the choice of systems of work, with a view, in particular, to alleviating monotonous work and work at a predetermined work rate and to reducing their effect on health.*

(e) *the adaptation of the place of work to technical progress.*

(f) *the replacement of dangerous articles, substances or systems of work by non-dangerous or less dangerous articles, substances or systems of work;*

(g) *the development of an adequate prevention policy in relation to safety, health and welfare at work, which takes account of technology, organisation of work, working conditions, social factors and the influence of factors related to the working environment*

(h) *the giving of priority to collective protective measures over individual protective measures.*

the giving of appropriate training and instruction to employees.

Examples of the application of the Principles of Prevention are discussed in the Designer section of these guidelines.

In co-ordinating the application of the above principles, the PSDP must consider how risks, during the construction process, can be proactively eliminated or mitigated by designers during the design process. If it is apparent that certain risks cannot reasonably be eliminated, then the second principle above suggests that risks must be evaluated. One method of evaluating the risks as required, is by the carrying out of written risk assessments of the integral elements of the design process. This is commonly referred to as a design risk assessment. The PSDP has a key role in co-ordinating the carrying out of these risk assessment and to assess if any gaps have been left in the assessment process.

The PSDP should also consider how the activities of each designer impinges on other designers and how risk assessments need modification as a result of this. Appendix 2 shows a suggested form which could be used to record coordination of design risk assessments by the PSDP. This form is very specific and will not be suitable for all industries. For example, the chemical, petroleum and power industries use Hazard and Operability Studies (HAZOP), Failure Mode and Effect Analysis (FMEA), ATEX assessments and SEVESO studies. Such design risk assessments would be detailed reports in themselves and are equally valid as design risk assessments for other aspects of construction.

The PSDP must coordinate all important elements of the design process. Particular attention should be paid to potentially catastrophic issues such as overall instability of the structure during the various stages of construction and after completion. In co-ordinating the activities of the various designers where the integrity of a structure during construction and after completion is an important safety issue, the PSDP should insist (and be in a position to insist) that one designer takes overall responsibility for the stability of a structure during the envisaged construction process and after completion. The PSDP may have competence to discharge this role himself. However if he does not have appropriate competence, the PSDP needs to be aware of who is in a position to appreciate and take responsibility for the overall structural integrity of the structure step by step during the envisaged construction sequence.

The PSDP should take steps to ensure co-operation between permanent and temporary works designers, in particular to and in particular that the designs are compatible and loading from the temporary works will not exceed the loads that can be safely be carried by the permanent works at a particular stage of their construction.

The PSDP must co-ordinate so far as is reasonably practicable activities of the designers in respect of their duties under these regulations and together with the PSCS, facilitate cooperation between the permanent works designers and the temporary works designers as may be necessary. The requirement of the Regulations for the PSDP to co-ordinate the design of the works, including the design of temporary works, in no way eliminates the need for the appointment (generally by contractors) of competent temporary works engineers who understand the complexity of the forces involved in

temporary works-permanent works interaction and who can design the temporary works to safely take account of these forces.

In an age of increasing technology the contractor, who is responsible for providing the specified materials and the required standard of workmanship, should recognize the need to employ properly qualified and experienced designers and supervisors on site.

Designers (of the temporary and permanent works) and the PSDP and PSCS should pay particular attention to potentially catastrophic issues such as overall structural instability at the critical stages of construction. On complex structures or in circumstances where a full understanding of engineering principles is required to execute the work safely, a suitably qualified engineer should be employed to direct and supervise the construction, including the sequencing of construction. One option to achieve this is for the PSDP to insist, when the construction contracts are being prepared, that a suitably qualified engineer be employed to liaise with the PSDP, the PSCS and permanent works designers to maintain the stability of the structure during and after construction.

However in their designs, the permanent works designers should also strive to minimise possible instances of instability during construction, by addressing the issue during the design of the structure.

- (ii) take reasonable steps to bring about co-operation between designers on the same project and ensure, so far as is reasonably practicable co-ordination of their activities in relation to the design of the project with a view to protecting persons at work,

The PSDP has a central role in the management of health & safety during the entire design process. This process starts when the design work commences and continues throughout the construction stage. The PSDP should take reasonable steps to bring about cooperation of the different designers engaged on the same project with a view to protecting persons at work, irrespective of whether the Client, permanent works designer, Contractor or some other person has appointed the designer, as detailed in Regulation 4.(1).

Reg
4(1)(a)(ii)

The PSDP needs to make sure that there are appropriate systems in place to encourage communication and the sharing of relevant information. The PSDP may need to convene special meetings if they are not satisfied that there is sufficient co-operation between designers or with other team members or if adequate regard is not being given to health and safety.

During the design process the PSDP is required to coordinate the activities of the various designers: It might be useful to split the designers into three groups as follows.

- Permanent works designers (e.g. Project Structural Engineer, Project Mechanical Engineer, Project Electrical Engineer, Architect,)
- Specialist Designers (e.g. Lighting Consultant, Steel Designer,

- Precast designer, IT Designer)
- Temporary Works Designers (e.g. Temporary Support Designer, Shoring Designer, Temporary Electrics designer etc .)

All designers will not fit comfortably into the classifications set out above or will perform dual roles. However as broad classifications this is a reasonable representation as to how designers can be classified for many projects. In organising co-operation between the various designers, the PSDP should consider all designers that might be appropriate to a particular element of the project.

The PSDP should take reasonable steps to ensure, so far as is reasonably practicable, co-operation between permanent and temporary works designers, in particular to and in particular that the designs are compatible and that the permanent works can support loadings from the temporary works.

The PSDP needs to pay particular attention to late designs or changes to designs, for example revisions on architects' instructions, when clients require changes or when unforeseen problems are encountered on site, to so that they do not result in significantly increased risks. Hurriedly produced solutions to problems or other last minute changes can have tragic consequences if the implications are not identified and thought through.

The PSDP must ensure, so far as is reasonably practical, that the work of the designers is co-ordinated. The PSDP must take account of the interaction of different activities and tasks, with potential conflicts or gaps that could affect health and safety being anticipated and resolved.

(b) subject to paragraph (2), prepare, on a preliminary basis and for the purpose of providing information for the project supervisor appointed for the construction stage, the safety and health plan referred to in Regulation 6(1), which plan shall be in writing and specify -

- (i) a general description of the project and of the time within which it is intended that the project will be completed,
- (ii) appropriate information on any other work activities taking place on the site,
- (iii) where appropriate, work related to the project which will involve particular risks to the safety and health of persons at work as referred to in Schedule 1,
- (iv) the basis upon which the timescale in (i) above was established, taking into account the requirements of subparagraph (1)(a),
- (v) the conclusions drawn by designers and project supervisor for the design process as regards the taking account of

- the general principles of prevention as specified in Schedule 3 of the Act and any relevant safety and health plan or safety file, and
- (vi) the location of water and sewage connections to facilitate adequate welfare facilities.

Reg 4(1)(b)

Regulation 4(1)(b)(iv) and 4(1)(b)(vi) require the conclusions drawn regarding taking account of the principles of prevention and the conclusions regarding the bringing about of co-operation between designers to be documented in the preliminary safety plan. The detail that is required in documenting this will depend on the complexity of the project. However what is essentially required is for the PSDP to document how he has complied with these key duties and the conclusions drawn from his compliance in order to give clarity to the PSCS and other during the construction of the project.

Responsibility for developing the Safety and Health Plan passes to the Project Supervisor for the Construction Stage before the commencement of the construction work. At that point the Plan should establish the arrangements for managing health and safety during the construction of the project, in view of the issues that were raised in the preliminary document. The Plan should be regarded as a living document, and should be reviewed or modified in line with developments on the construction site.

As stated above, the allocated timescale should allow sufficient time for the PSCS to prepare the Safety and Health Plan.

- (c) (i) prepare the preliminary safety and health plan in sufficient time as to enable the safety and health plan to be provided to every person being considered or tendering for the role of project supervisor for the construction stage,

The Preliminary Safety & Health Plan should be prepared in adequate time to allow it to be provided for anyone tendering or negotiating for the position of PSCS. This will allow the potential PSCS consider the implications of the any issues emanating from Preliminary Safety & Health Plan when he is preparing his tender or proposal for execution of the works.

Reg
4(1)(c)(i)

- (ii) keep a copy of the preliminary safety and health plan available for inspection by an inspector for the period of five years after its preparation, and

This is required to allow an Inspector assess the type of arrangements envisaged prior to the Construction Stage of any project. It may provide a valuable store of knowledge use in follow up or similar projects or may provide a useful store of knowledge to be adopted and adapted as appropriate

Reg
4(1)(c)(iii)

(iii) prepare a safety file appropriate to the characteristics of the project containing relevant health and safety information to be taken into account during any subsequent construction work following completion of the project and make any adjustments to the safety file where required to take account of the progress of the work and any changes which have occurred and, on completion of the project, deliver the safety file to the client;

Under this Regulation the PSDP must prepare a *Safety File* for the project, and present it to the client. The Safety File is a record of information for the end user, which focuses on safety and health. The information it contains will alert those who are responsible for the structure and services in it of the significant safety and health risks that will need to be addressed during subsequent maintenance, repair or refurbishment, extension or other construction work or indeed its demolition.

Reg 4(1)(c)(iv)

In order to prepare this document, the PSDP should receive appropriate information from designers and other duty-holders. This will require co-operation and co-ordination right from the start. The PSDP may request the PSCS to act as a conduit for information generated through the construction process.

In undertaking this task, it helps if procedures are set up during the project for obtaining and collating the information to be included in the Safety File. These procedures may need to detail what information is to be collated and how it is to be collected, presented and stored. Relevant information which could be included in the Safety File may include

- construction drawings, process and instrumentation drawings, specifications and bills of quantities, used and produced throughout the construction process;
- the general design criteria adopted;
- details of the equipment and maintenance facilities within the structure;
- maintenance procedures and requirements for the structure;
- manuals, and where appropriate certificates, produced by specialist contractors and suppliers which outline operating and maintenance procedures and schedules for plant and equipment installed as part of the structure, typically lifts, electrical and mechanical installations, pressure vessels, control and instrumentation systems, and window cleaning facilities; and
- details of the location and nature of utilities and services, including emergency and fire-fighting systems.

Some of the material for the Safety File comes from the information, which the designers should provide. The PSDP also needs to obtain details of services, plant and the project equipment, which are part of the structure from specialist supply and installation contractors as well as from statutory bodies and local authorities where appropriate, and include the relevant information in the safety file. On completion of the project the PSDP should hand over the Safety File to the client. In some cases it might not be possible

for a fully developed Safety File to be handed over at the end construction of the project. position of PSCS. This will allow the potential PSCS consider the implications of the any issues emanating from Preliminary Safety & Health Plan when he is preparing his tender or proposal for execution of the works. This may happen because the construction work had to be finished rapidly to meet a tight deadline and completion of the Safety File was impossible.

Clearly a common sense approach may be needed, allowing the Safety File to be handed over as soon as practical after the completion certificate (i.e. practical completion) or similar document has been issued. What is important is that work on producing the File continues throughout the project and is not left until the end. Where the client has an immediate need for the Safety File at “hand-over”

of the project, (i.e. practical completion), the PSDP should liaise with the client and agree on what aspects of the Safety File need to be made available immediately. It may be useful to compile the safety file so that it is in two parts. One part will be more relevant for day-to-day use, e.g. operational and maintenance manuals. The other part is for longer-term use, e.g. drawings that will only be required when major alteration work is carried out. For ease of reference, it may be useful for the PSDP to produce a document, which summarises the key elements of the safety file and acts as a quick guide to where the relevant information is stored.

When construction work is going to be carried out on a structure for which the client possesses a Safety File he must make it available to the PSDP. This project supervisor will then in turn need to give the designers the relevant information from the safety file. Moreover, relevant parts of the safety file may need to be incorporated into the preliminary safety and health plan. Once the construction work has been completed, the safety file or parts of it will need to be amended and updated by the PSDP.

On a project which involves work on part of a structure for which there is no safety file (e.g. maintenance or refurbishment work on a building that existed prior to the requirement for a safety file) a safety file has to be created only in relation to the construction work carried out and not for the whole of the structure. Eventually, as further work is carried out on that structure, the safety file will be added to and amended allowing an increasing detailed file to be developed.

(2) Where notification is not required under Regulation 8, a safety and health plan shall be required only for such sites where the work concerned involves a particular risk, including any of those specified in Schedule 1.

Under certain conditions notification of construction projects to the H.S.A. will not be required. In such instances a Safety & Health Plan (either preliminary or developed) will not be required unless the project involves a Particular Risk as set out in Schedule 1 of the Regulations.

Reg 4(2)

(3) The project supervisor for the design process may appoint a

competent person as health and safety co-ordinator for the design process to assist in the undertaking of the duties specified in paragraph (1).

The PSDP may appoint a competent person as Health & Safety Coordinator Design Process to assist the PSDP in undertaking his duties in Regulation 4(1). The Health & Safety Coordinator Design Process does not replace the PSDP but is intended to provide a direct point of contact for the Designers and PSCS and to assist the PSDP in the coordination of activities of Designers during the Design Process. A Co-ordinator as envisaged by this Regulation may be necessary if the selected PSDP wishes to increase the level of competence available to him to cope with his duties under the Regulations. The appointment of such a co-ordinator does not relieve the PSDP of his or her duties. Reg 4(3)

(4) The project supervisor for the design process shall give reasonable directions to any designer so far as is necessary to enable the project supervisor for the design process to comply with that supervisor's duties under these Regulations.

The PSDP should arrange meetings or discussions between the different designers working on a project, so as to aid the coordination of the design process. During the design process however, it may be necessary for the PSDP to issue written directions to Designers, in order to comply with his duties under the Regulations and with a view to protecting persons at work. Such directions may deal with the implementation of the General Principles of Prevention, as mentioned earlier and design risk assessments or the coordination of design activities between different Designers. Reg 4(4)

Each designer is required to comply with any reasonable direction received from the PSDP in relation to obligations under health and safety legislation.

(5) It is sufficient compliance with the duty under this Regulation to ensure -

(a) the co-ordination referred to in paragraph (1)(a)(i), or

(b) the co-operation or the co-ordination referred to in paragraph (1)(a)(ii),

for the project supervisor for the design process to issue a written direction in respect of the matters concerned to any designer or other person concerned.

In order to bring about co-operation or co-ordination among designers the PSDP may issue appropriate and reasonable written direction to any designer or designers on the project. Reg 4(5)

(6) If a designer or other person fails to comply with a direction given under paragraph (5), the project supervisor for the design process shall notify the Authority the designer and the client of this failure and such notification shall enclose a copy of the written direction.

If a designer fails to implement a written direction issued by the PSDP, the PSDP is required to notify, in writing, the Health & Safety Authority and should also notify the client and designer of the failure to comply. Reg 4(6)

In general however notification to the H.S.A. should be a last resort after all other reasonable avenues of discussions have been exhausted. A set procedure for dealing with written directions of this nature (with specific time limits) could be agreed at the negotiation stage of the contract. This might include a set number of written warnings, a mutually agreeable appeal and arbitration procedure and other means of conflict resolution, as might be appropriate depending on the nature of the work being undertaken. Only after exhaustive efforts to resolve the issue in question, should the “failure to comply” be taken as the outcome. However if “failure to comply” is the outcome then the H.S.A. and the Client should be notified. See also guidance in respect of directions in the designers section.

(7) Any such direction shall be contained in the preliminary safety and health plan.

The PSDP should include all directions issued in the Preliminary Safety & Health Plan. Reg 4(7)

2.2.3 Does any other legislation apply?

As in the case of the client, anyone who exerts control to any extent over a place of work must exert that control in such a fashion as to ensure so far as is reasonably practicable the safety health and welfare of workers at the place of work and those affected by the work being carried out at the place of work. A PSDP may exert such control, particularly if he is acting in the capacity of designer and again he is bound by the requirement of the Safety Health & Welfare at Work Act, 2005 in so far as it's provisions apply to him.

2.2.4 Examples

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The example quoted below are not intended as the only solution that might be used in the situations described. They do however show how the PSDP might be involved in the co-ordination of the design process leading to reduced risk in relation to the works.

Example of co-ordination of design risk assessments

PSDP noted that a particular project had extensive works in service shafts. He noted that the design risk assessments of the building services engineer did not take adequate account of personnel falling during the installation of services such as pipes and cables in the shafts. To control the risk, the PSDP arranged co-ordination between the structural designer and the building services engineer resulting in the design and installation of a simple platform spanning the shaft leaving adequate room for services but preventing the risk of personnel falling.

Example of design co-ordination to reduce risk of fall from height

A 4-storey office block was to be constructed with a glass atrium as an architectural feature. This would require the installation of lighting at a high level during construction and this would require cleaning internally on an ongoing basis thereafter.

One risk identified at design stage was falling from a height while installing light fittings and cleaning atrium

The Design was amended to reduce risk by designing the entrance doors to the building sufficiently large to allow access for a suitable Mobile Elevating Work Platform (MEWP) from which the light fittings could be installed and

maintained and atrium could be cleaned. The ground floor slab was designed by the structural engineer to cater for the intended MEWP. The design provision co-ordinated by the PSDP involved inputs from the architect, MEWP supplier and Structural Engineer.

Example of reduced risk through designed traffic management.

A major road development involving the realignment of existing roads would involve the interaction of existing road users and heavy machinery on roadways. The design was amended to include temporary roads drawings to illustrate arrangements which minimised the interaction between construction traffic and other road users.

The PSDP coordinated inputs from the Civil Engineer, the local County Council and the Gardai to allow preparation of the drawings.

DRAFT

Moving of Services.

At an early stage in the design process a designer identified a 110 kV electricity line traversing part of a site near where a three storey apartment scheme was to be built. The foundations required piling and the roof trusses would be craned in. The area adjacent to the line was an area likely to be used for site office and welfare facilities and to site the crane during lifts. The designer informed the PSDP that there was risk of contact with the lines during placement of the site buildings and during piling and craning operations. The ESB informed the PSDP that only minimum switch-outs of the line could be assured during the construction phase. The PSDP decided that the best option was to have the lines moved. The period of the contract meant that the PSCS, when appointed, might not be able get the ESB to move the lines before piling operations started on site. The PSDP requested the ESB to divert the lines, giving adequate notice to ensure that the lines could be moved before site works commenced. The network provider, having been given adequate notice, ensured that the lines were moved in time. The Client appointed a PSCS before the line removal commenced and the PSCS coordinated the removal with the ESB and the ground-works sub-contractor.

2.3. Designers

Summary of Designer Duties

Designers must:

- **Design projects to be, so far as reasonably practicable, safe and without risk to health during construction and after completion**
- **Proactively aim to design out risks experienced during construction**
- **Assess remaining risks arising from their design**
- **Where risks remain, use risk reduction to mitigate those risks**
- **Provide necessary information to the Project Supervisors and others**
- **Co-operate with Project Supervisors**

(The bullet points above are a brief summary for information only and are not a legal interpretation of the Regulations)

2.3.1 What is design and who are designers?

The term 'Design' has a very broad definition in the Regulations. Design work is the preparation of drawings, particulars, specifications, calculations, the preambles and preliminaries of bills of quantities in so far as they contain specifications or other expressions of purpose, according to which a project, or any part or component of a project, is to be executed. It should be noted that the term 'project' also has a very broad meaning under the Regulations, as have related terms such as 'construction work' and 'structure'.

The **design process** is the process through which the design of a project is prepared and developed from initial concepts through to detailed specification, usually involving different teams and disciplines at various stages throughout the life of the project.

Designers are organisations or individuals who undertake design work for a project, including the design of temporary works. They are therefore in a unique position and can often make decisions that can significantly reduce the risks to health and safety during the construction stage and during subsequent use and maintenance.

Designers include:

- those architects, civil and structural engineers, building services consultants, building surveyors, landscape architects and other design practices and individuals who contribute to, or have a responsibility for analysing, calculating, preparatory design work, designing, detailing, specifying and/or preparing bills of quantities for construction work.
- Mechanical, Electrical, Chemical and other engineers as appropriate to the project being undertaken
- those who specify or alter a design, or who specify the adoption of certain methods of work or the use of specific materials (this may include the client).

Included within this definition also are temporary works designers, interior designers, specialist sub-contractors with design input such as engineering services sub-contractors and others involved in the choice of construction materials.

Temporary works may include such matters as trench shoring, scaffolding, propping, working platforms, gangways and access stairs/ladders, etc., and persons who make decisions on site in respect of these may be deemed to be designers.

Those employing, or in control of, people undertaking design work are themselves deemed to be designers.

The scope/areas of design responsibility of a designer is determined by his brief. It is essential that areas of responsibility between the various designers on a project are delineated as clearly as possible to avoid overlap or gaps which could be confusing and/or potentially dangerous. Once those areas of responsibility have been determined, the duties of each designer relating to health & safety, in respect of his own defined areas of design responsibility and his cooperation with the other designers, are determined by the Regulations.

Designers must cooperate with the person appointing them, when that person is making reasonable enquires as to their competency and resources in relation to these Regulations.

The lines of communication for the management of health & safety should be agreed between the PSDP and each designer prior to the latter's design work commencing.

2.3.2 What Regulations apply to Designers?

Duties of designers

5. (1) In any case in which a person is engaged in work related to the design of a project, it is be the duty of that person to take account of the general principles of prevention as specified in the Schedule 3 of the Act and any relevant safety and health plan or safety file prepared in accordance with these Regulations.

Regulation 5(1) states that all designers must take account of the General Principles of Prevention which are contained in the Schedule 3 of the 2005 Safety, Health and Welfare at Work Act and any relevant Safety & Health Plan or Safety File. The Principles of Prevention are a hierarchy of risk elimination and reduction.

Reg 5(1)

Eliminating hazards and reducing risk, if feasible, at design stage is the first step in managing health & safety on construction projects . All designers must take into account the existing hazards on the project relevant to his areas of concern and consider these with respect to the potential new hazards generated by the design process for construction workers, end users and members of the public.

The table below shows how the 'general principles of prevention' can be related to proactively reducing risks experienced during the construction

process and after completion of the project. Measures at the top of the hierarchy, e.g. the avoidance of risks or the combating of risks at source, are more effective than measures at the bottom, e.g. the use of personal protective equipment or safety signs or notices.

| General Principles of Prevention | Comments |
|--|---|
| (a) The avoidance of risks. | Specifying materials or systems, which remove a hazard or hazards from the construction stage, while the structure is in use or maintained or during the demolition of the structure, which would otherwise have existed. |
| (b) The evaluation of unavoidable risks. | Construction is a high-risk sector and it is impossible to completely avoid risks. Therefore unavoidable risks need to be assessed so that control measures may be implemented to reduce the risks to an acceptable level. This is achieved by risk assessments for <u>respective</u> elements of the works undertaken by the permanent works designer, the specialist designer and the temporary works designer and <u>appropriate information</u> communicated to the PSDP PSCS |
| (c) The combating of risks at source. | This principle indicates that it is better to design out or minimise risks where practicable rather than leave them to be dealt with on site. |
| (d) The adaptation of work to the individual, especially as regards the design of places of work, the choice of work equipment and the choice of systems of work, with a view, in particular, to alleviating monotonous work and work at a predetermined work rate and to reducing their effect on health. | This principle refers to the design of places of work and ergonomic considerations of the individual. For example the consideration of working at height during the construction stage. |

| | |
|--|---|
| (e) The adaptation of the place of work to technical progress. | This principle refers to the duty of employers to maintain pace with technical progress in the workplace. |
| (f) The replacement of dangerous articles, substances or systems of work by non-dangerous or less dangerous articles, substances or systems of work. | The designer should consider the choice of materials or systems available, in achieving a design objective in order to reducing risks as far as practicable - see (b) above. |
| (g) The development of an adequate prevention policy in relation to safety, health and welfare at work, which takes account of technology, organisation of work, working conditions, social factors and the influence of factors related to the working environment. | The management of health & safety throughout the construction project can be documented through the Preliminary Safety & Health Plan (PSDP), Safety & Health Plan (PSCS) and the Safety File (PSDP). Reference should be made to any existing Safety File in the case of refurbishment projects or extensions. |
| (h) The giving to collective protective measures of priority over individual protective measures. | Reducing the risk to everyone exposed should be given preference to measures that only protect individuals. This might be done by designing in measures to accommodate collective fall protection such as nets (during construction) rather than facilities for the protection of the individual using harnesses. |
| (i) The giving of appropriate training and instructions to employees. | All employers are required to give appropriate training & instruction to their employees - including designers so that they may discharge their duties under the Safety, Health and Welfare at Work (Construction) Regulations and other relevant statutory provisions. |

Designers should systematically take account of these principles. They should as far as reasonably practicable include among the design considerations adequate regard to the need to:

- Identify any hazards in the proposed design
- Eliminate any hazards that can reasonably be eliminated (without introducing other higher risks)
- Evaluate and where possible, reduce the risk associated with residual hazards, through the use of a risk assessment process of the design as discussed earlier giving preference to collective protection

- Provide necessary information so that the PSDP, other designers, and contractors are aware of identified residual hazards and can take account of them.

Designers should be aware of hazards likely to cause injury. The Health and Safety Authority publishes annual statistics on the factors associated with construction injuries. In recent years most fatal injuries have been associated with (in descending order of frequency):

- Falling from a height, usually between 2 to 4 metres.
- Being struck by moving, often reversing, vehicles
- Being struck by falling objects or collapsing structures
- Burial in a trench
- Contact with overhead electric lines

Thousands of construction workers are injured or become ill due to their work. In recent years 56 out of every 1,000 construction workers were injured and a further 32 out of every 1,000 become ill. The most common type of injuries, accounting for about 70% of all non-fatal injuries, in descending order of frequency, were:

- Physical stress or strain due to lifting, pushing, pulling of loads
- Slips, trips and falls on the level
- Struck by fall or collapse of material or structure
- Falling from a height

Designers must critically assess their design proposals at an early stage, and then throughout the design process, so that the key construction health and safety issues are identified, integrated into the overall design process and addressed as they go.

However, depending on the type of the project being undertaken, the nature of the risks may vary substantially from the risks alluded to in the statistics above. The risks must be assessed in the context of the project under consideration.

The designer should reassess the hazards and issue revised information to the PSDP where this becomes necessary during the development of the design. This is particularly the case during design & build contracts where there may be a large overlap in time between the design of the main elements of a project and the construction stage. It is recommended that may on occasion be helpful if the designers participates in some health & safety meetings between the PSDP, PSCS and contractor.

This section identifies some areas over which a designer may have direct influence and which he should consider along with the other design considerations.

This is not an exhaustive list, nor is each item relevant to every project. The relevant designer(s) should, as far as reasonably practicable,

- a) Select the position and design of structures to avoid/minimise risks from known site hazards, including:
- Buried services, including gas pipelines;
 - Overhead and underground power lines;
 - Traffic movements to, from and around the site;
 - Contaminated ground (for example minimising disturbance by using shallow excavations and driven, rather than bored, piles – balancing that against the risk to health and welfare of operatives driving piles)
- b) Design out/minimise health hazards, for example:
- Specify/permit the use of materials known to be less hazardous, e.g. solvent-free or low solvent adhesives and water-based paints.
 - Avoid processes that create hazardous fumes, vapours, dust, noise or vibration, including disturbance of existing asbestos, cutting chases in brickwork and concrete, unnecessary breaking down cast in-situ piles to level or scabbling concrete, hand digging tunnels, flame cutting or sanding areas coated with lead paint or cadmium;
 - Specify/permit the use of materials that are easy to handle;
 - Design block paved areas to enable mechanical handling and laying of blocks.
- c) Design out/minimise safety hazards, for example:
- The need for work at height, particularly where it would involve work from ladders, or where safe means of access and a safe place of work is not provided;
 - Fragile roofing materials and rooflights as in the HSA Code of Practice for safety in Roofwork
 - Deep or long excavations in public areas or on roads or motorways
 - Materials that create a significant fire risk during construction. Consider prefabrication to minimise hazardous work or to allow it to be carried out in more controlled conditions off-site including:
 - Design/detail elements, such as structural steel work and process plant, so that sub-assemblies can be erected at ground level and then safely lifted into place;
 - Arrange for / permit cutting to size to be done off-site, i.e. under more controlled conditions, to reduce the amount of dust released.
- e) Design in features that reduce the risk of falling/injury where it is not possible to avoid work at height, for example:
- Early installation of permanent access, such as stairs, to reduce the use of ladders;
 - Edge protection or other features that increase the safety of access and construction

- f) Design/detail to simplify construction, for example:
- Provide lifting points and mark the weight, and centre of gravity of heavy or awkward items requiring slinging both on drawings and on the items themselves;
 - Make allowance for temporary works required during construction
 - End bearings to slabs beams that temporary end-propping.
 - Design/detail joints in vertical structural steel members so that bolting up can easily be done by someone standing on a permanent floor; and by use of seating angles to provide support while the bolts are put in place;
 - Design connections to minimise the risk of incorrect assembly.

- g) Design to simplify future maintenance and cleaning work, for example:

- Make provision for safe permanent access;
- Specify windows that can be cleaned from the inside;
- Design plant rooms to allow safe access to plant and for its removal and replacement
- Design safe access for roof-mounted plant, and roof maintenance;

(2) In any case in which a person is engaged in work related to the design of a project, it is the duty of that person, so far as is reasonably practicable, to design places of work that are safe and without risk to health.

Regulation 5 (2) reaffirms the duty contained in the Safety, Health and Welfare at Work Act, 2005, for all designers to design projects which, so far as is reasonably practicable, are safe and without risk to health, can be maintained safely and without risk to health during use, and complies in all respects, as appropriate, with the relevant statutory provisions. This duty is critical to the management of health & safety throughout the lifecycle of the structure, including the construction stage.

Reg
5(2)

(3) It is the duty of all designers engaged in the design of a project to provide in writing to the project supervisor for the design process all relevant documentation necessary for that project supervisor design process to carry out the duties of the supervisor.

Under this Regulation, the designer must provide to the PSDP, all information known and available to him (the designer), which is necessary for the PSDP to carry out his duties. This requires all designers to supply to the PSDP in a timely manner necessary information, so that the PSDP can coordinate the activities of all designers engaged on the project and communicate effectively with the PSCS and other duty holders.

Reg
5(3)

Designers should similarly provide appropriate information about aspects of the design that could create risks during future construction work or maintenance. This should then be incorporated into the Safety File by the PSDP. See also Reg 5.4.b

One method of recording compliance with these duties and maintaining a record of the various steps taken during the design process is to complete design certificates/design confirmation (see appendix 2) to affirm the safety of the works at the different stages. These also facilitate the checking of the design and the communication of the design assumptions to other Designers. If this method of recording is not considered appropriate, then an alternative method should be used to allow for communication and recording and verification of information regarding the project.

Appendix 2 contains templates for different types of certificates, which could be used by the various different designers on a project to allow for unambiguous communication of their assumptions and assurances to the PSDP. This will help the PSDP to fulfil his co-ordination role and will also demonstrate the designer's compliance with the legislation. It is recommended that a permanent works designer should complete a permanent works design certificate or permanent works design confirmation certificate, with respect to the adequacy, in the context of health & safety of their design similar to the certificate enclosed; as appropriate to their design discipline.

Appendix 2 also contains forms, which should be used in the case of 'composite' structural elements (such as precast concrete designed to act compositely with in-situ concrete, or prefabricated steel beams acting compositely with in-situ concrete, or steel sheet decking acting compositely with in-situ concrete). These are required because it is critical that the temporary works designers and contractors know the assumptions made in relation to loadings and construction sequence and each party must pass on adequate information to allow the structure to be built in safety.

A specialist designer (e.g. steel or precast concrete), if one is appointed should also provide assurance with regard to the adequacy of the design of the specific

element for which they are responsible. Similarly a temporary works designer, if one is appointed, should provide verification of their design input and again certification of the design should be completed on an appropriate form (see Appendix 2 for template). Forms, when completed, should be given to the PSDP and the PSCS and others as appropriate.

(4) In any case in which a person is engaged in work related to the design of a project, save where such a person is appointed under Regulation 3(1) as project supervisor for the design process, it is the duty of that person to -

- (a) co-operate with the project supervisor for the design process or the project supervisor for the construction stage, as appropriate, to enable that project supervisor to comply with these Regulations,

In accordance with the Regulations, the PSDP and PSCS have duties, which must be complied with, to allow them fulfil their co-ordination roles. The designer must co-operate with the Project Supervisors to allow those functions be discharged effectively. This co-operation could be in the form of provision of information or in attendance at meetings or revisions of designs to improve aspects of health and safety on site.

Reg
5(4)(a)

In addition, designers must also provide information to allow the PSDP compile a Safety File as mentioned earlier. This might include information on plant or materials specified in the building. Design assumptions and calculations pertinent to the functioning, maintenance and possible extension of the building should also be forwarded in this context

The relevant designer should also identify to the PSDP, demolition hazards for inclusion in the health and safety file, for example:

- Sources of substantial stored energy, including pre- or post-tensioned members;
- Stability requirements
- Alterations that have changed the original 'structure'.

- (b) promptly provide the project supervisor for the design process or the project supervisor for the construction stage, as appropriate, with such information as is known to that person regarding particular risks to the safety and health of persons at work as referred to in Schedule 1 which may be associated with the project, and also with such information regarding the nature and scope of the project to the extent necessary to enable the project supervisor to comply with these Regulations,

Designers must provide the PSDP or the PSCS, as appropriate, with such information as is known to the designer regarding the 'particular risks' set out in Schedule 1 of the Regulations .

Reg
5(4)(b)

Designers should provide information on significant hazards including

- Hazardous or flammable substances specified in the design, e.g. epoxy grouts, fungicidal paints, or those containing isocyanates;
- Specific problems and possible solutions, for example arrangements to enable the removal of a large item of plant from the basement of a building;
- Structures that create particular access problems, such as domed glass structures;
- Heavy or awkward prefabricated elements likely to create risks in handling;
- Areas needing access where normal methods of tying scaffolds may not be feasible, such as facades that have no opening windows and cannot be drilled;
- The features of the design and sequences of assembly or disassembly that should be apparent at the design stage and that are crucial to safe working.
- Unusual stability concepts;

Information provided must be specific to the project.

(c) promptly provide the project supervisor for the design process or the project supervisor for the construction stage or any contractor as appropriate, with such information as is known to that person to ensure so far as is reasonably practicable the safe construction of any such design,

In relation to structural stability for example, where a design is (or should be) based,

Reg
5(4)(c)

- on a particular erection or construction sequence
- on the installation and removal of falsework, temporary propping or formwork and the sequencing of this,
- any loading restrictions during construction,

and where these factors might not be apparent to a contractor, designers (including as appropriate temporary works, permanent works and specialist designers) should make available to the PSCS, PSDP and contractors, pertinent information to allow construction to proceed safely in accordance with the appropriate design intent. In the case of structure, which any particular reason to become unstable, the pertinent relevant information might be the temporary works, required to ensure stability during the construction, alteration or demolition of the whole or any part of the structure. This might include details of bracing during construction of steel or concrete frame buildings, temporary support of composite steel or concrete elements, or information regarding removal of critical load-bearing components.

It would also be prudent to inform other relevant designers of this type of information, to allow them take appropriate measures in their design to accommodate safety health and welfare.

- (d) comply with any reasonable direction from the project supervisor for the design process or the project supervisor for the construction stage, as appropriate.

The PSDP or PSCS may issue a written directive to any designer in relation to the fulfilment of the Designer's duties, where necessary in order that the Project Supervisor may comply with his own duties under these Regulations. Designers are required to comply with any reasonable such direction from the PSDP or PSCS.

Reg
5(4)(d)

Such directions may deal with issues relating to taking account of the General Principles of Prevention or with the coordination of design activities between different designers. When a PS issues a direction to a designer, the PS is primarily responsible for the effects arising from the implementation of the direction. Notwithstanding this the designer should communicate any reservations he might have in relation to the instruction.

Any such direction must be reasonable. It would not be reasonable for instance for a PS to direct a designer to do something which in his, the designer's, opinion he is not competent to do, or would, or which relates to matters which he does not effectively control or which he would be legally constrained from doing.

If there is a conflict between directions received from the Project Supervisors, the designer should inform the PSDP of this fact in writing and request clarification, which the PSDP will be obliged to provide.

In the event that a Designer fails to implement a written direction issued by the PS, the PS is required to notify, in writing the Health & Safety Authority and the Client of the failure to comply. The PS should also notify the Designer of this.

Where the HSA investigates this matter the focus of the investigation will normally be to determine if the relevant parties have complied with their legal duties and to take any necessary enforcement action. The Authority will not conduct any process of mediation or adjudication between the parties. Where such an investigation does commence then a designer or PS may forwarded any additional responses to the instruction to allow due consideration to be given to all relevant sides in the matter.

2.2.3 Does any other legislation apply?

As in the case of other duty holders anyone who exerts control to any extent over a place of work must exert that control in such a fashion as to ensure so far as is reasonably practicable the preservation of the safety health and welfare of workers at the place of work and those affected by the work being carried out at the place of work. A designer may exert other controls than those envisaged by the Construction

Regulations and the requirement of the Safety Health & Welfare at Work Act, 2005 and other relevant statutory provisions will also apply.

Section 17 (2) of the Act also requires (2)A person who designs a project for construction work to ensure, so far as is reasonably practicable, that the project—

- (a) is designed and is capable of being constructed to be safe and without risk to health,
- (b) can be maintained safely and without risk to health during use, and
- (c) complies in all respects, as appropriate, with the relevant statutory provisions.

2.2.4 Examples

The example quoted below are not intended as the only solution that might be used in the situations described. They do however show how the designer might eliminate or reduce risk in relation to the works.

Example of incorporating safety at design stage.

In the design of a roof the Permanent Works Designer increased the height of the parapet from 450 mm to 1100 mm prior to application for planning permission to facilitate safety in both the construction of the roof and future maintenance on the finished roof and associated drains.

Example minimising disturbance to contaminated ground

A development was built on a former industrial site that contained some contaminated ground. Records giving information on the history of the site were supplied by the client, and these outlined the extent of the contamination. Contact with the contaminants was minimised by using driven piles to reduce ground disturbance the designer having judged it was better to accept the noise etc of driven piles. Relevant information was passed to the project supervisor for the design process for inclusion in the safety file. Services were placed in ducts to minimise contact with contaminants for future maintenance work.

Example of health issues being addressed during design

An extensive refurbishment of an existing office block involved a upgrading of the steel frame to allow additional loading. The designer judged it was best to encase the steel beams in concrete and post-tension , avoiding the health hazards of gas cutting and welding and minimising dust and noise.

Example of minimising working adjacent to high-speed traffic

A steel footbridge was erected over a busy roadway. A single span was practicable and was chosen so as to reduce dangers to road vehicles. A lightweight design was utilised enabling the bridge to be lifted into place during a single road closure held on a weekend night. There was minimal need for temporary works. The connections and lifting points were designed to allow speedy pre-assembly.

Reduction in the need to perform work at a height

(a) A designer considered the use of a water-based paint for the exterior of a metal spire on a tall building to reduce exposure to solvents. She determined that the level of exposure to solvents from a solvent-based paint would be low, and the metalwork would require more frequent repainting with a water-based paint. She therefore concluded that it was better to specify the solvent-based paint because of the high risk of frequent working at height.

(b) A designer had specified timber cladding on a building façade, including the gables. All the cladding would be accessible for periodic maintenance by mobile elevating work platform, except for one gable adjacent to a narrow passageway. The cladding on the gables was replaced by a low maintenance anodised aluminium cladding.

Making arrangements to permit safer means of work at a height

(a) In preparing the drainage layout for a fast track project, the drainage lines were arranged so that the drains could be laid without preventing access for the use of mobile elevating work platforms that had been chosen to provide safe access for the erection of the structural steelwork.

(b) When designing a glass-clad building with a large atrium, the path around the perimeter building was made wide enough to accommodate a mobile elevating work platform for window cleaning and façade maintenance. The atrium floor and entrance were specified to accommodate a mobile elevating work platform for maintenance of lighting fixtures and cleaning of the interior glass.

Reducing the speed of traffic at roadworks

A pavement rehabilitation project was planned for a national primary road. The designer prepared a preliminary traffic management plan and identified that speed restrictions and signage, including variable message signs and repeater signs would be required. The PSDP informed the County Manager in good time who made an order under the Road Traffic Act 2004 specifying a special speed limit at the road works before construction commenced

2.4 The Project Supervisor for the Construction Stage

Summary of Duties of the Project Supervisor for the Construction Stage (PSCS)

The Project Supervisor for the Construction Stage must:

- Co-ordinate the activities on the construction site to bring about a safe workplace for all those working on site and all those affected by the construction work.
- Coordinate the activities of contractors on site.
- Develop a Safety and Health Plan, where required
- Keep the Safety and Health Plan available for inspection
- Give directions where necessary regarding safety health or welfare.
- Facilitate the election of a Site Safety Representative.

(The bullet points above are a brief summary, for information only, and are not a legal interpretation of the Regulations)

2.4.1 What is a Project Supervisor for the Construction Stage?

The Project Supervisors for the Construction Stage is responsible for managing and coordinating the construction phase safety and health issues on site. Regulations 3 to 14 of the 2004 Safety Health & Welfare at Work (Construction) Regulations, 2005 and particularly Regulation 6 provides a framework for this process, with the requirement that the key risk management issues be set out in writing in the construction phase safety and health plan. It is important to note, that the presence of a Project Supervisor for Construction does not relieve other contractors/employers of their obligation to comply with their statutory health and safety obligations.

2.4.2 Duties and powers of the project supervisor for the construction stage

What Regulations apply to the PSCS.

6. (1) It is the duty of the project supervisor for the construction stage to develop before the commencement of the construction work the safety and health plan for the construction site prepared on a preliminary basis under Regulation 4(1)(b), and make adjustments to such plan where required to take account of the progress of the work and any changes which occur, and take account as regards such plan at all times during the construction stage of the requirements of section 20 of the Act and of other work activities taking place on the site, and include in such plan specific measures concerning work which falls within one or more of the categories of Schedule 1.

The PSCS must develop a suitable safety and health plan for the project, prior to the commencement of construction work. The plan provides the blueprint for managing and co-coordinating safety and health during construction. The plan needs to explain how the key safety and health issues will be managed. It must be relevant to the particular project and should be built on the safety and health plan prepared on a preliminary basis by the PSDP.

Reg 6(1)

The PSCS should develop this safety and health plan so that it:

- incorporates the approach to be adopted for managing safety and health during the construction stage;
- takes account of the relevant sections of the safety statements prepared by the different contractors under the 2005 Safety, Health and Welfare at Work Act. The PSCS should check the safety statements prepared by the contractors to ensure they relate to the site in question and the work activities to be carried out;
- includes the specific control measures for dealing with Particular Risks
- takes account of other work activities taking place on the site,(eg. where the construction work overlaps with non construction activities);
- incorporates the common arrangements (including emergency procedures and welfare as well as details regarding control, coordination and management of shared equipment such as scaffolding and lifting appliances);
- document the arrangements for ensuring effective co-operation and co-ordination
- includes arrangements for monitoring compliance with the safety and health plan and with safe working procedures;
- includes arrangements for checking that persons on site have received appropriate safety and health information and training and that consultation arrangements are in place;
- includes arrangements for ensuring effective communications between all parties, (this may include matters such as frequency of project or site meetings and how safety and health is to be dealt with at these meetings);
- includes information and arrangements for the welfare of workers. Effective washing, welfare and changing facilities are a vital part of health precautions, for example, against cement contact dermatitis and contamination by other hazardous substances.
- Is modified as necessary as work progresses and as changes occur.

As much of the safety and health plan as possible should be developed before construction work starts, particularly the procedures and arrangements which are applicable to the generality of the construction stage and early work packages.. The safety and health plan needs to be kept up to date, modified and altered in the light of changing circumstances and standards achieved on site and as the construction work progresses. If the contracting arrangements are such that design and preparation for many of the work packages is not complete at the start of the construction stage, the parts of the safety and health plan relating to those packages need to be developed. Safety statements and information from contractors starting work during the different work stages of a project will invariably mean that parts of the safety and health plan have to be amended and updated before construction of such work packages commences.

Reviews of parts of the safety and health plan may also need to be made if there are design changes or alterations, unforeseen circumstances or if variations to planned circumstances arise. It is vital that such changes are notified to all parties working on site who will be affected.

As an integral part of developing the safety and health plan, the PSCS needs to check that a hazard identification and risk assessment has been carried out for each of the main stages during construction. To do this properly, information, including method statements and safety statements will generally be needed from the contractors who will be working at the site. If risks arise because a number of contractors are exposed to a common hazard (e.g. from site transport, shared scaffolding, unguarded openings or lifting operations), the PSCS needs to ensure the risks are avoided, or if this is not reasonably practicable, effectively controlled and managed.

(2) It is the duty of the project supervisor for the construction stage where more than one contractor is engaged in the project to -

(a) co-ordinate the implementation during construction of the general principles of prevention specified in the Schedule 3 of the Act -

(i) technical or organisational aspects are being decided,

(ii) estimating the period of time required for completing such work or work stages,

Reg
6(2)(a)

and monitor the consistent application of the principles of prevention and take appropriate remedial action as set out in paragraph (13).

The PSCS must coordinate the application of the 'General Principles of Prevention'.

| General Principles of Prevention | Comments and Examples |
|--|---|
| (a) The avoidance of risks. | <p style="text-align: center;">DRAFT for Public Consultation 07-Sep-2005</p> <p>The insertion of opening and channels in floors during the pouring of concrete to avoid the hazards of dust, noise and fall from height associated with core drilling and chasing after concrete has set.</p> |
| (b) The evaluation of unavoidable risks. | <p>Construction is a high-risk sector and it is impossible to completely avoid risks. Therefore unavoidable risks need to be assessed so that control measures may be implemented to reduce the risks to an acceptable level. This is achieved by risk assessments for each element of the works undertaken by contractors and sub-contractors and communicated to the PSCS or other contractors as appropriate.</p> |
| (c) The combating of risks at source. | <p>Fabricating assemblies and craning into place to eliminate the hazard of working at height during the fabrication.</p> |
| (d) The adaptation of work to the individual, especially as regards the design of places of work, the choice of work equipment and the choice of systems of work, with a view, in particular, to alleviating monotonous work and work at a predetermined work rate and to reducing their effect on health. | <p>This principle refers to the ergonomic issues associated with work of the individual. This principle might involve the production of templates or brackets to hold drilling or cutting equipment to reduce stress. It might also involve the sequencing of work so that heavy equipment could be craned into place and not manually lifted afterwards up stairs. This might involve the PSCS and contractors coordinating their procurement and delivery to bring about delivery of equipment before dismantling of the crane.</p> |
| (e) The adaptation of the place of work to technical progress. | <p>This principle refers to the duty of employers to maintain pace with technical progress in the workplace.</p> |
| (f) The replacement of dangerous articles, substances or systems of work by non-dangerous or less dangerous articles, substances or systems of work. | <p>The PSCS should consider the choice of materials or systems available, in achieving a construction objective in order to reducing risks as far as practicable - see (b) above.</p> |

| | |
|---|--|
| <p>(g) The development of an adequate prevention policy in relation to safety, health and welfare at work, which takes account of technology, organisation of work, working conditions, social factors and the influence of factors related to the working environment.</p> | <p>The management of health & safety throughout the construction stage can be documented through the, Safety & Health Plan and the Safety File where available Reference should be made to any existing Safety File in the case of refurbishment projects or extensions.</p> |
| <p>(h) The giving to collective protective measures of priority over individual protective measures.</p> | <p>Reducing the risk to everyone exposed should be given preference to measures that only protect individuals. This might be done by the PSCS coordinating measures such as bean bags or air bags to give collective fall protection for personnel installing, for example, formwork and false work for insitu concrete floors or installing precast concrete flooring slabs (or other elements of a structure where work at height exposes individuals to the risk of falling).</p> |
| <p>(i) The giving of appropriate training and instructions to employees.</p> | <p>Giving appropriate training (not just safe pass and CSCS courses as listed in the Regulations) for all work particularly work with implications for the safety health and welfare of the worker and others.</p> |

When decisions are being made about how the construction work will be undertaken it is the duty of the PSCS to make sure that the General Principles, as laid out in the Schedule 3 of the 2005 Safety Health and Welfare at Work Act, are used in the evaluation of what methods will be used. These principles should also be taken into account for estimating time frames to complete specific parts of the works. This also applies to any organisational aspects within the project that might have an impact on the management of health and safety. If required, the PSCS can issue written directives regarding compliance with the regulations.

Requirements to be applied to construction as regards the general principles of prevention

- a) *keeping the construction site in good order and in a satisfactory state of cleanliness;*
- b) *choosing the location of workstations bearing in mind how access to these workplaces is obtained and determining routes or areas for the passage and movement of equipment;*
- c) *the conditions under which various materials are handled;*
- d) *technical maintenance, pre-commissioning checks and regular checks on installations and equipment with a view to correcting any faults which*

might affect the safety and health of persons at work;

- e) *co-operation between employers and self-employed persons; the demarcation and laying-out of areas for the storage of various materials, in particular where dangerous materials or substances are concerned;*
- f) *the conditions under which the dangerous materials used are removed;*
- g) *the storage and disposal or removal of waste and debris;*
- h) *the adaptation, based on progress made with the site, of the actual period to be allocated for the various types of work or work stages;*
- i) *interaction with industrial activities at the place within which or in the vicinity of which the construction site is located*

(b) co-ordinate the implementation of any relevant requirements of these Regulations in order that the contractors, as regards the general principles of prevention specified in the Schedule 3 of the Act, apply in a consistent manner the requirements set out in Schedule 2, monitor the consistent application of the principles of prevention and take appropriate remedial action as set out in paragraph (13) and follow the provisions of the safety and health plan,

In coordinating the implementation of safe working procedures, the PSCS must proactively manage the interaction between contractors, personnel and any other parties who have an impact on the construction process during the construction stage. If a PSCS forms the opinion that there is non-compliance with safety health and welfare provisions, and attempts by the PSCS to remedy this situation have proved futile, then the PSCS may report the matter to the H.S.A. This is more fully explored in the guidelines to paragraph 13 below.

Reg
6(2)(b)

- (c)
 - (i) organise co-operation between contractors (including successive contractors on the same site) and co-ordination of their activities in relation to a project with a view to protecting persons at work and preventing accidents and injury to health, monitor such co-operation and co-ordination and take appropriate remedial action as set out in paragraph (13),

The PSCS should have an integrated approach to safety and health on site so that all contractors involved with the project work together to ensure the safety of all workers on the site. This involves coordinating the activities of all contractors throughout the duration of the construction period.

Reg
6(2)(c)(i)

Bringing about co-ordination and co-operation between contractors is an on-going task throughout the project which should be addressed and reviewed at project or site meetings and should include the following:

- (a) emergency arrangements and procedures (e.g. fire, including means of escape and first aid provisions);
- (b) arrangements for the provision and use of plant and equipment which will be used by a number of contractors (e.g. cranes, hoists and scaffolding);
- (c) coordinating the work of contractors so as to minimise the effect of one activity on another from the point of view of safety and health;

(d) giving the contractors relevant safety and health information relating to the project.

Where plant, equipment and welfare facilities are shared by a number of contractors, the project supervisor (construction stage) should co-ordinate the arrangements concerning its provision, use and maintenance.

- (ii) organise the implementation of section 6 of the Act in particular in relation to, monitor such implementation and take appropriate remedial action as set out in paragraph (13) in the event of inadequate supplying of information.

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There is also a duty on all employers to co-operate with each other in the interests of safety health and welfare. The Construction Regulation gives the PSCS the role of coordinator to bring about compliance with this requirement.

Reg
6(2)(c)(ii)

- (iii) co-ordinate the implementation by contractors of Regulation 9(1)(e) and keep available for inspection a copy of any information provided to the project supervisor under that Regulation, and where the Authority requests information in relation to such a record, to comply with such a request as soon as possible, check such co-ordination and take appropriate remedial action as necessary, monitor such co-ordination and take appropriate remedial action as set out in paragraph (13),

The PSCS must proactively manage all contractors on site to bring about compliance by the contractors with the regime envisaged in the Safety and Health Plan. The PSCS must put in place arrangements for monitoring compliance with the Health and Safety Plan and with any safe working procedures agreed during the construction process. If necessary, the PSCS should keep records of any information about such compliance. If requested these records must be made available for the Health and Safety Authority.

Reg
6(2)(c)(iii)

If the Contractor is failing to comply with a written directive, relating to a contractor's duty to co-operate under the regulations, the PSCS must notify the H.S.A. of this.

- (iv) provide access to appropriate information regarding safety, health and welfare required by clause (iii) to the site safety representative,

The site safety representative is discussed in more detail in Section 3 of this Reg

Document. He must be given access to information pertaining to health and safety on site and specifically to site rules as laid out in the Health & Safety Plan. 6(2)(c)(iv)

- (v) co-ordinate arrangements for checking the implementation of safe working procedures, monitor the implementation of these arrangements and take any necessary remedial action as set out in paragraph (13),

Plans and procedures are no use if they is treated as a paper exercise. To help to avoid injuries, they must be a practical aid to the management of health and safety on site. The PSCS has a particular role in both implementing and monitoring the safety and health plan and safe working procedures to check that they are implemented in practice.

Reg
6(2)(c)(v)

There is a clear onus on the PSCS to have practical arrangements for monitoring health and safety throughout the course of a project.

These arrangements will generally include:

Where, in monitoring safe working procedures on site, a PSCS forms the view that there is non-compliance among contractors or workers, then they must take remedial measures so that safe working procedures are used. Where the normal measures to achieve compliance are not effective the PSCS may issue a written direction and a notification of a subsequent failure to comply with that direction should be sent the Health and Safety Authority.

- (vi) co-ordinate measures to permit authorised persons only on to the construction site, monitor such co-ordination and take appropriate remedial action as set out in paragraph (13).

- In accordance with reg 6(2)(c)(vi) a PSCS must take reasonable measures to ensure that no unauthorised person enters the work area. Only people who are explicitly authorised either individually or collectively by the PSCS should be allowed on site.
- He will need to have in place measures so that only authorised people are allowed into any area where construction work is taking place.

Reg
6(2)(c)(vi)

- Typical authorised people might include:
 - contractors or employees carrying out construction work;
 - those who need to enter the work area for purposes connected with the work (e.g. architects, engineers and representatives of the client);
 - individuals or organisations who have a statutory right to enter the work area (e.g. Health and Safety Inspectors, Building Control Inspectors, and others who have statutory powers to enter the site);
 - employee representatives

Authorised people should have the relevant site rules explained to them and undertake any necessary induction training. Some authorised visitors may need to be supervised while on site or visiting specific areas.

How access is controlled depends on the nature of the project, the risks and the location. The boundaries of all sites should be physically defined, where practical, by suitable barriers. The type of barriers should reflect the nature of the site and its surroundings.

In deciding on the most appropriate exclusion methods to prevent unauthorised persons entering the site the following matters should be a consideration:

- the location of the site, for example, is it located in an urban area and close to extensive housing or a school, or is it in a remote area;
- is there a right of way across the site or have the public or others access to the site (e.g. street works or work carried out in an occupied premises);
- sites that are in, or next to, other work areas;
- if it is not practicable to erect hoarding around the site, can hazardous areas be cordoned off;
- new houses are being built on a development where some houses are already occupied;
- there are children and other vulnerable people nearby.
- what is the nature of the work and the risk to persons not authorised to enter the site;
- how can unauthorised persons be excluded from work areas, for example is it sufficient for persons to report to the site agent/foreman to gain authorisation, or should a "pass" scheme be set up so that only those who have a pass are allowed on to the site.
- whether an on-site security presence is required.

The effectiveness of the arrangements needs to be reviewed in the light of experience. In particular, their adequacy should be carefully reviewed if there is evidence of children playing on, or near the site. On a housing site it is also appropriate for the PSCS to advise the client on the appropriate sequence of selling houses to members of the public. A logical sequence of house selling will enable the PSCS to fence and secure the section of any housing development still under construction. This is particularly important given that new houses will often be purchased by new families with young children who might be exposed to the dangers of construction activity adjacent to their houses

(3) The project supervisor for the construction stage may appoint a competent person as health and safety co-ordinator for the construction stage to assist in undertaking the duties specified in paragraphs (1) and (2).

The PSCS may appoint a competent person as health and safety co-ordinator to assist in carrying out duties in relation to the preparation of a Safety and Health Plan and the and the general duties as set out in 2.4.1 above. This however does not relieve the project supervisor of the responsibility to ensure that these duties are carried out. Likewise the project supervisor may assign certain functions to named individuals, but again it is the responsibility of the project supervisor to ensure the provisions of Regulation 6 are complied with. Reg 6(3)

The appointment and competence of a co-ordinator and/or the assignment of certain functions to named individuals is the responsibility of the PSCS and does not affect the client's duties though the client should be kept informed when a co-ordinator or co-ordinators is appointed.

The Regulations do not prevent the appointment of more than one co-ordinator where it is considered appropriate.

(4) (a) It is the duty of every project supervisor for the construction stage where there is normally more than 100 persons on site at any one time engaged in construction work, to appoint in writing a full-time safety officer for that site to undertake the following duties -

- (i) to advise the project supervisor and contractors as appropriate as to the observance of the requirements of the relevant statutory provisions, and
- (ii) to exercise a general supervision of the observance of the aforesaid requirements and the promotion of the safe conduct of work generally.

Regulation 6(5) requires that where more than 100 persons on site at any one time are engaged in construction work, the PSCS must appoint in writing a full time Safety Officer. The PSCS must make reasonable enquires to check the competence of the person selected to advise the PSCS on matters of safety, health & welfare and to exercise a general level of on safety, health and welfare related issues

The appointed person should be experienced preferably with management experience and/or health and safety experience in construction and possess the appropriate health & safety training e.g. a recognised Safety and Management in Construction certificate, higher certificate or degree in Safety, Health and Welfare at Work or their equivalent. It is also highly desirable that the Site Safety Officer would have experience of the type of work being undertaken.

The presence on site of the Safety Officer does not relieve any employer or contractor of their own statutory duties to plan, manage, monitor and take corrective action as required.

Reg
6(4)(a)(i)
& (ii)

(b) A project supervisor for the construction stage shall not appoint any person as a safety officer unless the project supervisor is reasonably satisfied that the person whom the project supervisor intends to appoint has the competence to perform the duties specified in subparagraph (a)(i) and (ii).

The PSCS must make reasonable enquiries regarding the proposed Site Safety Officer. This might involve seeking references, checking membership of professional bodies and requesting the proposed site safety officer would himself give assurances regarding his competence and experience.

Reg
6(4)(b)

(5) It is the duty of the project supervisor appointed for the construction stage to co-ordinate arrangements which facilitate the provision and maintenance, in an appropriate condition, of site welfare facilities to all persons at work on the construction site, in accordance with the requirements of paragraphs 13 to 18 of Schedule 3 and the relevant requirements of Schedule 4 and to monitor the implementation of these arrangements and to take any necessary remedial action as set out in paragraph (13).

The PSCS must co-ordinate arrangements for the provision and maintenance of welfare facilities for all persons at work on a construction site. The criteria for the provision of various facilities to workers on a site should be rationalised by being linked to the numbers employed on the site rather than the number of workers employed by individual employers.

Reg 6(5)

The arrangements and rationale underscoring the provision of welfare facilities should also be documented in the safety and health plan, and the PSCS should have a workable system in place to maintain all the welfare facilities in a hygienic and healthy fashion. Provision should be put in place from the outset for hot and cold running water, eating, and washing, drying and changing facilities and adequate facilities for heating food. Flush toilets should be provided unless in very limited circumstances where it is not reasonably practicable to access a sewer connection or install and operate a septic tank.

(6) It is the duty of the project supervisor for the construction stage to co-ordinate arrangements to ensure that persons at work on the construction site to whom Schedule 5 applies are in possession of a current registration card in the form specified in that Schedule, to monitor the implementation of these arrangements and to take any necessary remedial action as set out in paragraph (13).

The PSCS should have a system in place for checking that all operatives on site have an up to date Safe Pass, or equal and approved, card. Safe Pass (or equal and approved) is a requirement for all craft and general construction workers. Drivers of vehicles delivering building materials on construction sites must receive Safe Pass training as must on site security personnel. Site office staff, visiting architects, visiting inspectors etc., are not specifically required under these Regulations to receive Safe Pass training but it is strongly recommended that they do receive the training.

Reg 6(6)

(7) It is the duty of the project supervisor for the construction stage to co-ordinate arrangements to ensure that those persons who engage in any of the tasks specified in Schedule 6 are in possession of a current certificate and registration card in the form specified in that Schedule, to monitor the implementation of these arrangements and to take any necessary remedial action as set out in paragraph (13).

Reg 6(7)

All workers undertaking specified safety critical duties (see Guidance below to Regulation 9 (6) –Contractors duties for the list) must have training under the Construction Skills Certification Scheme (CSCS) and be in possession of CSCS registration cards or equal and approved cards.

Details of Safe Pass and CSCS courses and their availability can be obtained from the local FAS Services to Business Manager. Although the PSCS does not have direct responsibility to ensure that other contractor's employees get Safe Pass and CSCS certification, nevertheless the PSCS must have a system to effectively check that relevant personnel on site to which this requirement applies are in possession of the appropriate certification. Where workers do not have the appropriate certification the PSCS should exclude these workers from site. In addition the PSCS must maintain a record of for five years after the completion (of a project) of the relevant documentation of those trained in Safe Pass and CSCS working on a project.

(8) The project supervisor for the construction stage shall -

(a) give such directions to any contractor or any other person as are necessary to enable the project supervisor for the construction stage to comply with the duties of the supervisor under these Regulations, and

(b) include in the safety and health plan rules for the execution of the construction work which are reasonably required for the purposes of safety and health.

The Project Supervisor for the Construction Stage may include reasonable rules for the management of construction work in the health and safety plan, which others on the site have to follow. These may cover issues such as restricted areas, permit-to-work systems, systems of work, co-ordination arrangements and emergency plans. In some cases they are needed to reflect the requirements of clients.

Reg 6(8)
(a) &(b)

The PSCS must take reasonable measures to make sure the safety and health plan is implemented throughout the construction phase. This helps ensure the health and safety of employees and others who may be affected by the work, including the public is protected. To achieve this, the PSCS needs to monitor the way the work is done so that the precautions described in the plan are followed in practice.

Where they find that contractors or others are not complying with the plan, and health and safety is put at risk, the PSCS must take appropriate action to deal with the risk. The PSCS has powers to give reasonable directions to any contractor, and regulation 9 (1) (e) requires contractors to comply.

Ongoing monitoring by the PSCS may show that the Plan needs to be changed or updated, for example because it has shortcomings. The PSCS should inform contractors about any significant changes.

The PSCS should have arrangements in place so that all newcomers to the site are made aware of the basic safety rules pertaining to the site, regardless of their position or experience in the construction industry. All newcomers should receive an induction programme. This induction should preferably be given before starting work on a site but where this is not practicable necessary safety and health information should be communicated to the newcomers and induction should be arranged as soon as practicable. The induction programme could give details of the main hazards, organisational arrangements, the safety and health management system for the site, emergency and evacuation procedures and specific site rules. This programme may be followed up with an on-going safety and health awareness programme.

(9) The safety and health plan and any rules contained in the safety and health plan shall be in writing and shall be brought to the attention of all contractors who may be affected by them by the project supervisor for the construction stage.

Any rules must be:

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

Reg 6(9)

(10) It is the duty of the project supervisor for the construction stage to maintain and keep available for inspection a record of the names of persons at work at the construction site to whom paragraphs (7) and (8) apply as provided by each contractor under Regulation 9(8).

The PSCS must maintain records of personnel on site with Safe Pass and the CSCS (or acceptable equivalent) training. The contractor should supply these records to the PSCS.

Reg 6(10)

(11) It is the duty of the project supervisor for the construction stage to keep appropriate records and copies of relevant documents in relation to Regulation 56(5) and Regulation 9(9) for five years from their preparation.

The PSCS must maintain records of personnel on site who were exempted from safe pass by virtue of the fact that they were from outside the state and were working for less than 20 working days in any 12 months while on site. Reg 6(11)

(12) It is sufficient compliance with the duty under this Regulation to ensure -

(a) the co-ordination referred to in paragraphs (2)(a), (b), (c)(iii),(v) and (vi), (6), (7) and (8), or

(b) the co-operation or the co-ordination referred to in paragraph (2)(c)(i),

for the project supervisor for the construction stage to issue a written direction in respect of the matters concerned to any designer or other person concerned.

(13) If a designer or other such person fails to comply with a direction given under paragraph (12), the project supervisor for the construction stage shall notify the Authority and the client in writing of this failure and such notification shall enclose a copy of the written direction.

To obtain co-operation and compliance with Regulation 6 on site the PSCS may issue written directions to contractors, employees and other parties as may be relevant. This might include designers, clients or client's agents. However instructions can only be given in relation with the PSCS being in a position to comply with his statutory obligations under the Construction Regulations. If the recipient of a written instruction does not comply a PSCS may report this matter to the H.S.A. In general however notification to the H.S.A. should be a last resort after other reasonable avenues of discussion have been exhausted. Only after reasonable efforts to resolve the issue in question have been made, should the "failure to comply" be taken as the outcome. However if "failure to comply" is the outcome then the H.S.A. should be notified.

Reg 6(12)
& 6(13)

(14) Any such direction shall be contained in the safety and health plan.

The PSCS must ensure that a copy of these directions are maintained in the Safety & Health Plan **Reg 6(14)**

(15) If, in accordance with Regulation 1 of these Regulations a Project Supervisor Design Process has not been appointed, then the Project Supervisor for the Construction Stage must produce the Safety File as required by Regulation 4(1)(c)(iv).

If, as part of the phasing in of the Regulations a PSDP has not been appointed, then responsibility with regard to the preparation and hand-over of the Safety File rests with the Project Supervisor Construction Stage **Reg 6(15)**

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Site Safety Representative

7. (1) (a) Without prejudice to of section 25 of the Act it is the duty of the project supervisor for the construction stage to -
- (i) co-ordinate the development and application by contractors of arrangements, made in consultation with their employees, which will enable them and their employees to co-operate effectively in promoting and developing measures in relation to their safety and health on the construction site and in ascertaining the effectiveness of such measures,
 - (ii) facilitate, where more than 20 persons are normally employed at any one time on the site at any stage of the project, in co-operation with contractors and persons employed on the project, the appointment of a site safety representative from among the employees of the contractor or contractors undertaking the project in accordance with the procedure outlined in Schedule 7.
- (b) A site safety representative has the right to receive from the project supervisor for the construction stage all information in the possession of the supervisor regarding the safety, health and welfare of persons at work at the construction site, including information referred to in Regulation 6(2)(c)(iv) and prescribed forms under these and the Principal Regulations.
- (c) It is the duty of the project supervisor for the construction stage to take reasonable measures to inform the site safety representative when an inspector enters the construction site for the purpose of making a tour of inspection.
 - (d) It is be the duty of the project supervisor for the construction stage to inform the site safety representative of the time and venue of all site safety meetings and to facilitate the attendance of the representative at such meetings.

The PSCS must facilitate the putting in place of a site Safety Representative where there is more than 20 people working on site.

Reg 7(1)
(a) & (b)

- If a site safety representative is elected by the workers on a site, the Project Supervisor for the Construction Stage (PSCS) must recognise that person as such;
- If a safety representative has previously been selected under the Safety Health and Welfare at Work Act 2005 by the employees of a particular contractor the PSCS must take the views of all workers on the site into account when confirming that person as site safety representative;
- If the workers have not elected a site safety representative the PSCS must facilitate an election;
- In the event of no safety representative being elected the PSCS must seek nominations and deem the nominee who he determines to have most support to be the site safety representative;
- If no nominee is forthcoming the PSCS must provisionally nominate a site safety representative.

Furthermore the PSCS must inform the site safety representative when an inspector from the Health and Safety Authority arrives on site. The PSCS should also provide appropriate information to the site safety representative

Regulation 7(2), the rights and the role of the Site Safety Representative, is covered in Section 3 of these Guidelines.

(3) The project supervisor for the construction stage and, as appropriate, any contractor involved in the project shall take account of any representations made to the project supervisor by a site safety representative on any matter affecting the safety, health and welfare at work of any person at work at the construction site.

In co-ordinating the project, The PSCS must take account of reasonable representations made by the site safety representative and should act on representations where they are reasonable. The representations must be in connection with matters of safety, health or welfare. The PSCS should not allow a situation develop where role of the site safety representative and the safety officer become confused or overlap. The site safety representative makes representations, whereas the management on site (including where appropriate the safety officer) must take account of the representations.

Reg 7(3)

Notification of Projects to the Authority

8. (1) It is the duty of the project supervisor for the construction stage to give notice,

- (a) by registered post, or
- (b) in compliance with the requirements which may be specified from time to time on the website of the Authority,

to the Authority before work on a construction site begins, where work is planned to last longer than 30 working days or on which the volume of work is scheduled to exceed 500 person-days, of such particulars specified in the prescribed form PF.1A.

(2) The project supervisor for the construction stage shall cause to be clearly displayed on the construction site and, if necessary, periodically cause to be updated the particulars required to be in any notice under this Regulation.

Reg 8(1) &
8(2)

The P.S.C.S. should notify the H.S.A. of the project prior to commencement of construction activities on site. The notice should set out the details listed in prescribed form PF.1A in schedule 11 of the Regulations. (This form is reproduced in Appendix 1 of these Guidelines). The notice should be sent by registered post to the H.S.A.

(4) The project supervisor appointed for the construction stage shall cause to be clearly displayed on the construction site and, if necessary, periodically cause to be updated the particulars required to be in any notice under this Regulation.

The PSCS must keep the details regarding the PF1.A up to date and must display the up to date legible form prominently and on site. This form should be easily accessible for anyone on the site.

Reg 8(4)

2.4.3 Does any other legislation apply?

As in the case of the client, anyone who exerts control to any extent over a place of work must exert that control in such a fashion as to ensure so far as is reasonably practicable the preservation of the safety health and welfare of workers at the place of work and those affected by the work being carried out at the place of work. A PSCS may exert such control, particularly if he is acting in the capacity of contractor or designer and again he is bound by the requirement of the Safety Health & Welfare at Work Act and other associated legislation in so far as its provisions apply to him.

Section 17 (3) of that Act also stipulates that

A person who carries out construction work shall ensure, so far as is reasonably practicable, that it is constructed to be safe and without risk to health and that it complies in all respects, as appropriate, with the relevant statutory provisions.

2.2.4 Examples

The example quoted below demonstrate some scenarios where the role of PSCS was used to bring about positive interventions on site while other examples show how a lack of co-ordination can lead to unacceptable risks with potential for serious consequences.

Example of lack of coordination between the PSCS and the PSDP

A steelwork structure was being constructed, and its method statement was agreed between the Steel work Contractor and the PSCS. The steelwork erector was to use Mobile elevating work Platforms (MEWPs) during the erection of the steelwork. Work on the steel work was practically complete when the Client's designer requested that an additional Air Conditioning unit at one of the intermediate levels. No risk assessment was carried out by the Designer or by the contractor for this revised workload, with both incorrectly assuming that the initial method statement of using MEWPs still applied. The revised sketch showing alteration to the steelwork was issued by the designer to the contractor. No new arrangements were put in place and as it was now no longer possible to use MEWPs due to site conditions, the employees of the contractor carried out these alterations with inadequate fall protection being in place. A man was fatally injured while carrying out the work.

Example of revision of Health and Safety Plan

A roofing contractor was selected after the initial Health & Safety Plan was written. He proposed that all roofwork was to be carried out using MEWPs rather than Use of Nets which was set out in the plan initially. The plan now has to be revised to take into account, and to put in place new checks for the revised method of work, e.g. checks on PF Forms for the lifting appliances, checks on driver training, and checks on ground conditions etc.

Example of coordinating the arrangements between contractors and taking appropriate action

A 4 storey building which is being constructed has an inner leaf of block work and an outer leaf of brickwork. The scaffolding contractor is scheduled to arrive and erect scaffolding for the construction of the brick outer leaf. The bricklayer is relying on his site specific method statement submitted to the PSCS that the scaffold is to be erected prior to the commencement of the inner leaf.

Example of failure to Co-ordinate the arrangements for safe working procedures

A PSCS requested the site scaffolder to ~~strike~~ dismantle a scaffold from around a 3 storey building. A few hours after the work was complete a roofer fell off the sloping roof in the exact location from where the scaffold was struck. He fell 12 metres and suffered fatal injuries.

Example of provision of information to workers.

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

Example of enforcement of Site Rules

A PSCS had drawn up the safety and health plan which included a requirement that all excavators used as cranes, with their lifting gear have to be accompanied by the test certificates, and weekly inspection forms. These were to be kept in the cab of the excavator. The PSCS as part of his monitoring of compliance finds out that 2 machines on site have no certs available and that the weekly inspection form has not been kept up to date. He issues a written instruction to the earthworks contractor to stop work until these certs are in place. On checking back he finds that the two machines are still operating without the certificates. He then instructed the contractor to remove the machines from the site immediately and notifies the H.S.A.

Example of the provision of information

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

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Example of communication where client has staff on site

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

Example of co-ordinating access to a Motorway project.

On a project to construct a 20 km motorway, the PSCS assesses that it was not feasible to securely fence the entire project. In order to comply with his obligations regarding controlling access to the site, the PSCS fenced off all bridges under construction and all dangerous excavations. In addition he placed various secure compounds at strategic locations for locking up plant, equipment and construction material when not in use.

The PSCS initiated a regime where any significant movement of plant or reversing vehicles was monitored continuously by appropriately positioned banksmen to reduce as far as reasonably practicable any risk to workers and others.

He also employed security personnel to carry out continuous random checks workers on site to check that they had been checked on site and accounted for centrally. The PSCS also maintained an electronic swipe card system to log all personnel entering and leaving the site and included in the site rules the need to check in and out with security when entering and leaving site. During non-work periods the PSCS maintained roaming security patrols on the site to check for unauthorised access

2.5 Contractors

Summary of Duties of Contractors

Contractors must:

- Co-operate with the Projects Supervisors and other contractors in the interests of safety, health and welfare
- Obey reasonable site rules and directions from Project Supervisors
- Supply a site specific safety statement to the PSCS that is relevant to the work activities being undertaken on site
- Report any reportable accidents and dangerous occurrences to the PSCS and Health & Safety Authority
- Ensure so far as is reasonably practical that their employees are trained and have Safe Pass and CSCS cards as appropriate.
- Comply with the technical elements of the Regulations regarding excavations, plant and machinery, working at height etc.

(The bullet points above are a brief summary, for information only, and are not a legal interpretation of the Regulations)

2.5.1 Who are contractors?

A contractor is defined in the Safety Health & Welfare At Work (Construction) Regulations as an employer whose employees undertake, carry out or manage construction work, or any person who carries out or manages construction work for a fixed or other sum and who supplies the materials and labour (whether his or her own labour or that of another) to carry out such work or who supplies the labour only; Contractors must co-operate with the P.S.C.S. in managing the work to ensure health and safety on site.

Most of the Construction Regulations cover both employers and the self-employed (many of whom will also be contractors) without distinction. People working under the day to day control of others are usually their employees for health and safety purposes, even if they are treated as self-employed for tax and Pay Related Social Insurance(P.R.S.I) purposes. Section 8 to 12_of 2005 S HWW Act also creates duties towards the self-employed, and place duties on them depending on their role in a particular project.

2.5.2 What Do the Regulations Require of Contractors

3(10) (b) A person shall not arrange for a designer to prepare a design unless the person is reasonably satisfied that the designer has allocated or, as appropriate, will allocate resources to enable the designer to comply with Regulation 5.

3(10) (d) No person shall not arrange for a contractor to carry out or manage construction work unless the person is reasonably satisfied that the contractor has allocated or, as appropriate, will allocate resources to enable the contractor to comply with the requirements and prohibitions imposed on the contractor by or under the relevant statutory provisions.

3(12) (b) A person to whom by these Regulations shall not arrange for a designer to prepare a design unless the person is reasonably satisfied that the designer has the competence to prepare that design in compliance with these Regulation.

(d) A person to whom these Regulations apply shall not arrange for a contractor to carry out or manage construction work unless the person is reasonably satisfied that the contractor has the competence to carry out or, as the case may be, manage, that construction work in compliance with these Regulations.

If a contractor appoints a designers or a sub-contractor, the contractor making the appointment must make reasonable enquiries regarding the competence of the prospective appointee and the resources that appointee will be in a position to engage on the project.

Reg 3(10)
(b) & (d)
and 3(11)
(b) & (d)

Section 2.1 explains in detail the type of enquires that should be made to comply with this requirement.

9. (1) It is be the duty of every contractor -

(a) to comply with the provisions of Parts 4 to 18 of these Regulations,

In addition to the general management duties laid out in Regulation 3 to 14 of the construction regulations, the contractor has also the duty of compliance with the technical requirements to do with excavations, scaffolding, working at heights and other specific element of the construction regulations.

Reg 9(1) (a)

(b) to co-operate with the project supervisor for the construction stage to enable such project supervisor to comply with the relevant statutory provisions,

The PSCS must coordinate the execution of the project to maintain the safety health and welfare of those working on the project and those affected by the construction work associated with the job. To this end the contractor has a duty to cooperate with the PSCS in the discharging of the PSCS role.

Reg 9(1) (b)

(c) to provide promptly to the project supervisor for the construction stage any information (including a copy of any relevant safety statement prepared under section 20 of the Act) which is likely to affect the safety, health or welfare of any person at work on the project or which might justify a review of the safety and health plan,

Contractors must promptly provide the P.S.C.S with any information about their work, which might affect the health and safety of workers or members of the public. This information could have a crucial bearing on the overall coordination of safety, health or welfare on site and could lead to a review or update of the safety and health plan. This information might come, for example, from risk assessments, which contractors carry out in accordance with their duties under the relevant statutory provisions.

Reg 9(1) (c)

(d) to comply with any directions of the project supervisor for the construction stage,

(e) to comply with any rules applicable to him or her or their employees in the safety and health plan and ensure, so far as is reasonably practicable, that his or her employees comply with such rules,

(f) to bring to the attention of all employees any rules contained within the safety and health plan,

Reg 9(1)
(d), (e)&(f)

To allow the PSCS coordinate safety, health and welfare on site, the contractor must comply with any reasonable instructions from the PSCS. Additionally, the Contractors must comply with relevant parts of the construction phase safety & health plan. This will help ensure, so far as is reasonably practicable, the health and safety of their employees and others who may be affected by their work including the public.

To achieve this, contractors need to monitor the way in which they carry out their work, to ensure that the health and safety precautions described in the plan are followed in practice. Where contractors find that their employees, or self-employed people that they are supervising, are not complying with the plan, they must take appropriate action to remedy the situation. Such monitoring may identify shortcomings in the plan. Where this is the case, the contractor should ensure that the P.S.C.S is notified.

(g) to provide the project supervisor for the construction stage with the information in relation to any death, injury, condition or dangerous occurrence which the contractor is required to notify or report under the Principal Regulations and furnish him or her a copy of the required notification or report,

The Safety Health & Welfare At Work (General Application) Regulations require the employer (generally a contractor on a construction site) to notify any death, reportable injury/disease or dangerous occurrence to the H.S.A. In addition the contractor should formally inform the P.S.C.S and provide a copy of the notification, of any notifiable incident which occurs to the contractor or his employees or is associated with the contractors work on site. The contractors should co-operate with the P.S.C.S. in compiling information on near misses and other information towards monitoring and reviewing safety, health & welfare on site. In this context a notifiable injury is an injury, which keeps an employee from his normal duties for more than 3 consecutive calendar days.

Reg 9(1) (g)

(h) to apply, where appropriate, the general principles of prevention specified in Schedule 3 of the Act in a consistent manner and in particular in relation to the matters specified in Schedule 2 in order to protect the health and safety of persons at work, and

Schedule 2 of the regulations documents a series of factors which should be taken into account when planning how construction work should be approached. The following is a list of the factors considered essential to the day-to-day management of safety health and welfare on construction projects.

Reg 9(1)
(h))

- (a) keeping the construction site in good order and in a satisfactory state of cleanliness;
- (b) choosing the location of workstations bearing in mind how access to these workplaces is obtained, and determining routes or areas for the passage and movement of equipment;
- (c) the conditions under which various materials are handled;
- (d) technical maintenance, pre-commissioning checks and regular checks on installations and equipment with a view to correcting any faults which might affect the safety and health of persons at work;
- (e) the demarcation and laying-out of areas for the storage of various materials, in particular where dangerous materials or substances are concerned;
- (f) the conditions under which the dangerous materials used are removed;
- (g) the storage and disposal or removal of waste and debris;
- (h) the adaptation, based on progress made with the site, of the actual period to be allocated for the various types of work or work stages;
- (i) co-operation between employers and self-employed persons;
- (j) interaction with industrial activities at the place within which or in the vicinity of which the construction site is located.

(i) to comply with the appropriate requirements of the Schedules 3 and 4 as regards any place of work under the contractor's control.

Schedule 3 and Schedule 4 of the Regulations sets out a series of requirements regarding the “minimum safety and health requirements for construction sites” and the “minimum requirements for on-site indoor workstations” respectively.

Reg 9(1) (i),

The schedules cover items such as electricity distribution, emergency evacuations, fire precautions, ventilation, welfare and many other issues relevant to construction sites and associated office accommodation. Where a contractor has control over a workplace or a section of the workplace, he should consider which elements of these schedules applies to the workplace and take appropriate measures to fulfil the requirements of the relevant sections of the schedules.

(2) It is the duty of every contractor to comply with those requirements of Schedules 3 and 4 which apply whenever required by the features of the construction site, the activity, the circumstances or a hazard at the site.

When carrying out construction work the contractor must consider what aspects of Schedule 3 & Schedule 4 apply to their activities and take appropriate measures to comply with the relevant sections. Reg 9(2)

(3) It is the duty of every contractor to facilitate the performance by the site safety representative of his or her functions conferred by Regulation 7.

All contractors must take account of any reasonable relevant representation made by the site safety Representative. In addition, the contractor employing the site safety representative must afford him or her enough time to perform the role of site safety representative effectively. He should also be facilitated with regard to training to allow him gain the knowledge to operate effectively. The contractor should also be aware that the site safety representative must not suffer any discrimination because of taking the job. Reg 9(3)

(4) It is the duty of every contractor or other person under whose direct control persons to whom Schedule 5 refers work on a construction site to ensure that those persons have received the safety awareness specified in that Schedule and have been issued with a current registration card in the form specified in that Schedule.

Schedule 5 refers to the "Safe Pass" scheme as mentioned in section 2.4.2 previously in these guidelines. While the PSCS has an overarching responsibility to have systems in place to check if workers on safe pass card, the final responsibility rests with the employer of the person to ensure that the person is in possession of an up to date Safe Pass card. Reg 9(4)

(5) It is the duty of every contractor or other person to ensure that current registration cards issued in accordance with paragraph (4) are returned to the person to which the card refers.

Original Safe pass cards must not be retained by the contractor but must be handed over to the person for whom it was obtained. The contractor may keep a photocopy for record purposes. However the original card must be given into the custody of the intended recipient. Reg 9(5)

(6) It is the duty of every contractor or other such person to ensure that any person under their direct control on a construction site who engages in any of the tasks specified in Schedule 6 has received the training specified in that Schedule and has been issued with a current Certificate and an up to date construction skills card in the form specified in that Schedule.

A contractor must ensure that their employees or anyone under their direct control out any tasks as listed in Schedule 6 of the regulations (See (a) to (n) below) are in possession of the appropriate Construction Skills Certification Scheme (CSCS) cards, or equal and approved. These cards demonstrate that the worker has received training and/or certification in these skills. Reg 9(6)

The tasks requiring CSCS certification are as follows;

- (a) Scaffolding – basic
- (b) Scaffolding – advanced
- (c) Tower crane operation
- (d) Slings/Signalling (This involves slinging of loads on lifting equipment and signalling plant drivers regarding the placing of loads)
- (e) Telescopic Handler Operation
- (f) Tractor/Dozer Operation
- (g) Mobile Crane Operation
- (h) Crawler Crane operation
- (i) Articulated dumper operation
- (j) Site dumper operation
- (k) 180⁰ Excavator operation
- (l) 360⁰ Excavator operation
- (m) Roof and wall cladding/sheeting
- (n) Built up roof felting

and to other tasks which may be prescribed officially in the future.

The certification requirements for Safe Pass and CSCS are

- (a) the relevant certificate under the CSCS
or
- (b) an equivalent programme
or
- (c) an equivalent certificate approved by a body in another jurisdiction recognised equivalent. (e.g. the UK Construction Industry Training Board (CITB) or the Construction Plant Competence Scheme (CPCS)

The programme gives listed in (b) and (c) above are generally listed on the FAS (<http://www.FAS.ie>) and H.S.A. (<http://www.hsa.ie/>) websites

Advanced scaffolding is defined as

- (a) the erection and dismantling of independent scaffolding,
- (b) the erection and dismantling of sheeted scaffolding,
- (c) the erection and dismantling of scaffolding with a larger number of platforms than recommended in the manufacturer's instructions or relevant code of practice,
- (d) the erection and dismantling of scaffold loading bays,
- (e) the erection and dismantling of scaffolding with different tie spacing than recommended in the manufacturer's instructions or relevant code of practice,
- (f) the erection and dismantling of scaffolding under which

- the public will have access,
- (g) the erection and dismantling of a buttress or truss-out scaffold,
 - (h) the erection and dismantling of a saddle and stack scaffold with access tower,
 - (i) the method of constructing and loading a cantilever (counterbalance) scaffold,
 - (j) the erection and dismantling of scaffolding with work platforms 7 metres or more above the level of the base of the scaffolding, or
 - (k) other tasks which might be prescribed in the future.

If tasks classified as “advanced scaffolding” are to be undertaken by a “basic” scaffolder then the task must be undertaken under the supervision of an advanced scaffolder. The ratio of supervisor to trainee in this context should be no more than 1:1.

(7) It is the duty of every contractor or other such person to ensure that current construction skills cards issued in accordance with paragraph (6) are returned to the person to whom the card refers.

Original CSCS cards must not be retained by the contractor but must be handed over to the person for whom it was obtained. The contractor may keep a photocopy for record purposes. However the original card must be given into the custody of the intended recipient. **Reg 9(7)**

(8) It is the duty of every contractor or other such person to furnish to the project supervisor for the construction stage, in respect of any person under their direct control on a construction site to whom paragraphs (4) and (6) apply, on the date upon which each such person first starts work on that site, written confirmation that the person concerned is in possession of any registration cards required under Regulation 6(7) and (8) together with any other relevant certificates and documentation required under the Principal Regulations.

The contractor must supply to the PSCS details of all his workers (on the day they start on site) who are required by the Construction Regulations to have Safe Pass and relevant CSCS cards confirming that they have these cards (and any other certificates required by the General Application regulations). **Reg 9(8)**

(9) It is the duty of every contractor to ensure that any person under their direct control, to whom Regulation 56 applies, on a construction site has undertaken a specific site safety induction programme.

Regulation 56 gives exemption to certain category of specialised craft workers normally living and working outside the state from having to do Safe pass. These craft workers must be involved in the installation, commissioning, maintenance, repair or removal of mechanical, electrical, gas, compressed air, hydraulic, telecommunication systems, computer systems, or similar services. In addition to living outside the state these personnel must not be working for more than 20 days on the project in any 12 month period. If exemption from Safe Pass is going to be claimed on this basis then the person to whom the exemption applies must have a letter from his employer outlining the work to be done, the competence of the person to undertake that work and stating the start date and the anticipated completion date. However if exemption is claimed this person must undertake a site specific induction programme for the site where he will be working. This induction should be laid on in a manner that's understandable to the worker in question and which supplies relevant safety health and welfare related information pertaining to the site.

Reg 9(9)

Appointment of Safety Officers

10. (1) It is the duty of every contractor who normally has more than 20 persons under his or her direct control at any one time on a construction site or normally more than 30 persons under his or her direct control at any one time engaged in construction work, taking account of the provisions of Section 18 of the Act to appoint in writing one or more persons as a safety officer to undertake the following duties:

- (a) to advise the contractor as to the observance of the requirements of the relevant statutory provisions, and
- (b) to exercise a general supervision of the observance of the aforesaid requirements and the promotion of the safe conduct of work generally.

(2) Only a person competent to undertake the above duties shall be appointed under this Regulation.

(3) The duties assigned to any person appointed under paragraph (1), including any duties other than those mentioned in paragraph (1), shall not be such as to prevent that person from discharging with reasonable efficiency duties assigned to him or her under that paragraph.

(4) Nothing in these Regulations shall be construed as preventing the same person or persons being appointed under these Regulations for a group of sites or two or more contractors from jointly so appointing the same person or persons.

If a contractor has normally more than 20 employees on a site or more than 30 engaged in construction on various sites he must appoint a competent safety officer to advise and supervise adherence to Health and Safety requirements. A competent Safety Officer is a person who has experience of the work being undertaken, and knowledge of how to control the hazards associated with this work as well as training, (such as the IOSH Managing Safely in Construction program or other safety management program).

Reg 10(1) to
10(4)

When making this appointment the contractor should ensure that the safety Officer has adequate time and resources to discharge his function as intended by the regulation. Contractors may appoint the same person as Safety Officer for a group of sites or a number of contractors may appoint the same person as Safety Officer. It is recommended that the PSCS is informed of the appointments and contact details.

Erection and installation of plant or equipment

11. It is the duty of every contractor who -

(a) erects, installs, modifies, works or uses any plant or equipment to which any of the provisions of these Regulations applies to erect, install, modify, work or use any such plant or equipment in a manner which complies with those provisions, and

(b) erects or alters any scaffold to comply with the requirements of these Regulations having regard to the purpose or purposes for which the scaffold is designed at the time of erection or alteration.

Reg 11

All plant, equipment and scaffold on site must be only be put in place or altered on site in accordance with good practice. Where plant such as cranes or other lifting equipment is substantially altered or repaired it should be re-examined and certified and the results of these examination and tests recorded upon the prescribed forms on the prescribed forms. Scaffolding should only be altered by appropriately trained personnel and

again the scaffold should be re-examined and the results documented after such alterations.

Information

12. It is the duty of every contractor in providing information to his or her employees or safety representative (or both) as required under Section 9 of the Act to ensure that such information includes information on the measures to be taken concerning their safety and health on the construction site and that such information is comprehensible to the employees concerned.

Information should be transmitted in an understandable format. This might mean that consideration should be given to translating safety related documentation where workers do not have a clear understanding of English. It might also include measures such as the use of pictograms or other illustrative measures to convey messages to the operatives on site. Consideration should also be given to literacy problems that people might have. Reg 12

Consultation

13. It is the duty of every contractor to ensure consultation with his or her employees or their safety representative (or both) in relation to the requirements of these Regulations in accordance with the provisions of Section 26 of the Act taking account of the need, whenever necessary, for co-ordination between employees or the safety representatives of the different contractors on the construction site.

Consultation is considered in Section 3 of these guidelines.

2.5 Role of employees

Summary of Duties of the employees

The Employee must:

- to comply with site rules as contained in the Safety & Health Plan
- make proper use of safety equipment, such as safety helmet, harness and footwear
- undertake training in relation to Safe Pass and Construction Skills Certification (and any other training in relation to health & safety) without loss of remuneration
- produce Safe Pass and relevant CSCS cards when requested to do so by the Project Supervisor Construction Stage, their employer or by a H.S.A inspector.

(The bullet points above are a brief summary, for information only, and are not a legal interpretation of the Regulations)

2.5.1 Who is an employee?

An "employee" is defined by 2005 Act as meaning a person who has entered into or works (or in the case of a contract which has been terminated, worked) under a contract of employment with an employer. Part II of the Safety, Health and Welfare at Work (General Application) Regulations, 2005 clarifies that fixed term and temporary employees are included

Where there is confusion as to a person's status, "tests" may be applied to clarify the situation.

- a) If the person receives a payslip, this will normally have the employer's details on it and thus the person in receipt of the payslip can be considered an employee.
- b) If PRSI contributions are being paid by an employer as identified on the yearly on the yearly P60.
- c) Where the individual can be given instructions as to how to do a job, not merely what to do. This test may be particularly useful for construction.
- d) Even where individuals cannot be directed how to do a job, they may still be regarded as an employee if they share the same facilities as other staff, and are part of a team.
- e) If one considers the "substance rather than form" test, the description of the contractual relationship will not be as important as the reality of the situation.

Duties of employees and other persons at work

14. (1) Without prejudice to the provisions of Section 13 of the Act, it is the duty of every person at work -

(a) to comply with these Regulations and to co-operate in carrying out the requirements of these Regulations and if that person discovers any defect in the plant or equipment to which these Regulations apply and which might endanger safety, health and welfare, to report such defect without unreasonable delay to the employer or immediate supervisor of that person or the contractor responsible for the plant or equipment,

Employees have general duties not to endanger themselves or others through their acts or omissions while at work. Employees also have a duty to report, without delay, to their employer, PSCS or responsible contractor, any dangerous plant or machinery or any defect in the place of work or system of work which might endanger safety, health or welfare, of which they become aware.

Reg
14(1)(a)

(b) to comply with any rules in the safety and health plan,

Workers must co-operate with their employer and others such as the PSCS to enable them comply with safety and health legislation for the benefit of all workers on site. Reg 14(1)(b)

(c) to make proper use of any safety helmet, harness or any other personal protective equipment provided for that person's safety and health,

Employees must use suitable protective clothing or equipment when it is made available in such manner as to provide the protection as intended. They should also cooperate in any systems that are in place for safe storage of PPE. An employee (or any other person) should not intentionally or recklessly interfere with or misuse any protective clothing, equipment, etc. provided for securing the safety, health or welfare of persons arising out of work activities. Reg 14(1)(c)

(d) to make proper use of any work equipment supplied,

The employee must treat all work equipment in a manner, which the equipment was intended. Employees should always be aware that misuse of plant and equipment could have unforeseen consequences and could lead to potential injuries to themselves or others on site. Reg 14(1)(d)

(e) to accept reasonable offers of assessment and safety awareness and training specified in Schedules 5 and 6 to these Regulations, without loss of remuneration, made by his or her employer, and

Where training is offered with regard to Safe pass and the Construction Skills Certification Scheme as prescribed, and the offer is reasonable, the employee has an obligation to accept this training though he should not be at a financial loss for undergoing the training. Reg 14(1)(e)

(f) when requested by their employer or the project supervisor appointed for the construction stage, to show relevant registration or construction skills cards referred to in Regulation 9(4) and (6).

Employees must produce Safe Pass and relevant CSCS cards when requested to do so by the Project Supervisor Construction Stage or by their employer. Reg 14(1)(f)

- (2) A person shall not -
- (a) in applying for a certificate or registration card, as specified in Schedules 5 and 6, make a statement which he or she knows to be false,
 - (b) with intent to deceive, forge or alter a certificate or registration card, or
 - (c) with intent to deceive, make or possess any document closely resembling a certificate or registration card.

It is a serious criminal offence to knowingly obtain a Safe Pass or CSCS card under false pretences or to have forge or altered these cards for the purposes of deceiving an employer, a PSCS, or anyone else who would have reason to check for authentic Safe Pass and CSCS cards. Reg 14(2)

3. Consultation Requirements

3.1 Consultation

3.1.1 Must Contractors make consultation arrangements?

It is the duty of every contractor to ensure consultation with employees or their safety representative (or both) in relation to health & safety requirements, taking account of the need, whenever necessary, for co-ordination between employees or the safety representatives of the different contractors on the construction site.

Under Section 13 of the Safety, Health and Welfare at Work Act, 2005 each employer is obliged to make arrangements for effective consultation between himself and his employees on matters of safety and health. In addition the employees have the right to select and appoint one of themselves as a safety representative to represent them in consultations with the contractor.

However consultation does not just cover the employer employee relationship. Constructive consultation should also be ongoing between contractors, designers, Project Supervisors, clients and others as relevant on site. Decisions should not be unilaterally imposed on other parties but rather due consideration should be given to inputs of those who are being affected by decisions made in the context of health safety and welfare.

3.1.2 What should consultation cover?

Regulation 12 of the Safety, Health and Welfare at Work (General Application) Regulations, 1993 sets out a range of matters on which employees ought to be consulted. However these should also be considered in the context of the other contractual relationships on site as mentioned in the paragraph above.

These include:

- any proposed measures which may substantially affect safety and health;
- the designation of employees to carry out protective and preventive services or emergency duties;
- contents of the safety statement and risk assessments carried out and any revisions to these;
- information on notifiable accidents and dangerous occurrences;
- the engagement of external health and safety consultants;
- the planning and organisation of training;
- the planning and introduction of new technologies as they effect particularly the choice of equipment, the working conditions and the working environment for the safety and health of employees.

Changes in design, timescale and other key parameters which affect health and safety should also form the basis of consultation and should not as previously noted be unilaterally imposed by client or Project supervisors as they consider necessary or commercially desirable.

3.1.3 How can effective consultations take place?

Consultation arrangements, depending on the size and nature of the project, can have various forms ranging from formal site meeting to a safety committee with agreed agenda down to informal discussions with the immediate supervisor. Consultation must be balanced for both employees and management. The type of consultation arrangements needed on site will depend on the size and nature of the project and should enable the views of employees working for different contractors to be co-ordinated and taken into account.

On smaller sites, direct, informal contact may be sufficient, whereas on larger sites a formal arrangement of representatives and co-ordination meetings may be necessary. Any employee appointed as a safety representative or participating in the consultation process must not be placed at any disadvantage (e.g. in relation to promotion, work experience, choice of shifts, holidays etc.)

3.1.4 What arrangements are needed for effective consultation?

In addition to the obligation on contractors to consult their employees, they must also take account of the need for co-ordination of consultation arrangements between the various other contractors on site. The Project Supervisor Construction Stage will need to specify in the safety and health plan the arrangements for consultations between the different contractors. Contractors are obliged to co-operate with the project supervisor in ensuring there is effective consultation between the various contractors and groups of employees on the site.

The PSCS should ascertain the effectiveness of the arrangements made. This can be done simply by requesting feedback from the contractors and their respective employee representatives. If the project is on a large scale with numerous contractors on site, the PSCS should arrange in consultation with the various contractor employee representatives and the site safety representative, structures such as joint safety committee meetings or a rotation of safety representatives attending site safety meetings. It is important that no matter what structure is implemented that consultation arrangements should include balanced participation on the part of both employees and employers.

3.1.5 Pointers for an effective consultation mechanism

- There should be a commitment from site management to provide the necessary financial and staff resources.
- Site management and employees should be encouraged to participate.
- Workers should be encouraged to communicate their views or complaints.
- Sensible recommendations should be implemented without delay.
- Site Management should not ignore reasonable recommendations.
- Safety representatives should be adequately trained and informed on safety and health matters.
- Meetings should be held regularly in accordance with agreed procedures.
- The agenda for meetings should be varied and relevant.
- Site safety meeting attendees should be prepared to consider new options or approaches to problems.

3.2. The Site Safety Representative

3.2.1 What is a Safety representative ?

In accordance with Section 25 of the Safety, Health and Welfare at work Act 2005, “.....*employees may, from time to time, select and appoint from amongst their number at their place of work a representative (in this Act referred to as a “safety representative”) or, by agreement with their employer, more than one safety representative, to represent them at the place of work in consultation with their employer on matters related to safety, health and welfare at the place of work.*”

Regulation 7 of the Safety, Health and Welfare at Work (Construction) Regulations 2005. develops this and introduces the concept of a “**Site safety representative**” .

3.2.2 Why a Site Safety Representative ?

There was a perception that consultation and safety representation as described in the Safety, Health and Welfare at work Act 2005 was never facilitated with any great effect in the construction industry in the past, as a construction site was seen as a temporary workplace, with a rapidly changing environment and with large numbers of workers, very often with different employers.

Hence the introduction of the requirement for a site safety representative provides not only a focal point, but also a duty holder in relation to facilitation and co-ordination of representation for, and consultation with, construction site workers.

3.2.3 Who is responsible for facilitating the appointment of the Site Safety Representative ?

The duty holder is the Project Supervisor Construction Stage, who has a duty to co-ordinate consultation between the contractors and their respective employees and a duty to facilitate the appointment of a site safety representative, where more than 20 workers are normally employed at any one time on the site and this can be at any stage of the project. The regulations outline a procedure for such an appointment; the procedure is outlined in schedule 7 of the regulations.

It is important that a Site Safety Representative should represent all workers on a site irrespective of who their direct employers are. The primary duty holder with regards the Site Safety Representative is the PSCS. However sub-contractors and others also have duties as employers in relation to consultation with and representations from their employees and the duty to co-operate with the PSCS.

Workers can elect the Site Safety Representative at any time after site start up. The site safety representative should be in place at the earliest possible time. All the workers on a site, irrespective of their direct employer, are entitled to vote.

The PSCS must facilitate the advertising of the role and function of the site safety representative, and co-ordinate with contractors the advising of the role to all workers

on a construction site. The site induction or the Tool Box Talk is an opportune moment to advise workers of the site safety representative and his/her role on site. Once the advising of the role and function of the Site Safety Representative is complete the Project Supervisor Construction Stage must seek volunteers from the construction site workforce.

3.2.4. Who can be a Site Safety Representative and how is the representative selected?

Any worker on the site may volunteer. Should more than one person volunteer then the Project Supervisor Construction Stage should organise an election process. If previously elected under section 25 of the 2005 Act, or under Regulation 7 of the Construction Regulations, an employee may be nominated again for the role. However it must be noted that Site Safety Representatives must be selected for each project by the workers on that site. A Site Safety Representative moving from a site under completion to a new project is not automatically the Site Safety Representative for the new site.

If after advertising the role and function of the Site Safety Representative no workers volunteer for the role the Project Supervisor Construction Stage may provisionally appoint a Site Safety Representative.

This appointment is provisional. Should 50% of the workers on the site at a later date organise an election, the outcome of that election denotes the Site Safety Representative and the provisional appointment is ended.

The Project Supervisor Construction Stage must keep available for inspection a record detailing the selection process, in addition to a record of the name of the Site Safety Representative.

There is also a requirement for the Project Supervisor Construction Stage to take steps to inform all persons on a site of the name of the Site Safety Representative following the selection process. Workers arriving on a site subsequent to the selection process must also be advised of the name of the Site Safety Representative. Best practice would be to ensure that the name of the selected Site Safety Representative is included in site inductions as part of the Health & Safety Plan, and to invite the Site Safety Representative to attend the beginning or end of an induction talk to introduce themselves to new employees and outline their role and function on the site.

The Project Supervisor Construction Stage has a number of specific duties to the site safety representative. The site safety representative must be informed when an inspector from the Health and Safety Authority enters the construction site for the purpose of making a tour of inspection and the Project Supervisor Construction Stage must inform the site safety representative of the time and venue of all site safety meetings and to facilitate his or her attendance at such meetings.

The PSCS and any contractor involved in the project must take account of any representations made to him or her by a site safety representative on any matter affecting the safety, health and welfare at work of any person at work at the construction site.

A Safety Representative if he / she is of the view that there is serious or imminent danger to a person or persons, then this risk must be reported immediately to the relevant management party.

Where the Safety Representative is asked by a worker to highlight an unsatisfactory condition or practice, then this can be reported at an agreed time to Site Management, e.g. before or after a rest period or at the end of the working day, whichever is sooner. However within his / her role as a Safety Representative he / she should actively encourage workers to report and highlight unsafe conditions and unsafe practices, as all employees have a duty to do so under the Safety, Health and Welfare at Work Act 2005.

3.2.5 What are the functions of the Site Safety Representative ?

The regulations give rights to the site safety representative. The rights prescribed highlight the key functions of the Site Safety Representative,

- The **right** to information

The site safety representative has a right to access information from the PSCS regarding any health, safety and welfare issues on the construction site.

There is the duty on all employers that all information relevant to health, safety and welfare should be advised to all employees. (N.B. This excludes certain information of a confidential nature; e.g., personal or medical).

- The **right** to make representations

The representations can be made not only to the Project Supervisor Construction Stage, but any contractor involved in the project. Again, all employees may raise any issue on health, safety and welfare.

- The **right** to liaise with the Health and Safety Authority at any time.

All employees may speak with a Health and Safety Authority Inspector. However in addition to this, a site safety representative must be advised by the PSCS if a Health and Safety Authority inspector visits the site.

- The **right** to carry out reasonable inspections and investigations

Often inspections are carried out in agreement with the PSCS. The carrying out of inspections by a site safety representative does not replace the duties placed upon employers or the PSCS. The site safety representative has a right to investigate accidents and dangerous occurrences, but they must not interfere or obstruct the fulfilment of a statutory obligation, e.g. the scene of a fatal accident must be preserved until the Health and Safety Authority have carried out an investigation.

It must be remembered by the employer and fellow workers alike, that the site safety representative is often a voluntary role and the Site Safety Representative role is to consult with, and make representations to the relevant management party on safety, health and welfare matters relating to the site.

The intention of these consultations is to: -

- prevent accidents and ill health,
- help highlight problems, and

- help identify solutions.

A site safety representative will incur no criminal liability arising from his / her performance of, or his / her failure to perform any functions of a Safety Representative, and again, the site safety representative does not replace the duties of the PSCS or the contractor to manage health and safety on the construction site.¹

3.2.6 What protection is afforded the site safety representative ?

Training is essential for all workers to ensure a task is carried out in a proper manner, the Safety, Health and Welfare at Work Act 2005 places a duty on all employers to provide training for employees.

The contractor employing the site safety representative must allow reasonable time off work without loss of earnings, for the Site Safety Representative to acquire training that will enable him / her to function effectively.

The contractor and the PSCS should also provide training and information to the site safety representative on the specific hazards and safe systems of work at the site. Clearly this allows the site safety representative have a good understanding of the information he / she has a right to access and provides for effective representation and consultation.

The site safety representative shall not suffer any disadvantage in their employment nor suffer any loss of earnings through discharging their functions.

3.2.7 Where can I get more information on the Site Safety Representative ?

Sources of information in relation to safety representation:

Guidelines on Safety Consultation and Safety Representatives, available from the Health and Safety Authority.

Sources of information in relation election process, best practice in consultation and operational guidance for the construction site safety representation:

Operational Guidelines for Safety Consultation in the Construction Industry, a guide produced by the Safety representatives facilitation pilot project, available from the Construction Industry Federation or the Irish Congress of Trade Unions.

3.2.8 Procedure for selection of site safety representatives

In the absence of a site safety representative selected by the persons at work on the site, the following procedures laid out in schedule 7 of the regulations and reproduced in Appendix 4 of these guidelines should be followed.

Index of Appendices

- 1. Prescribed form PF1 for notification of Projects**
- 2. Suggested Documentation for use in Coordinating and Carrying out the design of a structure.**
- 3. Schedule 7 to the Regulations – Procedure for the Selection of Safety Representatives**
- 4. Suggested Contents of Safety & Health Plan.**
- 5. Summary of Changes to Regulation 14 to 56**

Appendix 1

Prescribed form PF1 for notification of
Projects

Prescribed Form PF.1

Regulations 8 and 55

The Safety, Health and Welfare at Work (Construction) Regulations 200x (S.I. No. xxx of 200x)

Particulars to be notified to the National Authority for Occupational Safety and Health

Notification of Project By Project Supervisor Construction Stage

Note

- This form is to be used to notify any project covered by the Safety, Health and Welfare at Work (Construction) Regulations 200x, which will last longer than 30 days or 500 person days. It can be used to provide changes to initial notification of projects. Any day on which construction work is carried out (including holidays and weekends) should be counted, even if the work on that day is of short duration. A person day is one individual, including supervisors and specialists, carrying out construction work for one normal working shift.
- This Notification is to be made by Registered Post (or means as may be prescribed) to The Health & Safety Authority, 10 Hogan Place, Dublin 2 or other addresses as may be prescribed.

1. Is this the initial notification of this project or are you providing changes to a notification?

Initial Notification Changes to Notification

2. **Client:** Name, full address and telephone number (if more than one Client please attach details on separate sheet)

| | |
|----------|------------------|
| Name: | Telephone Number |
| Address: | e-mail address |

3. **Project Supervisor Design Stage:** Name, full address and telephone number

| | |
|----------|------------------|
| Name: | Telephone Number |
| Address: | e-mail address |

4. **Health and Safety Co-ordinator for Design Process**

| | |
|----------|------------------|
| Name: | Telephone Number |
| Address: | e-mail address |

5. Project Supervisor Construction Stage: Name, full address and telephone number

| | |
|----------|------------------|
| Name: | Telephone Number |
| Address: | e-mail address |

6. Health and Safety Co-ordinator for Construction Stage (If Applicable)

| | |
|----------|------------------|
| Name: | Telephone Number |
| Address: | e-mail address |

7. Address of Site: where construction work is being carried out

Address:

8. Please give your estimates on the following

| | |
|---|--|
| The planned date for the commencement of the construction work | |
| How long the construction work is expected to take (in weeks) | |
| The maximum number of people carrying out construction work on site at any one time | |
| The number of contractors expected to work on site | |

9. Please give the dates for the following

- Date Preliminary Safety and Health Plan was prepared
- Date Safety and Health Plan was prepared

10. Construction work: full address of those who have been chosen to work on the project (if required continue on a separate sheet) Note: This information is only required when it is known at the time notification is first made. An update is not required

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Appendix 2

Suggested Documentation for use in Coordinating & when Carrying out the Design of a Structure.

Certificate (APP 2.1) which may be used for co-ordination of the design of a project a project. Other certificates (APP 2.2 to 2.4) for use in the particular case of 'composite' structural elements (such as precast concrete designed to act compositely with in-situ concrete, or prefabricated steel beams acting compositely with in-situ concrete, or steel sheet decking acting compositely with in-situ concrete)

Note these certificates are not mandatory under the legislation but are suggestions as to how the designers and the PSDP can share information and for designers to verify their designs. If these are not used then alternative means must be used by the PSDP to "take account of the general principles of prevention" and to bring about coordination of designers on the project and for designers to provide information as is known

Fig APP 2.1

PERMANENT WORKS DESIGNER'S CONFIRMATION

[Confirmation to be completed by each designer of any element(s) of the permanent works, including specialist suppliers who design any elements of the permanent works, at an appropriate stage as determined by the PSDP]

| | | |
|----------|---|--|
| <u>1</u> | Project | |
| <u>2</u> | Elements/part of the permanent works for which we had design responsibility | |
| <u>3</u> | Element of Works to which this document applies | |
| <u>4</u> | Main design codes adopted | |
| <u>5</u> | Schedule of current drawings [may be appended] | |
| <u>6</u> | Specialist suppliers who designed elements of the permanent works which we were responsible for coordinating and integrating within the overall permanent works design. | |
| <u>7</u> | Summary of how the principles of prevention were applied to this element of the works | |
| <u>8</u> | Construction sequence (if safety critical) | |

We hereby confirm that we have to date carried out and will continue to carry out as necessary, the design of those parts of the works for which we were appointed to design exercising reasonable professional skill, care and diligence and that in our opinion we have complied with our duties under the Safety Health and Welfare at work (Construction) Regulations, 2005 in that we

- have taken account of the General Principles of Prevention and any existing safety file..
 - have provided the PSDP & PSCS as appropriate with all relevant information as required by the Regulations and
- have cooperated with the PSDP & PSCS and with other designers as necessary

Signed:

Permanent Works

Designer: _____ (Name): _____ Date: ____ / ____ / ____

We have coordinated the activities of _____ (*designer named on this page*) that they have applied the General Principles of Prevention for this element of the work with a view to achieving a design to contribute towards securing the health and safety of those constructing and using this element of the structure

Signed:

PSDP: _____ (Name): _____ Date: ____ / ____ / ____

Fig App 2.2

Permanent Works Design Certificate
(To be completed by the Permanent Works Designer and the PSDP)

| | |
|-----------------|-------------|
| <u>Project:</u> | <u>Ref:</u> |
|-----------------|-------------|

| |
|-----------------|
| <u>Element:</u> |
|-----------------|

Stability of Permanent Works:

Detail requirements for:

1. Construction Sequence required by the Permanent Works Design

2. Temporary works required by the Permanent Works Design:
3. Criteria for erection and removal of Temporary Works which are required as part of the of the Permanent works Design, including loading information and design assumptions:

Permanent Works Documentation:

Designed in accordance with (Codes): _____

Calculations (Ref.): _____

Drawings (Ref.): _____

We hereby certify that the preparation of the design of the Permanent Works has been carried out with reasonable professional skill and care. We are satisfied so far as is reasonably Practicable that the Permanent Works design is communicated effectively and will:

- a. Secure the safety of the persons engaged in the construction of these elements of the works and- third parties
- b. Secure the safety and stability of these elements of the works
- c. Not be detrimental to the works

Signed:

Permanent Works

Designer: _____ (Name): _____ Date: ___/___/___

We have coordinated the activities of the designers and are satisfied, so far as is reasonably practicable, that each has cooperated in applying the General Principles of Prevention and achieving a design with a view to protecting persons at work.

Signed:

| |
|--|
| <u>Communication:</u> |
| Issued to: PSCS: <input type="checkbox"/> Permanent Works Designer: <input type="checkbox"/> Specialist Designer: <input type="checkbox"/> Temporary Works Designer: <input type="checkbox"/> Contractor: <input type="checkbox"/> |
| <i>Signed:</i> PSDP: _____ (Name): _____ Date: ___/___/___ |

Fig App 2.3

Specialist Design Certificate for Precast Supplier or Supplier of Steel Beams

(To be completed by the Specialist Designer and the PSDP)

| | |
|-----------------|-------------|
| <u>Project:</u> | <u>Ref:</u> |
|-----------------|-------------|

| |
|-----------------|
| <u>Element:</u> |
|-----------------|

Stability of Permanent Works:

Detail requirements for:

1. Construction Sequence required by the Specialist Design:

2. Temporary works required by the Specialist Design:

3. Criteria for erection and removal of Temporary Works which are required as part of the Specialist Design, including loading information and design assumptions: -

Permanent Works Documentation:

Designed in accordance with (Codes): _____

Calculations (Ref.): _____

Drawings (Ref.): _____

We hereby certify that the preparation of the design of the specialist design elements has been carried out with reasonable professional skill and care. We are satisfied so far as is reasonably practicable that the specialist design is communicated effectively and will:

- c. Help secure the safety of the persons engaged in the construction of these elements of the works and third parties
- d. Secure the safety and stability of these elements of the works
- c. Not be detrimental to the works.

Signed:

Specialist

Designer: _____ (Name): _____ Date: ___/___/___

We have coordinated the activities of the designers and are satisfied, so far as is reasonably practicable, that each has cooperated in applying the General Principles of Prevention and achieving a design with a view to protecting persons at work.

Signed:

PSDP: _____ (Name): _____ Date: ___/___/___

Communication:

Issued to: PSCS: Permanent Works Designer: Specialist Designer: Temporary Works Designer: Contractor:

Signed:

PSDP: _____ (Name): _____ Date: ___/___/___

Temporary Works Design Certificate

(To be completed by the Temporary Works Designer and the PSDP)

| | |
|-----------------|-------------|
| <u>Project:</u> | <u>Ref:</u> |
| <u>Element:</u> | |

Stability of Temporary Works:

Detail requirements for:

1. Stability of supporting structure: _____
2. Nominal & Minimum Bearing: _____
3. Torsional Stability: _____
4. Temporary Bracing: _____
5. Temporary Propping: _____

Temporary Works Documentation:

Designed in accordance with (Codes): _____

Temporary Works Calculations (Ref.): _____

Temporary Works Drawings (Ref.): _____

We hereby certify that the preparation of the design of the Temporary works has been carried out with reasonable professional skill and care. We are satisfied so far as is reasonably practicable that the Temporary Works design is communicated effectively and will:

- a.e. Help secure the safety of the persons engaged in the construction of these elements of the works, and third parties ~~and third party property~~
- b.f. Secure the safety and stability of these elements of the works
- c. Not be detrimental to the works.

Signed:

Temp Works

Designer: _____ (Name): _____ Date: ___/___/___

We have coordinated the activities of the designers and are satisfied, so far as is reasonably practicable, that each has cooperated in applying the General Principles of Prevention and achieving a design with a view to protecting persons at work.

Erection of the Temporary Works may proceed, subject to the provision of a Temporary Works Method Statement agreed by the Contractor & PSCS as being adequate.

Signed:

PSDP: _____ (Name): _____ Date: ___/___/___

Communication:

| | | | |
|------------------|---------------------------|----------------------|---------------------------------------|
| Issued to: PSCS: | Permanent Works Designer: | Specialist Designer: | Temporary Works Designer: Contractor: |
|------------------|---------------------------|----------------------|---------------------------------------|

Signed:

PSDP: _____ (Name): _____ Date: ___/___/___

Fig App 2.6
Calculation Sheet Worked Example

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Appendix 3 - Schedule 7 to the Regulations

PROCEDURE FOR SELECTION OF SAFETY REPRESENTATIVES

In the absence of a site safety representative selected by the persons at work on the site, the following procedures shall apply.

The selection of a site safety representative should proceed as follows:

1. If a site safety representative is elected by the workers on the site at any time after commencement of activities on the site this person shall be recognised as such by the project supervisor for the construction stage and particulars shall be noted in writing by the project supervisor for the construction stage.
2. If a safety representative has previously been selected under section 13 of the Principal Act by the employees of any of the contractors on the construction site the views of all persons at work on the site at the time must be taken into account when confirming that person as site safety representative.
3. If, at the time the number of persons at work on the construction site normally exceeds 20 and there is no site safety representative the project supervisor for the construction stage shall invite all persons working on the site at that time to elect a site safety representative from amongst their number. If those working on the site are unwilling to organise a selection process themselves and request the project supervisor for the construction stage to do so he or she shall organise the election.
4. If a site safety representative is not selected under paragraph (3) the project supervisor for the construction stage shall invite persons working on the construction site or their representatives to nominate persons willing to undertake the role. If more than one name is put forward the project supervisor for the construction stage shall determine which candidate has the most support from all persons employed on the site. The person who has the most support shall be deemed selected.
5. If no site safety representative has been selected under paragraphs (1) to (4), the project supervisor for the construction stage shall nominate a provisional site safety representative. If subsequently a site safety representative is elected by a process involving more than 50 per cent of the persons working on the site at a particular time then that person shall be deemed to be the site safety representative.
6. The project supervisor for the construction stage shall take steps to inform all persons who are at work on the site at the time of the selection and subsequently of the name of the site safety representative. The project supervisor for the construction stage must keep available for inspection by an inspector a record of the name of the site safety representative and details of the selection process.

Appendix 4

Suggested Contents of Safety and Health Plan.

(a) **The preliminary safety and health plan.**

1. Description of project

- a) project description and programme details;
- b) details of client, designers, project supervisor for the design process and other consultants;
- c) extent and location of existing records and plans.
- d) Arrangements for communicating with Designers, PSCS and others as appropriate

2. Client's considerations and management requirements.

- structure and organisation;
- safety objectives for the project and the arrangements for monitoring and review;
- permits and authorisation requirements;
- emergency procedures;
- site rules and other restrictions on contractors, suppliers and others eg access arrangements to those parts of the site which continue to be used by the client;
- activities on or adjacent to the site during the works;
- arrangements for liaison between parties;
- security arrangements.

3. Environmental restrictions and existing on-site risks.

- a) Safety hazards, including:
 - boundaries and access, including temporary access;
 - adjacent land uses;
 - existing storage of hazardous materials;
 - location of existing services - water, electricity, gas, etc.;
 - ground conditions;
 - existing structures – stability, or fragile materials;
- b) Health hazards, including:
 - asbestos, including results of surveys;
 - existing storage of hazardous materials;
 - contaminated land, including results of surveys;
 - existing structures hazardous materials;
 - health risks arising from client's activities.

4. Significant design and construction hazards.

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

(b) The safety & health plan for the construction stage.

1. Description of project.

- a) project description and programme details;
- b) details of client, project supervisor for the design process and project supervisor for the construction stage, designers, main contractor and other consultants;
- c) extent and location of existing records and plans
- d). Arrangements for communicating with Contractors, PSDP and others as appropriate

2. Communication and management of the work.

- a) management structure and responsibilities;
- b) health and safety goals for the project and arrangements for monitoring and review of health and safety performance;
- c) arrangements for:
 - regular liaison between parties on site;
 - consultation with the workforce;
 - the exchange of design information between the client, designers, project supervisor for the design process, project supervisor for the construction stage 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;
 - security, site induction and on site training;
 - welfare facilities and first aid;
 - the production and approval of risk assessments and method statements;
 - the reporting and investigation of accidents and other incidents (including near misses);
- d) site rules;
- e) fire and emergency procedures

3. Arrangements for controlling significant site risks.

- a) safety risks:

- services, including temporary electrical installations;
- preventing falls;
- work with or near fragile materials;
- control of lifting operations;
- dealing with services (water, electricity and gas);
- the maintenance of plant and equipment;
- poor ground conditions;
- traffic routes and segregation of vehicles and pedestrians;
- storage of hazardous materials;
- dealing with existing unstable structures;
- accommodating adjacent land use;
- other significant safety risks.

b) health risks:

- removal of asbestos;
- dealing with contaminated land;
- manual handling;
- use of hazardous substances;
- reducing noise and vibration; and
- other significant health risks.

Appendix 5

Summary of Changes to Regulation 14 to 56

Summary of Differences between the 2005 and the 2001 Regulations.

This chapter will summarise the main differences between the Safety, Health and Welfare at Work (Construction) Regulations 2005 and the Safety, Health and Welfare at Work (Construction) Regulations 2001 from Regulation 10 to Regulation 56.

- **Safety Officers (Regulation 10)**

Under Regulation 10 of the 2003 Regulations a person appointed to the role of safety officer must be *competent* to undertake the specified duties. This replaces the provision that such a safety officer should be *qualified by experience and training* in the 2001 Regulations.

- **Duties on employees (Regulation 14 (1) (C))**

Employees now carry a duty to *make proper use of any work equipment supplied*.

- **Prevention of Drowning (Regulation 40)**

This Regulation now requires the provision and use of *personal flotation devices (conforming to EN or equivalent standards)* for construction work on or adjacent to water into which a person at work is liable to fall with risk of drowning. The personal flotation devices should be properly maintained and be inspected before each use and given a thorough examination every 12 months (with the results of the inspections and examinations made a prescribed form).

- **Transport – General (Regulation 41).**

Regulation 41(e) provides that in circumstances where the operator's visibility is restricted, *auxiliary devices shall be installed to improve visibility (as listed in Schedule 9) unless a risk assessment shows that this is not required* (in the 2001 Regulations an efficient warning device had to be fitted. It requires these visibility aids to be fitted on all new vehicles before the 1st of June 2006 and on all vehicles on the list before the 1st of January 2008 (unless there are particular circumstances with regard to the work that requires these devices to be fitted before these dates). Regulation 41(2)(b) – addresses the organisation and control of traffic and pedestrian routes including, *where appropriate, the provision of a traffic and pedestrian management plan*.

- **Demolition (Regulation 50).**

The wording of Regulation 50(2) is changed from
'the following operations shall be carried out *only under the immediate supervision of a competent person or by persons trained and experienced in the kind of work and under the direction of a competent person*' to
'*by or under the immediate supervision of a competent person*'.

- **Miscellaneous – keeping of records (Regulation 54).**

Regulation 54(1) has been amended to 'the reports required by *any provision* of these Regulations shall be kept on site' etc.

Under Regulation 54(3), when no relevant works are being carried out on the site, the reports shall be kept at an office of the appropriate contractor.

Regulation 54(5) is an additional provision, and it provides that records, reports and other documentation required to be made and kept by designers may be kept in a computer.

- **Miscellaneous – prescribed forms (Regulation 55).**

This provides that the prescribed forms are specified in Schedule 10.

- **Application (Regulation 56).**

Schedule 5 (~~FAS~~ Safe Pass Programme) shall not apply to workers involved in the installations, commissioning, maintenance, repair or removal of mechanical, electrical, gas, compressed air, hydraulic, telecommunication systems, computer systems, or similar services where such person is normally domiciled outside the State and whose normal place of employment is outside the State, where such person has not been working on the project for a period in excess of 20 working days in any 12 month period. Such person shall be in possession of a letter in the English Language from the relevant employer describing the work to be undertaken, the competence of the person to undertake that work, and stating the start date and anticipated completion date.

- **Schedule 6**

This schedule requires a FEETAC certification of the courses rather than FAS certification. It also clarifies the mechanism for recognition of courses outside Ireland