

**PART 1 – MANAGEMENT OF HEALTH & SAFETY**

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## 1.1 General Health and Safety

### 1.1.1 Introduction

The Network Management Manual encompasses the processes for the management of the motorways and all-purpose trunk road network for which the Highways Agency, who are the executive agency to the Department for Transport, are responsible. This includes the interface between the Highways Agency, the Service Provider and road users on the motorway and all-purpose trunk road network.

The Health and Safety at Work etc. Act 1974 and those regulations made under it provide the legal framework for occupational health and safety in network management. Due to the nature of the works in network management, the Construction (Design and Management) Regulations 2007 (CDM Regulations) are particularly relevant as they determine the roles and responsibilities of the client, principal contractor, CDM co-ordinator, etc.

Throughout the document there are several references to occupational health and safety, emphasising the need for it to be an integral part of the management and operational function. In order for that integration to be successful there has to be a clear understanding of the roles and responsibilities of the various parties. This chapter provides a summary of the key issues that duty holders (Highways Agency and Service Provider) must consider in order to comply with health and safety legislation.

## 1.2 Main Legislation relating to Network Management

This section deals with many of the legislative Acts and Regulations that are considered important and relevant to the work of the Highways Agency and the Service Provider undertaking or involved in any of the tasks and activities described in the Network Management Manual. They act as a prompt for the Highways Agency and the Service Provider in ensuring that they are fully aware of the existence and main requirements of each Act or Regulation.

### 1.2.1 Management of Health and Safety at Work Regulations

The Management of Health and Safety at Work Regulations and its associated approved code of practice introduced the need to ensure that health and safety is managed effectively, taking into regard the size and complexity of an organisation's activities. This includes ensuring the provision of effective planning, organisation, control, monitoring and review together with the application of preventative and protective measures.

The Highways Agency ensures that (potential) Service Providers have the competence and resources to comply with the requirements of the Management Regulations by use of their tender assessment process. This process includes determining the extent of the Service Provider's health and safety management systems, how they control risk within their organisation, including the level of training provided to staff, their monitoring processes to assess the effectiveness of the health and safety management system and their review process.

#### 1.2.1.1 Risk Assessment

The Management of Health and Safety at Work Regulations 1999 require the employer to undertake suitable and sufficient assessments of the risks to the health and safety at work of his employees to which they are exposed and the risks to the health and safety of persons not in his employment arising out of or in connection with the conduct by him of his undertaking. Guidance on the completion of risk assessments is available on the [HSE web site](#), e.g. 5 Steps to Risk Assessment.

In support of this, the Highways Agency provides, where reasonably practicable, any information to the Service Provider to aid this process. Such information may include details of land ownership, highway boundaries, 'as-built' drawings and health and safety files where these are available.

Following the appointment of a Service Provider a suitable and sufficient risk assessment process must be used by the Service Provider to adequately identify hazards and evaluate the risks relating to the contract and demonstrate that the proposed control measures are adequate for the management of the Network.

It is the duty of the Highways Agency to provide such information relating to the contract as is necessary for the Service Provider to conduct a suitable and sufficient risk assessment.

The Service Provider must produce suitable and sufficient written risk assessments of the work that is to be undertaken and they must comply with the Management of Health and Safety at Work Regulations.

It is expected that risk assessments will be qualitative for the majority of work undertaken in network management using a risk matrix to assess the outcome by consideration of likelihood and consequence, however if it is determined that quantitative risk assessments are necessary the Service Provider will undertake such work, possibly in conjunction with the client.

The Service Provider must ensure that the risk assessments are compiled adequately with the details briefed to personnel and contractors affected by the proposed works.

In relation to assessing urgency of works for barrier repairs – the use of the Highways Agency's risk based process should be adopted to ensure safety of the Network balanced with safety of road workers.

### 1.2.2 Workplace (Health, Safety and Welfare) Regulations

The Workplace (Health, Safety and Welfare) Regulations 1992 and its associated Approved Code of Practice were introduced to provide a recognised minimum standard of health and safety provision and welfare facilities for workplaces. As well as offices and depots owned or leased by the Highways Agency and the Service Provider this also includes offices and depots owned or leased by others for the use of Highways Agency staff and Service Provider's staff.

**These regulations exclude construction sites, including site offices.**

### 1.2.3 Construction (Design and Management) Regulations

The Construction (Design and Management) Regulations 2007 (CDM Regulations) came into force on 6<sup>th</sup> April 2007. They replace the CDM Regulation 1994 and incorporate duties from the now withdrawn Construction (Health, Safety and Welfare) Regulations 1996. The key aim of the CDM Regulations is to integrate health and safety into the management of the project and to encourage everyone involved to work together to:

- Improve the planning and management of projects from the very start;
- Identify hazards early on, so they can be eliminated or reduced at the design or planning stage and the remaining risks can be properly managed;
- Target effort where it can do the most good in terms of health and safety, and;
- Discourage unnecessary bureaucracy.

An Approved Code of Practice (ACOP), Managing Health and Safety in Construction (HSE publication reference L144), provides practical guidance on complying with the duties set out in the CDM Regulations.

The CDM Regulations are intended to focus attention on planning and management throughout construction projects, from concept and feasibility, through planning and design, tender/selection, construction phase and the commissioning, handover and eventual decommissioning and demolition. They are relevant to the majority of the work undertaken by the Highways Agency and Service Provider for routine, cyclical and improvement works on the trunk road network.

Specific duty holders are defined in the CDM Regulations and their duties defined. The duty holders are:

- Client;
- CDM Co-ordinator;
- Designer;
- Principal contractors, and;
- Contractors.

The extent of duties to be discharged by the various duty holders, in relation to network management, is detailed in the following section at 1.3.

The Highways Agency would normally envisage that, subject to being satisfied as to their competence, they appoint the Service Provider as CDM co-ordinator, principal contractor and designer.

The applicability of certain of the regulations is dependent on whether the project is notifiable, i.e. those projects for which the construction phase is likely to involve more than 30 working days or more than 500 person days of construction works.

To ensure a high standard of health and safety management for the work undertaken on behalf of the Highways Agency, all the construction / maintenance work must be carried out by the Service Provider in accordance with the CDM Regulations, irrespective of whether it is notifiable or not, with appropriate works order systems to identify procedural compliance.
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Additionally there are documents that must be produced to comply with the CDM regulations. Such documentation is identified below.

### 1.3 Roles and Responsibilities

The CDM regulations apply to construction projects and define obligations for various parties. Those duties are detailed.

#### 1.3.1 Client

Under the CDM Regulations the term (client) is defined in relation to construction work as any individual or organisation for whom a construction project is carried out, so for highway works on the trunk road network. In England this, in all but the most exceptional circumstances, is the Highways Agency. The definition of construction work includes maintenance works.

The HSE Approved Code of Practice and Guidance document for CDM Regulations defines the duties for clients. In its capacity as client, the Highways Agency must make sure that:

- Designers, contractors and other team members that they propose to engage are competent (or work under the supervision of a competent person), are adequately resourced and appointed early enough for the work that they have to do;
- They allow sufficient time for each part of the project, from concept onwards;
- They co-operate with others concerned in the project as is necessary to allow other dutyholders to comply with their duties under the CDM Regulations;
- They co-ordinate their own work with others involved with the project in order to ensure the safety of those carrying out the construction work, and others who may be affected by it;
- There are reasonable management arrangements in place throughout the project to ensure that the construction work can be carried out, so far as is reasonably practicable, safely and without risk to health. (This does not mean managing the works themselves, as few clients have the expertise and the resources and it can cause confusion);
- Contractors have made arrangements for suitable welfare facilities to be provided from the start and throughout the construction phase;
- Any fixed workplaces (for example offices, shops, factories, schools) which are to be constructed will comply, in respect of their design and the materials used, with any requirements of the Workplace (Health, Safety and Welfare) Regulations 1992;
- Relevant information likely to be needed by designers, contractors or others to plan and manage their work is passed to them in order to comply with the CDM Regulations (regulation 10).
- Appoint a CDM co-ordinator to advise and assist with their duties and to co-ordinate the arrangements for health and safety during the planning phase;
- Appoint a principal contractor to plan and manage the construction work, preferably early enough for them to work with the designer on issues relating to buildability, usability and maintainability;
- Ensure that the construction phase does not start until the principal contractor has prepared a suitable construction phase plan and made arrangements for suitable welfare facilities to be present from the start of the work;
- Make sure the health and safety file is prepared, reviewed, or updated ready for handover at the end of the construction work. This must be kept available for any future construction work or to pass on to a new owner..

Prior to appointing the Service Provider to undertake the work of managing and maintaining the trunk road network, the Highways Agency provides relevant health and safety information, the pre construction information – see 1.3.6.1, of the assets to tenderers. Such information may be provided via various methods including within contract documents, provision or access to Highways Agency departmental standards, guidance and advice notes and other documents such as maintenance manuals and as-built records. The Network Management Manual and other Highways Agency documents may also contribute to the design or have some influence over part of the design.

### 1.3.2 The CDM Co-ordinator

Where the client has appointed a CDM co-ordinator, they undertake a number of duties, to provide the client with a key project advisor in respect of construction health and safety risk management matters. They should assist and advise the client on appointment of competent contractors and the adequacy of management arrangements; ensure proper co-ordination of the health and safety aspects of the design process; facilitate good communication and co-operation between project team members and prepare the health and safety file.

If appointed by the Highways Agency as CDM Co-ordinator the Service Provider must:-

- give suitable and sufficient advice and assistance to clients in order to help them to comply with their duties, in particular:
  - The duty to appoint competent designers and contractors, and;
  - The duty to ensure that adequate arrangements are in place for managing the project;
- Notify HSE about the project;
- Co-ordinate design work, planning and other preparation for construction where relevant to health and safety;
- Identify and collect the pre-construction information and advise the client if surveys need to be commissioned to fill significant gaps;
- Promptly provide in a convenient form to those involved with the design of the structure; and to every contractor (including the principal contractor) who may be or has been appointed by the client, such parts of the pre-construction information which are relevant to each;
- Manage the flow of health and safety information between clients, designers and contractors;
- Advise the client on the suitability of the initial construction phase plan and the arrangements made to ensure that welfare facilities are on site from the start;
- Produce or update a relevant, user friendly, health and safety file suitable for future use at the end of the construction phase.

The appointment of the CDM Co-ordinator may be monitored by the Highways Agency and may be terminated, changed or reviewed as necessary. This monitoring may be carried out within regular audits, such as Traffic Operations Contract Compliance Audit (TOCCA).

### 1.3.3 Designers

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

To help achieve those objectives, designers should:

- Make sure that they are competent and adequately resourced to address the health and safety issues likely to be involved in the design;
- Check that clients are aware of their duties;
- When carrying out design work, avoid foreseeable risks to those involved in the construction and future use of the structure, and in doing so, they should eliminate hazards (so far as is reasonably practicable, taking account of other design considerations) and reduce risk associated with those hazards which remain;
- Provide adequate information about any significant risks associated with the design;
- Co-ordinate their work with that of others in order to improve the way risks are managed and controlled;
- Ensure that the client has appointed a CDM co-ordinator;

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

Service Providers appointed as designer should discharge the duties bulleted above.

#### 1.3.4 Principal Contractor

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

When appointed as principal contractor, the Service Provider must:

- Satisfy themselves that clients are aware of their duties, that a CDM co-ordinator has been appointed and HSE notified before they start work;
- Make sure that they are competent to address the health and safety issues likely to be involved in the management of the construction phase;
- Ensure that the construction phase is properly planned, managed and monitored, with adequately resourced, competent site management appropriate to the risk and activity;
- Ensure that every contractor who will work on the project is informed of the minimum amount of time which they will be allowed for planning and preparation before they begin work on site;
- Ensure that the contractors are provided with the information about the project that they need to enable them to carry out their work safely and without risk to health. Requests from contractors for information should be met properly;
- Ensure safe working and co-ordination and co-operation between contractors;
- Ensure a suitable construction phase plan (see 1.3.6.2) is:
  - a. Prepared before construction work begins
  - b. Developed in discussion with, and communicated to, contractors affected by it
  - c. Implemented, and
  - d. Kept up to date as the project progresses
- Satisfy themselves that the designers and contractors that they engage are competent and adequately resourced;
- Ensure suitable welfare facilities are provided from the start of the construction phase;
- Take reasonable steps to prevent unauthorised access to the site;
- Prepare and enforce any necessary site rules;
- Provide (copies of or access to) relevant part of the construction phase plan and other information to contractors, including the self-employed, in time for them to plan their work;
- Liaise with the CDM co-ordinator on design carried out during the construction phase, including design by specialist contractors, and its implications for the construction phase plan;
- Provide the CDM co-ordinator promptly with any information relevant to the health and safety file (see 1.3.6.3);
- Ensure that all workers have been provided with suitable health and safety induction, information and training;
- Ensure that the workforce is consulted about health and safety matters;
- Display the project notification

**1.3.5 Contractors**

Contractors and those actually doing the construction work are most at risk of injury and ill health. They have a key duty to play, in co-operating with the principal contractor, in planning and managing the work to ensure that risks are properly controlled. Anyone who directly employs, engages construction workers or controls or manages construction work is a contractor for the purpose of the CDM Regulations.

Contractors must:

- Check clients are aware of their duties;
- Satisfy themselves that they and anyone they employ or engage are competent and adequately resourced
- Plan, manage and monitor their own work to make sure that workers under their control are safe from the start of their own work on site;
- Ensure that any contractor who they appoint or engage to work on the project is informed of the minimum amount of time which will be allowed for them to plan and prepare before starting work on site;
- Provide workers under their control (whether employed or self-employed) with any necessary information, including about relevant aspects of other contractors' work, and the site induction (where not provided by a principal contractor) which they need to work safely, to report problems or to respond appropriately in an emergency;
- Ensure that any design work they do complies with CDM Regulation 11;
- Comply with the requirements listed in schedule 2 (welfare facilities) and part 4 (duties relating to health and safety on construction sites) of the regulations that apply to their work;
- Co-operate with others and co-ordinate their work with others working on the project;
- Ensure the workforce is properly consulted on matters affecting their health and safety, and;
- Obtain specialist advice (for example from a structural engineer or occupational hygienist) where necessary when planning high-risk work.

**1.3.6 CDM Deliverables**

One of the principles underlying the CDM Regulations is of having "The right information for the right people at the right time". To achieve this, initial information is collected and made available for consideration and inclusion from which a construction phase Health and Safety Plan is developed. As the project progresses through the preparation and construction phases this is developed to form a detailed document covering all aspects of health and safety of the project, construction, maintenance and demolition.

**1.3.6.1 Pre-Construction Information**

Project specific health and safety information needed to identify hazards and risks associated with the design and construction work is termed pre-construction information. It should concentrate on those issues that designers and contractors could not reasonably be expected to anticipate or identify, and not on obvious hazards such as the likelihood that the project would involve work at height. The Highways Agency will make such information available to prospective Service Providers as part of the invitation to tender documents.

Following their appointment as CDM co-ordinator, the Service Provider must develop (typically for maintenance and improvement projects) the pre-construction information for use by their designers, other designers, principal contractors and contractors.

**1.3.6.2 Construction Phase Plan**

The way in which the construction phase will be managed and the key health and safety issues for the particular project must be set out in writing in the construction phase plan. This plan should set out the organisations and arrangements that have been put into place to manage risk and co-ordinate the works on site. It should not be a repository for detailed generic risk assessments, records of how decisions were reached or detailed method statements, but it may, for example set out when such documents will need to be prepared.

The development of a construction phase plan becomes the responsibility of the principal contractor upon appointment of the contract for the construction phase of the project where it will reflect the principal contractor's health and safety intentions for the project.

Service Providers, appointed as principal contractor, must prepare a construction phase plan in accordance with the requirements of 1.3.4

IAN 105/08 sets out the minimum standard required by the Highways Agency for the preparation of a Health and Safety Plan, the term previously given to the construction phase plan.

**1.3.6.3 Health and Safety File**

The CDM Regulations further require the preparation and handover of a Health and Safety File for each project containing relevant health and safety information on its design, construction, maintenance or demolition. The Health and Safety File will provide a record to assist persons undertaking future construction, improvement, maintenance or demolition work on the project or structures making up the project, for retention by the client. It is prepared during a project to ensure it is ready to be handed over to the client upon completion of that project.

The Service Provider, appointed as CDM co-ordinator, is responsible for producing a relevant and user friendly Health and Safety File and upon completion its handover to the Service Manager. The Health and Safety File must include information from small maintenance projects that may affect the future safe maintenance of the trunk road network.

The Health and Safety File must be in a format that can be easily updated where required and made available for inspection by any person who may need access to information contained therein.

To facilitate this, details relating to the format, media and storage of the Health and Safety File must be agreed with the Service Manager by the CDM co-ordinator on a project-specific basis, and as determined by IAN 105/08 (see below). The Highways Agency however envisages that responsibility for storage of documents contained in or referenced to the Health and Safety File will normally reside with the Service Provider, noting that the Health and Safety Files will be passed to another Service Provider should there be a change of contract

IAN 105/08 sets out the minimum standards required by the Highways Agency, as client under the CDM Regulations, regarding the Health and Safety File for projects involving construction work on the trunk road network.

**1.4 Legislation Register**

This section lists many of the legislative acts and regulations that are considered important and relevant to the work of personnel undertaking any of the activities or subjected to any of the conditions as described in the Network Management Manual. They act as a prompt for the client and Service Provider in ensuring that they are fully aware of the existence and main health and safety requirements of each act or regulation. This list is comprehensive but not complete and it is the responsibility of the client and Service Provider to ensure that they comply with other less well known or obscure legislation or regulation relating to network management work to be undertaken. This responsibility extends to new health and safety legislation that may be introduced during the lifespan of the Network Management Manual.

It has become standard practice to support health and safety regulations, where possible, with an Approved Code of Practice (ACoP) or HSE/HSC Guidance to explain the practicalities of complying with the requirements of the regulations. Where such ACoP's or HSE/HSC Guidance are relevant they have been noted in the register.

The following tables are set out, in alphabetical order, to show the following:

- Table A. Principal Acts
- Table B. Main Regulations (including Approved Codes of Practice and Guidance)
- Table C. Legislation used in Civil Law

Table A. Principal Acts	Interpretation
<b>Fire Precautions Act 1971 (FPA)</b>	<p>The principle instrument for the control of fire safety in occupied premises. It is designed to ensure the provision of adequate fire precautions and prevention, means of escape and related fire precautions in premises within its scope. Fire authorities are responsible for the issue of the fire certificates and have a duty to enforce the provisions of the Act and the Regulations made under it. A fire certificate is required for certain premises, and this may also apply to trunk road maintenance depots.</p>
<b>Health and Safety at Work, etc. Act 1974 (HSWA)</b>	<p>Key objectives are:</p> <ul style="list-style-type: none"> <li>• to secure the Health, Safety and Welfare of all people at work, and;</li> <li>• to protect third parties from the risks arising from workplace activities.</li> </ul> <p>The Act establishes principles of safety responsibility on employers, employees, manufacturers, suppliers, designers and importers, and established the corporate bodies of the Health and Safety Commission and Health and Safety Executive.</p> <p>The employer's duties are:</p> <ul style="list-style-type: none"> <li>• to provide a statement of health and safety policy;</li> <li>• to provide and maintain plant and equipment that is safe and without risks to health, so far as is reasonably practicable;</li> <li>• to ensure safe handling, storage and transport of articles and substances;</li> <li>• to provide adequate information, instruction, training and supervision;</li> <li>• to provide safe premises and safe access/egress;</li> <li>• to provide a safe working environment and welfare arrangements;</li> <li>• not to charge employees for things done or provided in the interest of health and safety;</li> <li>• to consult with employees about health and safety.</li> </ul> <p>Self employed workers, other employees and the general public must not be exposed to unacceptable risk from any work activity.</p> <p>Designers, manufacturers, suppliers and installers must ensure that articles, i.e. physical objects and substances are safe and without risk so far as is reasonably practicable before they are used, erected or installed.</p> <p>Employees must take reasonable care of their own health and safety and that of others who may be affected by their actions.</p>
<b>Highways Act 1980</b>	<p>Makes a requirement to ensure free passage for pedestrians and vehicles is maintained around work sites. Permission for works on the public highway must be obtained from the relevant Highway Authority, which is the Highways Agency for the trunk road network in England. Licenses for hoardings, forced storage areas, skips, etc, affecting the public highway are required.</p>

Table A. Principal Acts	Interpretation
<b>New Roads and Street Works Act 1991 (NRSWA)</b>	All excavations in roadways are licensed and co-ordinated, normally by the Local Authority who grants licenses for the placement, retention and maintenance of apparatus in roadways, and provides notice and co-ordination of street works.
<b>Railways Act 1993</b>	Primarily concerned with the privatisation of the national railway. Section 117(2) requires secure, proper construction and safe operations for railways and for the protection of the public from injury and other risks arising from construction and operation of the railway.
<b>Traffic Management Act 2004</b>	<p>Part 1 allows for the establishment of a uniformed on-road traffic officer service implemented by the Highways Agency.</p> <p>Part 2 imposes a duty on all local traffic authorities to plan and implement traffic movements on the network with the appointment of a 'Traffic Manager'.</p> <p>Part 3 provides for the introduction of permit schemes for both street works and road works.</p> <p>Part 4 provides for changes to the regulatory requirements of Part 3 of the New Roads and Street Works Act 1991, including increases in the level of fines for specified offences.</p> <p>Part 5 includes specific measures to alter the arrangements for traffic management in London including for enhanced TfL (Transport for London) powers in decisions affecting strategic roads. Amendments are also made to the Highways Act 1980 broadening the scope of lane rental charges to apply to skips, scaffolding, temporary excavations, etc.</p> <p>Part 6 includes powers providing a single framework to make regulations for the civil enforcement by local authorities (outside and including London) for parking and waiting restrictions, bus lanes and some moving traffic offences.</p> <p>Part 7 introduces miscellaneous powers including the ability for discrete inspection of Blue Badge Scheme parking permits and an associated offence for failure to produce a badge when required to do so. Also included is provision for the application of surplus income from parking places and financial provision for the establishment of traffic officers.</p>
<b>Transport and Works Act 1992</b>	These regulations apply to employees working on or near railways and tramways. They require that employees must not report for duty under the influence of drugs or alcohol. Staff engaged in safety critical work will be subject to random drugs and alcohol tests.

Table B. Main Regulations	Interpretation
<b>Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP)</b>	<p>The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP) define the system for classification and labelling of substances and preparations dangerous for supply. This system applies to all dangerous substances and preparations as defined in the Regulations.</p> <p>An integral part of CHIP is the Approved Supply List which has been approved by the Health and Safety Commission and contains detailed information about substances to assist manufacturers, importers and suppliers having responsibilities under CHIP.</p> <p>For the purposes of classification and labelling, this comprises:</p> <ul style="list-style-type: none"> <li>• information to be shown on labels when the substance is supplied in packages; and</li> <li>• information to be used to derive the classification and supply labels for preparations containing the substance.</li> </ul>
<b>Confined Spaces Regulations 1997 and Approved Code of Practice</b>	<p>Defines confined spaces as any place or other space which, by virtue of its enclosed nature has a reasonably foreseeable specified risk. This includes:</p> <ul style="list-style-type: none"> <li>• fire and/or explosion;</li> <li>• loss of consciousness;</li> <li>• drowning;</li> <li>• oxygen deficient atmosphere;</li> <li>• asphyxiation (including free flowing solids).</li> </ul> <p>Wherever possible, entry to confined spaces must be avoided – this must be considered at the design stage.</p> <p>Competent persons must complete risk assessments for work within a confined space.</p> <p>If entry into a confined space is unavoidable then a safe system of work must be designed and implemented, i.e., a permit to work.</p> <p>Individuals entering a confined space must have received relevant training and hold a current certificate of conformance.</p> <p>Plant and equipment must be suitable for use in confined spaces.</p> <p>Adequate emergency arrangements must be in place before work starts.</p>
<b>Construction (Design and Management) Regulations 2007 (CDM) ACoP and Guidance</b>	<p>These regulations cover the health and safety management of a construction project from its inception through to the completion of the construction, and the commissioning and handover, and includes decommissioning and demolition.</p> <p>The regulations require:</p> <ul style="list-style-type: none"> <li>• a realistic project programme with adequate time allowed for planning, preparation and the work itself;</li> <li>• early appointment of key people;</li> </ul>

Table B. Main Regulations	Interpretation
<b>Construction (Design and Management Regulations 2007 (CDM) ACoP and Guidance (continued))</b>	<ul style="list-style-type: none"> <li>• competent duty holders with sufficient resources to meet their legal duties;</li> <li>• early identification and reduction of risks;</li> <li>• provision of health and safety information from the start of the design phase, through construction and maintenance to eventual demolition, so that everyone can discharge their duties effectively;</li> <li>• co-operation between duty holders; and</li> <li>• effort and resources proportionate to the risk and complexity of the project to be applied to managing health and safety issues.</li> </ul> <p>These regulations now cover the implementation of safe controls on a construction site (previously Construction (Health, Safety &amp; Welfare) Regs 1996):</p> <ul style="list-style-type: none"> <li>• safe places of work;</li> <li>• precautions against falls and falling objects;</li> <li>• prevention or avoidance of drowning;</li> <li>• ventilation, temperature, lighting;</li> <li>• stability of structures;</li> <li>• excavations, demolition, explosives, cofferdams;</li> <li>• traffic routes, vehicles, doors and gates;</li> <li>• emergency procedures, fire prevention and detection;</li> <li>• welfare facilities, good order;</li> <li>• training, inspection, reports</li> </ul>
<b>Construction (Head Protection) Regulations 1989</b>	<p>These regulations have a simple requirement – everyone except turban wearing Sikhs, working in the construction industry must wear suitable head protection whenever there is a risk of injury to the head from falling objects or hitting the head against something. To achieve this requirement, the regulations place duties on employers, on the person in control of others, on individual employees and self-employed persons as follows:</p> <ul style="list-style-type: none"> <li>• suitable head protection must be worn, i.e. it must conform to the equivalent standard, such as BS EN 397 (safety helmets), BS EN 812; (bump caps);</li> <li>• new head protection must be CE marked to indicate it complies with the PPE regulations;</li> <li>• head protection must be provided to employees and visitors on site by the employer;</li> <li>• employers must ensure that head protection is worn unless there is no foreseeable risk of injury to the head other than a fall;</li> <li>• employees to make full and proper use of head protection provided and to return it to the correct storage facility, and report defects or loss;</li> <li>• employees must comply with any employer rules;</li> <li>• head protection must be replaced at recommended intervals and when damaged.</li> </ul>
<b>Control of Asbestos Regulations 2006 and Approved Code of Practice</b>	<p>These regulations place an explicit duty on employers in occupation of premises to ensure that certain requirements are carried out. This includes:</p> <ul style="list-style-type: none"> <li>• locate materials likely to contain asbestos;</li> <li>• maintain written records of their location;</li> </ul>

Table B. Main Regulations	Interpretation
<b>Control of Asbestos Regulations 2006 and Approved Code of Practice (continued)</b>	<ul style="list-style-type: none"> <li>• assess the risk of exposure;</li> <li>• prepare and implement a management plan to control these risks.</li> <li>• laboratories used to undertake site clearance certification must be accredited</li> <li>• work with asbestos insulation, some textured coatings and asbestos insulation board must only be undertaken by a licensed contractor</li> </ul> <p>Additional duties are placed on other parties who have an obligation to maintain and repair the premises to enable the employer to meet these requirements, as follows;</p> <ul style="list-style-type: none"> <li>• notifiable work in the presence of asbestos must be reported to the HSE at least 14 days prior to the work commencing;</li> <li>• exposure must be reduced to as low as reasonably practicable even when respiratory protection is worn;</li> <li>• laboratories used to analyse suspected ACM's (asbestos containing materials) must be accredited;</li> <li>• contractors involved in the work must be informed of the presence of asbestos;</li> <li>• health surveillance is provided where required.</li> </ul> <p>These regulations place an explicit duty on employers in occupation of premises to ensure that certain requirements are carried out. This includes:</p> <ul style="list-style-type: none"> <li>• locate materials likely to contain asbestos;</li> <li>• maintain written records of their location;</li> <li>• assess the risk of exposure;</li> <li>• prepare and implement a management plan to control these risks.</li> </ul> <p>Additional duties are placed on other parties who have an obligation to maintain and repair the premises to enable the employer to meet these requirements, as follows;</p> <ul style="list-style-type: none"> <li>• notifiable work in the presence of asbestos must be reported to the HSE at least 14 days prior to the work commencing;</li> <li>• exposure must be reduced to as low as reasonably practicable even when respiratory protection is worn;</li> </ul>
<b>Control of Lead at Work Regulations 2002 (CLAW) and Approved Code of Practice</b>	<p>Mandates the requirement to protect the health of people at work by preventing, or where not reasonably practicable, adequately controlling their exposure to lead and to monitor the amount of lead that employees absorb within allowable limits. Individuals whose work involves significant exposure (as defined by the Regulations) to lead at work must be screened at work to prevent their health being affected.</p> <p>The use of lead based products must be avoided so far as is reasonably practicable. When work has to be undertaken risk assessments are required to determine the likely presence of lead. This is particularly relevant with hot work where welding may involve contact with old lead based paints.</p> <p>Employees must receive training and information. In particular, they need to be aware of the importance of hygiene when coming into contact with lead based materials.</p>

Table B. Main Regulations	Interpretation
<b>Control of Lead at Work Regulations 2002 (CLAW) and Approved Code of Practice (continued)</b>	<p>Adequate control measures must be implemented with the use of PPE as a last resort.</p> <p>Medical surveillance may also be required.</p>
<b>Control of Substances Hazardous to Health Regulations 2002 (COSHH) and Approved Code of Practice</b>	<p>Hazardous substances are defined in the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP). These regulations mandate assessments for use of, and exposure to hazardous substances within Workplace Exposure Limits (WEL's) which are detailed in a separate document produced annually by the HSE, EH40.</p> <p>The main requirements of the COSHH Regulations are as follows:</p> <ul style="list-style-type: none"> <li>• when a substance is to be used, a risk assessment must be carried out to consider its use and identify the control measures. Control measures must be properly maintained to ensure they continue to be effective;</li> <li>• users of hazardous substances must be trained in their use and receive relevant information;</li> <li>• Relevant COSHH assessments must be available for employees at the location where work is being carried out;</li> <li>• in certain circumstances the monitoring of exposure to employees and health surveillance is required;</li> <li>• when considering the use of a substance a safer alternative / substitute must always be considered.</li> </ul>
<b>Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR)</b>	<p>These regulations apply to employers and the self-employed at most workplaces where a dangerous substances is, or could be, present. They set minimum requirements for the protection of employees from fire and explosion risks related to dangerous substance and potentially explosive atmospheres. An explosive atmosphere is an accumulation of gas, mist, dust or vapour mixed with air.</p> <p>Dangerous substances include:</p> <ul style="list-style-type: none"> <li>• petrol and liquefied petroleum gas,;</li> <li>• paints and varnishes;</li> <li>• solvents;</li> <li>• certain types of dust (e.g. wood dust).</li> </ul> <p>DSEAR must be considered when working on construction activities in high risk environments.</p> <p>The main requirements of the regulations are to:</p> <ul style="list-style-type: none"> <li>• carry out formal risk assessment of the fire and explosion risks of any work activities involving dangerous substances (this must be done regardless of the amount of hazardous substance in use or explosive atmosphere present);</li> <li>• provide measures to eliminate or reduce so far as is reasonably practicable the risk of fire or explosion;</li> <li>• apply measures, so far as is reasonably practicable to control risks and mitigate the detrimental effects of a fire or explosion;</li> </ul>

Table B. Main Regulations	Interpretation
<b>Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR) (continued)</b>	<ul style="list-style-type: none"> <li>• provide equipment and procedures to deal with accidents and emergencies;</li> <li>• provide employees with information and adequate training.</li> </ul>
<b>Electrical Equipment for Explosive Atmospheres (Certification) Regulations 1990 (Amended 1999)</b>	<p>These Regulations address the measures for safety and consumer protection in relation to electrical equipment and any provisions concerning the composition, labelling, marketing, classification or description of electrical equipment. A Certificate of Conformity and a Certificate of Inspection must accompany equipment for use in explosive atmospheres from a certified body. It also requires the manufacturer to issue the appropriate distinctive community mark (CE) and supply with the equipment instructions defining the specialist conditions governing the use of the equipment.</p>
<b>Electricity at Work Regulations 1989</b>	<p>Applies to almost all workplaces. Precautions must be taken against the risk of death or personal injury from electricity during work activities. Duties are imposed on persons in respect of electrical systems, electrical equipment, conductors and work activities on or near electrical equipment as follows:</p> <ul style="list-style-type: none"> <li>• only competent individuals with technical knowledge and experience, including those working under supervision are to undertake work on electrical systems and equipment;</li> <li>• safe systems of work must be employed when working with electrical equipment;</li> <li>• adequate working space, access and lighting is to be provided to avoid injury from dangerous situations;</li> <li>• electrical equipment is properly maintained;</li> <li>• systems must be protected from adverse or hazardous environments, and be designed with safety factors to accommodate potential transient and overload conditions;</li> <li>• conductors which may give rise to danger must be insulated, or if exposed, suitable precautions must be taken to place in safe locations with warning notices and ensure associated safe working practices;</li> <li>• adequate precautions by earthing or by other suitable means are to be taken to prevent danger from electrical equipment that may become charged;</li> <li>• restrictions are placed on inserting devices into any conductor connected to earth and any allowable jointing of systems, including plugs and sockets, must be suitable for the purpose;</li> <li>• systems or parts of systems must be protected from overload (fuses, circuit breakers etc.);</li> <li>• suitable means must be provided for cutting off the current and isolating equipment, including the prevention of such equipment becoming live during any subsequent work (removal of fuses etc.);</li> <li>• work is not allowed on or near any 'live' conductors unless the person is trained and qualified. When such work is necessary suitable precautions must be implemented.</li> </ul>
<b>Employer's Liability (compulsory Insurance) Regulations 1998</b>	<p>Employers must maintain an insurance policy with an authorised insurer for employee's injury and ill health. A copy of the certificate must be displayed in a prominent place at all offices and other places of work.</p>

Table B. Main Regulations	Interpretation
<b>Fire Precautions (workplace) Regulations 1997</b>	<p>These regulations apply to most, but not all, workplaces where people are employed. They enforce obligations on employers the responsibility for the safety of their employees in case of fire. This legislation mandates the need for documented fire risk assessments including for premises with a fire certificate and implementation of control measures. The legislation requires provision for:</p> <ul style="list-style-type: none"> <li>• fire-fighting equipment and fire detection devices and their appropriate maintenance;</li> <li>• emergency routes and exits.</li> </ul>
<b>Health and Safety (Consultation with Employees) Regulations 1996</b>  <b>Safety Committees and Safety Representatives Regulations 1977 (SCSR)</b>	<p>Employers must consult with employees regarding planning, organising, safety issues and the use of new equipment. Where staff are not covered by safety representatives this can be achieved by consulting with all staff or nominated groups. Additional requirements are:</p> <ul style="list-style-type: none"> <li>• safety representatives must have time off for training;</li> <li>• information must be made available;</li> <li>• staff must not be penalised for raising safety issues.</li> </ul> <p>SCSR relates to the recognition for trade unions to appoint safety representatives from among its employees.</p>
<b>Health and Safety (information for Employees) Regulations 1989</b>	<p>These regulations relate to the requirement to display The Health and Safety Law Poster and provide HSE and other contact details to all staff.</p>
<b>Health and Safety (Display Screen Equipment (DSE)) Regulations 1992 and Guidance</b>	<p>All workstations with display screen equipment must be assessed to ensure they meet the requirements of the schedule, contained within the regulations. The assessment must include consideration of the following:</p> <ul style="list-style-type: none"> <li>• ensure sufficient workspace;</li> <li>• adequate and proper lighting;</li> <li>• fully adjustable chair;</li> <li>• suitable positioning of PC to avoid glare and flicker.</li> </ul> <p>There is also a requirement to ensure suitable training and information is provided and that employees have sufficient work breaks and activity changes. Employers are required to provide users of DSE with appropriate suitable eye tests upon request, and if required special corrective appliances.</p>
<b>Health and Safety (First Aid) Regulations 1981</b>	<p>Details the first aid equipment and training (for selected staff) to be provided (based on risk assessment) and the need to inform staff of the first aid arrangements.</p> <p>Requirements must reflect the nature of the workplace such as:</p> <ul style="list-style-type: none"> <li>• positioning of first aid equipment, (close to high risk areas);</li> <li>• calculate the number of first aiders required in relation to number of staff ;</li> <li>• and tasks being undertaken.</li> </ul>

Table B. Main Regulations	Interpretation
<b>Health and Safety (First Aid) Regulations 1981 (continued)</b>	<p>Facilities must contain appropriate sign posting, this must be considered in relation to activities being undertaken.</p> <p>There must be provision of adequately trained personnel and suitable first aid equipment.</p> <p>Employers must provide information to staff on provision of first aid.</p>
<b>Health and Safety (Safety Signs and Signals) Regulations 1996</b>	<p>These Regulations identify the minimum requirements for the provision of safety signs at work. Regulations require employers to use a safety sign where there is a significant risk to health and safety that has not been avoided or controlled by the methods required under the relevant law, provided use of a sign can help reduce the risk. Safety signs are not a substitute for those methods of controlling risk such as engineering controls or safe systems of work. They apply to all workplaces and to all activities where people are employed, but exclude signs used in connection with the transport, supply and marketing of dangerous substances, products and equipment.</p> <p>The regulations require, where necessary, the use of road traffic signs in workplaces to regulate road traffic.</p> <p>The regulations require employers to ensure that safety signs are provided (or are in place) and maintained.</p> <p>When determining the need for signs, employers need to take into account the results of risk assessments.</p> <p>Four types of safety signs are identified in the regulations:</p> <ul style="list-style-type: none"> <li>• mandatory;</li> <li>• prohibition;</li> <li>• warning;</li> <li>• emergency escape/first aid signs.</li> </ul> <p>These regulations also provide the minimum requirements for acoustic signs, illumination, hand signs, verbal communication, traffic routes and fire fighting equipment.</p>
<b>Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) and ACoP</b>	<p>These regulations require the employer to ensure the following:</p> <ul style="list-style-type: none"> <li>• lifting equipment must be constructed to be suitable for its purpose;</li> <li>• the working conditions and persons in the vicinity are considered;</li> <li>• lifting equipment is of suitable strength and capability for the load;</li> <li>• all lifting operations must be planned, supervised and carried out in a safe manner;</li> <li>• where required, examination, testing and inspection of lifting equipment is properly conducted;</li> <li>• suitable records are kept of any such examination, testing and inspections;</li> <li>• the safe working load (SWL) of all lifting equipment must be clearly indicated;</li> </ul>

Table B. Main Regulations	Interpretation
<b>Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) and ACoP (continued)</b>	<ul style="list-style-type: none"> <li>• lifting equipment exposed to adverse conditions liable to result in dangerous situations must be thoroughly examined by a competent person and records kept;</li> <li>• equipment must have a current certificate of examination.</li> </ul>
<b>Management of Health and Safety at Work Regulations 1999 (MHSW) and Approved Code of Practice</b>	<p>MHSW identifies the way in which Duties under the HSWA can be undertaken.</p> <p>The key requirement is for the employer to conduct a suitable and sufficient risk assessment of the locations and tasks that may affect workers and others. The risk assessment must;</p> <ul style="list-style-type: none"> <li>• address normal and abnormal situations;</li> <li>• ensure significant findings are recorded;</li> <li>• be reviewed and evaluated at appropriate intervals and when any working situation changes.</li> </ul> <p>Other requirements are:</p> <ul style="list-style-type: none"> <li>• health and safety arrangements must be in place to manage risk and implement controls.</li> <li>• required health surveillance must be carried out when there is an identifiable disease or adverse health condition related to the work;</li> <li>• health and safety assistance must be provided by the employer to assist in complying with statutory provisions;</li> <li>• where tenants or contractors share a premises or site location, common risks must be shared through joint controls;</li> <li>• appropriate procedures must be established for serious and imminent danger;</li> <li>• host employers must ensure anyone carrying out work in or on their premises receive relevant health and safety information;</li> <li>• health and safety training, including refresher training must be given to safeguard against risk;</li> <li>• temporary workers must be provided with relevant health and safety information;</li> <li>• employees must co-operate with the employer in the pursuit of all of the above;</li> <li>• risk assessments must be conducted for new and expectant mothers;</li> <li>• protection must be provided to young workers from risks arising through lack of experience, lack of awareness or immaturity.</li> </ul>
<b>Manual Handling Operations Regulations 1992 and Guidance</b>	<p>Employers must protect workers from manual handling injuries. Employers must:</p> <ul style="list-style-type: none"> <li>• avoid the need for hazardous manual handling where possible (e.g. by doing jobs in a different way to eliminate or minimise handling);</li> <li>• assess the risk of injury from any hazardous manual handling task that cannot be avoided, and ensure the risk is reduced to a level as low as is reasonably practicable;</li> <li>• put measures in place to reduce the risk of injury, once risks have been assessed, including provision of information to employees and, where reasonably practicable, precise information relating to weight and configuration.</li> </ul>

Table B. Main Regulations	Interpretation
<b>Manual Handling Operations Regulations 1992 and Guidance (continued)</b>	Employees are to make full use of systems put in place to reduce risk from manual handling.
<b>Noise at Work Regulations 2005</b>	<p>These regulations require the following:</p> <ul style="list-style-type: none"> <li>• the implementation of a hierarchy of risk controls;</li> <li>• employers must reduce the risk to as low as reasonably practicable without PPE;</li> <li>• the completion of appropriate risk assessments, including specific noise assessments, which must be completed by competent persons where noise exceeds defined action levels;</li> <li>• records must be kept of the risk and noise assessments undertaken;</li> <li>• persons entering hearing protection zones must use appropriate hearing protection;</li> <li>• steps must be taken to reduce noise where practicable.</li> </ul> <p>Two action levels are specified as follows:</p> <ul style="list-style-type: none"> <li>• Lower exposure action levels are <ul style="list-style-type: none"> <li>• a daily or weekly personal noise exposure of 80 dB (A-weighted); and</li> <li>• a peak sound pressure of 135 dB (C-weighted).</li> </ul> </li> <li>• when breached requires the employer to ensure suitable hearing protection is available, maintained and repaired as necessary, and that adequate information, instruction and training is provided.</li> <li>• Upper exposure action levels are; <ul style="list-style-type: none"> <li>• a daily or weekly personal noise exposure of 85 dB (A-weighted); and</li> <li>• a peak sound pressure of 137 dB (C-weighted).</li> </ul> </li> <li>• when breached requires the employer to ensure suitable hearing protection is supplied and used, and ear protection zones are established and clearly signed with notices.</li> </ul>
<b>Personal Protective Equipment at Work Regulations 1992 (PPE) and Guidance</b>	<p>These regulations set out the general requirements for the provision and use of personal protective equipment (PPE). The key requirements are as follows:</p> <ul style="list-style-type: none"> <li>• provide a system whereby suitable PPE is provided;</li> <li>• risk assessment must be completed and consider the suitability of PPE;</li> <li>• suitable storage must be made available for PPE;</li> <li>• PPE must be properly maintained (including regular cleaning) in good condition and repair (including regular cleaning), and if not it must be reported for replacement to be provided;</li> <li>• where more than one item of PPE is used simultaneously it must be ensured that they are compatible;</li> <li>• employees to be provided with information, instruction and training to ensure proper use;</li> <li>• PPE must always be considered as a 'last resort' in terms of safety control.</li> </ul>

Table B. Main Regulations	Interpretation
<b>Pressure Systems Safety Regulations 2000</b> <b>And Approved Code of Practice</b>	<p>Users and owners of pressure systems are required to demonstrate that they know the safe operating limits, principally pressure and temperature, of their pressure systems, and that the systems are safe under those conditions.</p> <p>They need to ensure that a suitable written scheme of examination is in place before the system is operated.</p> <p>They also need to ensure that the pressure system is actually examined in accordance with the written scheme of examination.</p>
<b>Provision and Use of Work Equipment Regulations 1998 (PUWER) and Approved Code of Practice</b>	<p>These regulations address the need to ensure that where plant and equipment is required for work that it is suitable for the purpose and is properly maintained.</p> <p>Work equipment must be suited to the task and meet all statutory safety standards (including guarding and fail safe devices). Specific risks must be identified and suitable control measures implemented. Appropriate information, supervision and training must be provided (including refresher training). Inspections, where required, must be carried out by a competent person prior to work.</p> <p>Maintenance, where required, must be carried out by a competent person in accordance with the maintenance procedures for that equipment.</p>
<b>Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR)</b>	<p>These regulations identify certain incidents that require reporting to the relevant enforcing authority, what timescale is available for such reporting and the responsibilities for reporting such an incident. Incidents include fatalities, major injuries, injuries and absences resulting in more than 3 days off work, dangerous occurrences, specified diseases, and gas related incidents and incidents related to dangerous gas fittings.</p> <p>They also specify the reporting form to be used and the records to be kept and maintained.</p> <p>In general, road traffic accidents are not reportable except for specific work related incidents.</p>
<b>Supply of Machinery (Safety) Regulations 1992</b>	<p>Although these regulations place duties on the supply chain for the manufacture and supply of machinery it is incumbent on employers (i.e., user / purchaser) to ensure that the machinery they have purchased is accompanied by a Declaration of Conformity identifying the relevant safety standards.</p> <p>Where that machinery is intended for incorporation into other machinery, it must be accompanied by a Declaration of Incorporation (a Declaration of Conformity will apply once incorporation has taken place)</p> <p>All machinery must be marked with the appropriate CE mark to demonstrate it satisfies the relevant European Standards.</p>

Table B. Main Regulations	Interpretation
<b>The Control of Vibration at Work Regulations 2005</b>	<p>These regulations require the employer to undertake a suitable and sufficient assessment of the risks created by work that exposes workers to hand-arm vibration or whole body vibration.</p> <p>When the risk of exposure to hand-arm vibration is identified appropriate action must be taken to control that risk where exposure exceeds the daily exposure action value (EAV) of <math>2.5\text{m/s}^2</math> A(8). Employers also have to prevent exposure exceeding the daily exposure limit value (ELV) of <math>5\text{m/s}^2</math> A(8).</p> <p>When the risk of exposure to whole body vibration is identified appropriate action must be taken to control that risk where exposure exceeds the daily exposure action value (EAV) of <math>0.5\text{m/s}^2</math> A(8). Employers also have to prevent exposure exceeding the daily exposure limit value (ELV) of <math>1.15\text{m/s}^2</math> A(8).</p> <p>Control measures include alternative methods of working, job rotation, PPE and health surveillance. Employees must be provided with information and training on methods of controlling the risks from vibration. Health surveillance will need to be considered. Liaison with suppliers of machinery is necessary to ensure the most suitable equipment is available for use in line with regulations.</p>
<b>Work at Height Regulations 2005</b>	<p>The regulations define working at height as a place where a person could be injured falling from it, even if it is at or below ground level. The regulations require the employer to ensure:</p> <ul style="list-style-type: none"> <li>• all work is properly planned and organised;</li> <li>• those involved in work at height are competent, or being supervised;</li> <li>• the risks from working at height are assessed and appropriate work equipment is selected and used;</li> <li>• the risks associated with working on or above fragile surfaces is properly controlled;</li> <li>• prevention of objects falling, or when not reasonably practicable, protection from falling objects;</li> <li>• identification of danger areas;</li> <li>• equipment for work at height is properly inspected and maintained.</li> <li>• suitable rescue arrangements are in place in the case of an emergency occurring at height</li> </ul> <p>The Regulations include Schedules that provide requirements for the following:</p> <ul style="list-style-type: none"> <li>• existing places of work and means of access for work at height;</li> <li>• collective fall prevention (e.g. guardrails and working platforms);</li> <li>• for collective fall arrest (e.g. nets, airbags etc);</li> <li>• personal fall protection (e.g. work restraints, fall arrest and rope access) and ladders.</li> </ul>
<b>Working Time Regulations 1998 (Amended 1999, 2001)</b>	<p>These regulations restrict the number of additional hours that an employee can be asked to work. Where additional hours are required this must be by agreement between the employer and employee.</p> <p>They also provide restrictions on the number of hours and days worked</p>

Table B. Main Regulations	Interpretation
	without a break.
<b>Workplace (Health, Safety and Welfare) Regulations 1992 and Approved Code of Practice</b>	<p>These regulations address the health and safety issues within the workplace which include:</p> <ul style="list-style-type: none"> <li>• maintenance within workplaces, including equipment, devices and systems;</li> <li>• comfort (ventilation, temperature, lighting, cleanliness)</li> <li>• workstations;</li> <li>• traffic routes (suitability, layout, organisation, segregation from pedestrian routes);</li> <li>• provision of rest areas;</li> <li>• sanitary and washing facilities;</li> <li>• drinking water;</li> <li>• accommodation for clothing and changing facilities;</li> <li>• temporary work sites (but not construction sites);</li> <li>• doors, windows, and other openings.</li> </ul>

Table C. Legislation used in Civil Law	Interpretation (Some Regulations allow for civil redress)
<b>Construction (Design and Management) Regulations 2007</b>	Breach of a duty imposed by these regulations other than those imposed by regulation 10 and regulation 16(c), must not confer a right of action in any civil proceedings. There are certain exemptions to this in relation to the preparation of a Health and Safety Plan and the authorisation of persons onto premises where construction work is taking place.
<b>Management of Health and Safety at Work Regulations 1999</b>	Breach of a duty imposed by these regulations must not confer a right of action in any civil proceedings. There are certain exemptions to this in relation to new or pregnant mothers and young persons.
<b>Occupiers Liability Act 1957 (OLA)</b>	<p>Codifies an occupier's common law duty towards lawful visitors. The OLA does not define an occupier but it simply states that the rules, which have been held at common law to apply to an occupier of premises and his visitors, must also apply in relation to the Act. A lawful visitor is any person who has express or implied permission to be on the premises including; Police, Fire Brigade, Post Office delivery person, etc., to carry out their duties.</p> <p><b>The rules are widely regarded as being similar to those of a person in control of premises under Section 4 of the Health and Safety at Work Act, etc. 1974.</b></p> <p>The occupier has a duty to take all reasonable measures to ensure that the visitor will be safe whilst on the premises.</p>
<b>Occupiers Liability Act 1984</b>	<p>Codifies an occupier's common law duty towards unlawful visitors, i.e., trespassers. As above, the Act does not define an occupier but it simply states that the rules, which have been held at common law to apply to an occupier of premises and unlawful visitors, must apply in relation to this Act.</p> <p>The occupier has a duty with regard to unlawful visitors to take all reasonable measures to ensure that the unlawful visitor will be safe whilst on the premises.</p> <p>Consideration must be given to these issues in relation to the design of a premise, particularly when unoccupied or in a hazardous condition, e.g., anti-trespass guarding.</p>

## 1.5 Standards, Guidance & Information

In addition to existing legislative and regulatory requirements there are a number of other documents by various bodies that provide further guidance, support or direction. Whilst they do not have legal standing, they are produced to support existing regulations and legislation. It is expected that due cognisance is taken of these documents, particularly those produced by the HSE and the Health and Safety Commission (HSC), when developing a suitable system of work.

The Highways Agency also produce a number of documents as departmental standards, the use of which it is expected will allow the Service Provider to endorse and conform to their requirements.

Further to the above there are a number of organisations who provide valuable health and safety information through the internet, either free of charge or by subscription and may be considered a valuable source of information. Some of these have been listed alphabetically in Table D. Examples are HSE, British Standards, etc.

This list in Table D below is comprehensive but not complete and it is the responsibility of the Service Provider to ensure that they are aware of relevant documents that may be beneficial to the work to be undertaken.

Table D. Other Standards, Guidance, Information Documents, etc.	Interpretation
<b>Avoidance of danger from overhead electrical lines</b> HSE Guidance Note GS/6	This document covers detailed methods of working near or below overhead power lines.
<b>Avoiding danger from underground services</b> HSE Guidance booklet HS(G)47	This document covers all types of underground services likely to be encountered.
<b>Breathing Apparatus and Respiratory Protective Equipment – A practical guide for users</b> HSE Guidance Booklet HS(G)53	This provides advice on selection, use, training and storage of respiratory protective equipment (RPE).
<b>British Standards Online</b>	Provides access to all current British and European Standards, including those related to health and safety. <a href="http://www.bsonline.bsi-global.com">www.bsonline.bsi-global.com</a>
<b>COSHH – A brief guide for Employers</b> HSE Leaflet IND(G)136(L)	This guide gives a basic introduction to various aspects of the COSHH Regulations.
<b>Dust: General Principles of protection</b> HSE Guidance Note EH 44	An explanation of how the COSHH Regulations apply to dust and advice on prevention and control of exposure.

Table D. Other Standards, Guidance, Information Documents, etc.	Interpretation
<b>Electrical Safety on Construction Sites</b> HSG141	Provides advice on precautions to reduce the risk of electrical accidents during the construction phase.
<b>Essentials of Health and Safety at Work</b>	A useful guide from the HSE providing the general scope of health and safety law and practical guidance containing checklists, diagrams and photographs.
<b>Five Steps to Risk Assessment</b>	Provides a straightforward 5-step guide to conducting risk assessment. Suitable for large organisations and small to medium sized companies and organisations.
<b>General Access Scaffolds and Ladders</b> CIS 49	Practical guidance on scaffold access and ladders.
<b>Guidance for Safer Temporary Traffic Management</b> (produced by the Highways Agency)	Produced by the Highways Agency to promote a safe system of work for temporary traffic management operations through design, planning and implementation.
<b>Health and Safety Executive website</b>	The Health and Safety Commission is responsible for health and safety regulation in Great Britain. The Health and Safety Executive and local government are the enforcing authorities who work in support of the Commission. This website provides a link to many of the health and safety documents already mentioned in the Network Management Manual and provide valuable information relating to all aspects of health and safety.
<b>Health and Safety in Construction HSG 150</b>	Provides help and assistance on how to work safely on most tasks encountered on a construction site.
<b>Health and Safety in Excavations HSG 185</b>	Provides help and assistance on how to work safely in relation to excavations.
<b>HSE Information Sheets</b>	The HSE produce a number of information sheets relating to health and safety. They are normally referenced as CIS with a unique number to follow.
<b>Interim Advice Notes</b>	Interim Advice Notes (IAN) are issued by the Highways Agency as required to reflect a change in practice which is not already included in the Manual of Contract Documents for Highway Works (MCDHW), or where there needs to be some more expedient advice relating to changes of documents currently within the MCDHW. Examples include: IAN 63 Asbestos Management Applicable to the Strategic Road Network, IAN 69 Designing for Maintenance and IAN 105 Implementation of Construction (Design and Management) 2007 and the withdrawal of SD10 and SD11.
<b>Isocyanates: toxic hazards and precautions</b>	Isocyanates are used in certain types of bridge deck waterproofing systems and in certain paints.

Table D. Other Standards, Guidance, Information Documents, etc.	Interpretation
HSE Guidance Note EH 16	
<b>Managing Asbestos in Premises HSG227</b>	A comprehensive publication outlining the steps that must be taken to ensure that all asbestos containing materials within a premises are identified and managed safely.
<b>Manual of Contract Documents for Highway Works (MCDHW) Volume 6</b>	<p>The Highways Agency Departmental Standards and Advice Notes on Contract Documentation and Site Supervision Standards are contained in Volume 6 of the Manual of Contract Documents for Highway Works (MCDHW).</p> <p>They set out the requirements of the Highways Agency for the Service Provider to maintain those standards and ensure a co-ordinated approach to compliance with relevant health and safety legislation.</p> <p>For the full content of the MCDHW please refer to the Highways Agency.</p> <p>MCDHW Volume 6 contains the following standards relating to health and safety:</p> <ul style="list-style-type: none"> <li>SA 8/94 Use of Substances Hazardous to Health in Highway Construction – MCDHW Volume 6, Section 2 Part 1.</li> </ul>
<b>Monitoring strategies for toxic substances</b> HSE Guidance Note EH 42	General advice on methods and strategy for monitoring and sampling airborne concentrations of hazardous substances.
<b>Permit to Work Systems INDG98</b>	Provides information on formal written systems of work that should be used for potentially hazardous situations.
<b>Pre-stressed concrete</b> HSE guidance note GS/49	This document relates to pre-stressed concrete from a health and safety perspective.
<b>Respiratory Sensitisers – a guide for employers</b> HSE Leaflet IND(G)95(L)	This leaflet identifies known respiratory sensitisers and gives general advice on their use.
<b>Safe use of ladders, step ladders and trestles</b> HSE Guidance Note GS/31	This document provides a practical guide on ladder access.
<b>Safety at Street Works and Road Works</b> A Code of Practice	<p>A Code of Practice issued by the Secretary of State for Transport on the application of Chapter 8 of the Traffic Signs Manual. It applies to all highways and roads except motorways and dual carriageways with hard shoulders.</p> <p>This document is primarily aimed at operatives, supervisors and managers tasked with ensuring the safety of all street and road works.</p>
<b>Successful Health and Safety Management</b> HSE Guidance Booklet HS(G)65	This is a working document that acts as a guide on how to develop a health and safety management system. This document is aimed at directors, managers with health and safety responsibilities, safety professionals and representatives.

Table D. Other Standards, Guidance, Information Documents, etc.	Interpretation
<b>The Highway Code</b>	The Highway Code provides rules, legal requirements and a code of practice for road users
<b>The Law on VDUs An Easy Guide HSG90</b>	This document discusses the implications of complying with the Health and Safety Display Screen Equipment Regulations.
<b>Traffic signs Manual – Chapter 8 – Traffic Safety Measures and signs for Road Works and Temporary Situations</b>	A general standard of good practice for the signing and marking of obstructions as well as for the temporary traffic control necessitated by such obstructions of the highway republished in June 2006 in two parts: Part 1 – Design and Part 2 – Operations. Both parts are available for download from the DfT website ( <a href="http://www.dft.gov.uk/pgr/roads/tss/tsmanual/">http://www.dft.gov.uk/pgr/roads/tss/tsmanual/</a> ). This is supplemented by the Design Manual for Roads and Bridges, including:  Volume 8 – Section 2: <ul style="list-style-type: none"> <li>• TA61 – Currency of the Traffic Signs Manual.</li> </ul>
<b>Vibration Solutions HSG170</b>	This document provides practical ways to reduce the risk of hand-arm vibration injury.
<b>Workplace Exposure Limits</b> HSE Guidance Note EH40	Workplace Exposure Limits are given for a wide range of hazardous substances together with some advice on their method of use. This publication is regularly revised, usually annually.

### 1.5.1 Limitations

It is the intention that this document will be updated on a regular basis to take account of new legislation and ensuing best practice that arises, however it should be noted that legislation may change between the review periods and due cognisance must be taken of any such new legislative changes that may affect the Highways Agency, Service Provider and stakeholders using this document.

**1.6 Accident and Incident Reporting System (AIRSweb)****1.6.1 Introduction**

In May 2006 the Highways Agency released a new Accident and Incident Reporting System (AIRS) to its supply chain to ensure that all RIDDOR (Reporting of Incidents, Diseases and Dangerous Occurrences Regulations) incidents are reported to the Highways Agency's National Health and Safety Team as well as to the Health & Safety Executive (HSE).

AIRS was developed in partnership with the Transport and Research Laboratory, the HSE and was trialled by two of the Highways Agency's construction supply chain partners, AmeyMouchel and Optima. The results of the trial demonstrated clearly that using AIRS provided the Highways Agency with earlier notification of incidents on the network and streamlined the notification of incidents to the Highways Agency and HSE.

AIRS allows the completion of a single incident report, which can be submitted to several organisations. It replaces the Highways Agency Work Site Accident Reporting (HAW SAR) form and can be used instead of the RIDDOR form F2508 to submit reports directly to the HSE.

A new version of the AIRS has been released, which being a web-based application is, named AIRSweb. This includes the submission of monthly summary information which is required to enable the Highways Agency to produce an accurate Agency-wide Accident Frequency Rate (AFR) for 08/09 and to meet other Ministerial reporting requirements. It is applicable to all supply chains including any Network Operations Schemes and Frameworks they manage.

Collation and subsequent analysis of this data will allow potential patterns or repeat accident/incident to be identified (across all Service Providers and the Highways Agency's supply chain partners in all areas) and may provide valuable information for design change or working practices for improved safety of those working on and those using the Network.

**1.6.2 Requirements**

All Service Providers must:

- Record all incidents on AIRSweb within 24 hours of them occurring. In this context incident means any accident, incident or 'near miss' on a Highways Agency contract or the Network, where the incident involves one or more of the following items:
  - anything that is reportable under RIDDOR;
  - any vehicle driven by a member of the public entering a works zone or colliding with temporary signing;
  - any member of the public being injured in the work zone;
  - any worker being struck by a vehicle;
  - any worker suffering an injury that requires medical attention from a paramedic, nurse or doctor;
  - any collision with a protection vehicle or with a crash cushion vehicle;
  - any collision between vehicles or equipment in the works zone;
- Inform the Service Manager immediately if the incident is a Fatality or Major Injury, reportable under RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995), or would generate press interest, and thereafter follow it up with an AIRSweb record within 24 hours;
- Attach to the original AIRSweb record, at the earliest opportunity following completion of the incident investigation, the final investigation report along with any relevant supporting documentation;
- Submit on a monthly basis, within 1 week of month end, total number of hours worked on site per calendar month and number of people employed on project / site per calendar month.

- Report to HSE in writing any fatality or serious injury; - this does not replace the immediate reporting by telephone / fax required by the HSE.

MACs / DBFO's must:

- monitor incident reporting for their Network and ensure that information for Spot Tendered Schemes, Works Frameworks and Construction Management Frameworks information is submitted;

The Service Provider must report to the Service Manager, for the benefit of the Highways Agency's National Health and Safety Team, all other accidents, incidents and near misses that occur while undertaking works on the Highways Agency's behalf. This in effect means all incidents that are recorded within the accident book / records.

### 1.6.3 AIRSweb Account

In order to use AIRSweb, the supply chain will require the creation of a user account and are encouraged to obtain this immediately. Service Providers seeking a user account should contact AIRS@highways.gsi.gov.uk and provide the following details:

- Name
- Address
- Contact telephone no.
- E-mail address
- Project or contract name they relate to

Once created the user will be provided with log-in details along with user guidance and a work instruction.

### 1.6.4 AIRSweb Information and Guidance

AMM 96/08: The Reporting of Supply Chain Incidents mandated the use of AIRS for accident and incident reporting. Those requirements, detailed at 1.6.2, remain although Service Providers are now required to use AIRSweb instead of AIRS.

AMM 97/08: The Gathering of Supply Chain Incidents, which introduced interim arrangements to enable the Highways Agency to calculate the AFR, is withdrawn. Such summary information provided in response to that AMM is currently being inputted to AIRSweb. All incident data reported on AIRS has been migrated to AIRSweb.

Further information in the form of a Work Instruction titled "Reporting, Recording and Investigation of Supply Chain Incidents" may be obtained from the Highways Agency's National Health & Safety Team or may be downloaded from SHARE, at <http://share/Share/livelink.exe/overview/1440489> or from the open homepage of PartnerNET, [www.ha-partnet.org.uk](http://www.ha-partnet.org.uk).

Service Providers who are joint ventures should report under the joint venture banner with the involved party company adding to the "on behalf of" section within AIRSweb.

Spot Tendered Schemes, Works Frameworks and Construction Management Frameworks information should be reported by the Service Provider's specialists appointed for that contract.