A Designer’s Perspective of the European Directive

Temporary & Mobile Construction Sites Directive 92/57/EEC

Paul Bussey
David Watson
The HSE is reviewing all its guidance to ensure it is practical and proportionate and helps organisations understand and comply with health and safety law.

Why?

- To ensure it is clear and fit for purpose,
- To make the law simpler and less bureaucratic for all businesses
- Making Britain more growth-focused by easing the burden of bureaucracy on all businesses.

And to ensure H&S “Myths” are busted
The Construction Industry “Disconnect”

Other drivers for change:-
Professor Lofstedt:
Too many different CDM interpretations
Too much trivial risk assessment
Bureaucratic nightmares
Much confusion over SFARP
ACOP’s need simplification

Lord Young of Graffham
Reasonable NOT ‘All risk’ approach
Disproportionate compensation culture
Reduce overzealous H&S approaches

CDM 2007 Evaluation Report
Poor coordination & cooperation
Too much competence assessment
Improve value generally & H&S standards on small sites

Not just a political agenda?

What is the Essence of CDM?
Designer duties under other GB legislation (ie. non-CDM)

**H&S at Work Act 1974**

Requires:-

Employers & self-employed to ensure, SFARP, that persons who may be affected are not exposed to risks

Employees to take reasonable care for the health and safety of himself and of other persons who may be affected by his acts or omissions at work

**Communication & Interpretation are key?**

**What really is SFARP !!!!!!**
Designer duties under other GB legislation (ie. non-CDM)

Management of H&S at Work Regulations 1999

Requires:-
Employers & self-employed to make suitable and sufficient assessment of risks to non-employees

Employers & self-employed to apply the principles of prevention

Proportionately and to everyone
The EU Framework Directive 1989 “…workers at work”

- All workers to be responsible (afap) for their own health & safety and for that of others affected.
- Employers to ensure the safety of workers unless unusual and unforeseeable circumstances and events.
- Workers must have necessary capabilities and means.
- Persons consulted must have necessary aptitudes and personal and professional means.
- Workers and persons consulted must be sufficient in number.
- Member States to define necessary capabilities & aptitudes.

**Proportionate Health & Safety and “training”**

**What is competence?**
**Surely the Trades & Professions know?**

Need for the TMCS Directive :-

Unsatisfactory architectural organizational options and poor planning at Project Preparation Stage have “played a role” in 50% of accidents on Construction Site’s

Inadequate coordination of various undertakings at Project Preparation and Execution Stages “may have caused” many accidents

How could this be improved…… by better guidance?

A big ask?
Both very long and complex documents?

HSE target 32 Pages for New ACOP’s?
None

Is this necessary?

The relevant information is in the Non-Binding Guidance?

Simplification is the key

Avoids additional bureaucracy

Additional 300 All Approx. 50 pages
Both use colour coding
EU more intuitive
EU easier to browse
<table>
<thead>
<tr>
<th>General questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>What is the construction directive?</strong></td>
</tr>
<tr>
<td>2. <strong>What is the purpose of the directive?</strong></td>
</tr>
<tr>
<td>3. <strong>What is the scope of the directive?</strong></td>
</tr>
<tr>
<td>4. <strong>What is the method of implementation?</strong></td>
</tr>
<tr>
<td>5. <strong>What are the key requirements of the directive?</strong></td>
</tr>
<tr>
<td>6. <strong>What is the significance of the directive?</strong></td>
</tr>
<tr>
<td>7. <strong>What is the impact of the directive?</strong></td>
</tr>
</tbody>
</table>

**Not easy for infrequent users to find key issues fast**

**No index or equivalent in ACOP**

**Difficult to navigate**
## Index by topic

<table>
<thead>
<tr>
<th>Topic</th>
<th>Where can I find the main information on this topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advance works</td>
<td>p. 83, 94</td>
</tr>
<tr>
<td>Alteration</td>
<td>p. 64</td>
</tr>
<tr>
<td>Asphyxia</td>
<td>p. 75</td>
</tr>
<tr>
<td>Biological substances</td>
<td>p. 63, 64</td>
</tr>
<tr>
<td>Burial under earth fall</td>
<td>p. 64, 108</td>
</tr>
<tr>
<td>Butts</td>
<td>p. 70, 74</td>
</tr>
<tr>
<td>Chemical substances</td>
<td>p. 65</td>
</tr>
<tr>
<td>Client</td>
<td>p. 54, 81, 95</td>
</tr>
<tr>
<td>Collective protective measures</td>
<td>p. 14, 21, 28, 101, 103</td>
</tr>
<tr>
<td>Compressed air caissons</td>
<td>p. 63, 66</td>
</tr>
<tr>
<td>Construction site</td>
<td>p. 32</td>
</tr>
<tr>
<td>Construction stage</td>
<td>p. 103</td>
</tr>
<tr>
<td>Construction work</td>
<td>p. 32</td>
</tr>
<tr>
<td>Contractor (including subcontractors)</td>
<td>p. 54</td>
</tr>
<tr>
<td>Conversion</td>
<td>p. 34</td>
</tr>
<tr>
<td>Coordinators for safety and health matters</td>
<td>p. 41</td>
</tr>
<tr>
<td>Coordinator for safety and health matters at the project preparation stage</td>
<td>p. 44</td>
</tr>
<tr>
<td>Coordinator for safety and health matters at the project execution stage</td>
<td>p. 46</td>
</tr>
<tr>
<td>Demolition</td>
<td>p. 35</td>
</tr>
<tr>
<td>Design stage</td>
<td>p. 62</td>
</tr>
<tr>
<td>Designers</td>
<td>p. 40</td>
</tr>
<tr>
<td>Directive 82/57/EEC</td>
<td>p. 5, 18, 32, 70, 80, 132</td>
</tr>
<tr>
<td>Dismantling</td>
<td>p. 35</td>
</tr>
<tr>
<td>Diving</td>
<td>p. 66</td>
</tr>
<tr>
<td>Drainage</td>
<td>p. 33</td>
</tr>
<tr>
<td>Drowning</td>
<td>p. 65</td>
</tr>
<tr>
<td>Dust</td>
<td>p. 74, 107</td>
</tr>
<tr>
<td>Earthworks</td>
<td>p. 33, 65</td>
</tr>
<tr>
<td>Electricity</td>
<td>p. 70</td>
</tr>
<tr>
<td>Employer</td>
<td>p. 4, 18, 50</td>
</tr>
<tr>
<td>End of construction stage</td>
<td>p. 109</td>
</tr>
</tbody>
</table>

**No equivalent in ACOP**

**Topic searches are most designer preferred entry level**
How to read this guide

There are several ways to read this guide and to find the information of interest to you.

1. Contents
   This guide is divided into five chapters which you can consult separately, according to your needs. Each chapter has been printed with different colour bands on the edges of the pages.
   Each chapter is divided into numbered paragraphs covering each topic so you can refer to each item of information.
   → See Contents p. 7

2. Key questions on important topics
   A list of key questions covers essential issues for each of the chapters. You may find it helpful in accessing the text that you require.
   → See Key questions on important topics, p. 8

3. Index by topic
   A list of topics or keywords allows you to go directly to the chapters of this guide where references to the topic can be found.
   → See Index by topic, p. 12

4. Table of examples
   You can also find information on specific topics using the reference list for the practical examples contained in the guide. This list does not list the topics of each project and the type of risk addressed.
   → See Annex 2 — Table of examples, p. 121

5. Glossary
   The Construction Site Directive contains a number of definitions that differ used in each of the Directives. These definitions are listed in Annex 1 together with those from the Framework Directives.
   → See Annex 1 — Glossary, p. 120

6. General table of duties
   The duties of stakeholders named in the Directive are summarised in a table.
   → See 3. General table of duties of each stakeholder during the construction project, p. 113

7. Explanation of text marking
   extracts of the European Directives 89/686/EEC and 97/58/EC are in blue boxes and accompanied by this logo.
   Non-binding good practices are identified with this logo displayed.
   Explanatory examples can be found where this logo is displayed.

Introduction


   - The key aim of CDM2007 is to manage hazards and safely into the management of the project and to encourage everyone involved to work together:
     (a) improves the planning and management of projects from the start.
     (b) identifies hazards early on, so they can be eliminated or reduced at the design stage and mitigation strategies can be properly managed.
     (c) focuses on the activities specific to health and safety, and
     (d) recognises the importance of the client.

   3. The Regulations are intended to bring about a shift in planning and management throughout the construction process. The design concept and work undertaken for the construction project should be based on a sound understanding of the work. It is therefore important that the client and others involved in the project understand the importance of the client.

   4. The client is the key to planning and managing health and safety.

   → See Annex 2 — Table of examples, p. 121

Simple explanation of format

No clear explanation of format?
1.2.1 Avoiding risks
One of the most effective ways to minimize risk is by implementing the following strategies:

Example 1:

Example 2:

Example 3:

1.2.2 Evaluating the risks which cannot be avoided
If a detailed approach is required, this section should be considered as follows:

Risk assessment: Identify and prioritize risks.

Step 1: Identify factors and issues, including:
- Step 2: Analyze and evaluate risks.
- Step 3: Risk mitigation strategies.

Visually clear, sections, easy to browse
Legislative look, jargon, not easy to browse
1.2.1 Avoiding risks

One way of avoiding risk is to eliminate entirely the hazard that gives rise to the risk.

Example 1:
There are hazards from working in confined spaces in sewage treatment plants such as underground chambers associated with surface and foul water systems. However, if the design is changed so that such places are open to the general atmosphere and well ventilated, these hazards will not be present.

Example 2:
On a small domestic extension the architect specified the use of dry lining thus avoiding the need for curtaining and chasimg masonry for the installation of electrical and other services. This avoided the risks to the health of the workers from dust, noise and vibrations.

If a hazard cannot be eliminated it may still be possible to avoid some of the risks. For instance, there are hazards associated with many work activities that cannot be entirely eliminated; however, there are often alternative ways of completing the work that avoid some, if not all, of the risks. It is useful to think as broadly as possible and not be constrained by custom and practice.

Example 3:
Block-laying involves repetitive lifting actions. Lifting dense heavy blocks can cause musculoskeletal problems. The risk of injury can be reduced by specifying alternatives such as smaller or lighter blocks.

No visual aides
All written text
Examples relatively obscure

Simple & useful examples
References in non-binding guidance to designers

No specific reference to designers in the Directive.

Project supervisor is responsible for the design &/or execution &/or supervision of the execution of a project and can include designers acting on behalf of a client.

Designer’s must take account of the general principles of prevention during the various stages of designing the project.

- Proportionately

Large amounts of bureaucracy are positively dangerous
References to designers in non-binding guidance

The Framework Directive also requires employers to apply the principles of prevention.

Designers acting on behalf of other stakeholders should take account of the general principles of prevention so that they reduce the on-site risks to workers………not users.

Simple Risk Management

Not ill-considered and overprotective actions, and not “in use” issues
No definition of a “project” except that it is work for a client and includes building or civil engineering work including repairs and maintenance.

Applies to construction workers & does not apply to the safety and health of the “users” of the finished project, only maintenance use.

Appointment of coordinator(s) required for H&S matters for any sites where there is more than one contractor present.

Small, simple projects are exempt by reason of proportionality of risk and trade contractor competence.
No ‘domestic’ client exemption but

Notification, to HSE, by client or project supervisor, of all sites on which:

work is scheduled to last more than 30 working days and involve more than 20 workers at one time;

OR more than 500 person days of work

Relatively Simple
Project Supervisor / Coordinator ‘design’ functions

**Project supervisor** is responsible for
- the design
- execution of a project
- supervision of the execution of a project

And shall consider the **general principles of prevention**

**Project “preparation stage” coordinator**
To coordinate implementation of taking account of the principles of prevention during design

**Project “execution stage” coordinator**…..
during construction

**Coordination still required but by whom?**

Appoint those most appropriate to coordinate the risks?
Competence is not mentioned directly in the TMCS Directive however:

The Principles of prevention require consideration of the individual’s capabilities as regards health and safety when entrusting tasks to them.

There is therefore a need for more specific training of capabilities within workers & designers and a better understanding of proportionate NOT “all risk” in the rest of the Construction Industry.

Reasonable Competence

‘...are the stakeholders trained and competent?’
Principles of prevention apply to all stakeholders and provide a broad strategy for risk control:

- Avoiding risk;
- Evaluating risks which can’t be avoided;
- Combating risks at source;
- Adapting work to the individual;
- Adapting to technical progress;
- Replacing dangerous by non or less dangerous;
- Developing a coherent overall prevention policy;
- Giving priority to collective protection measures;
- Giving appropriate instruction to employees.

No reference to ERIC or SFARP…. but implied?
A framework for integrated team discussions.

It’s not that difficult ……!
Client

Project Supervisor (optional)

Coordinator – Preparation Stage
- Ensure H&S plan drawn up
- Prepare H&S file

Coordinator – Execution Stage

Contractors

Designers

Take account of the principles of prevention during design / preparation stages

Coordinate implementation of the application of principles of prevention during design/preparation
### Summary of key differences for designers?

<table>
<thead>
<tr>
<th>EU - TMCS</th>
<th>UK - CDM</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Construction Sites with <strong>multiple contractors</strong></td>
<td>All qualifying <strong>Projects plus Use as Workplaces</strong>. Why? This is gold-plating?</td>
</tr>
<tr>
<td><strong>Pragmatic &amp; proportionate</strong> application to all sizes of projects inc. small sites</td>
<td>Domestic exemptions? Why not all projects because proportionality exempts smallest?</td>
</tr>
<tr>
<td><strong>Functions</strong> - Only Client &amp; Project Supervisors plus Coordination</td>
<td><strong>Duties &amp; Roles</strong> of Client, Designers, Principal Contractors, CDM-Coordinators? Not clear?</td>
</tr>
<tr>
<td><strong>Project Preparation</strong> - includes buildability</td>
<td><strong>Pre-Construction</strong> - Poor construction input?</td>
</tr>
<tr>
<td><strong>Project Execution</strong> – includes design</td>
<td><strong>Construction Phase</strong> Poor design input?</td>
</tr>
<tr>
<td>Competence not included - implicit &amp; expected from trades &amp; professions</td>
<td>Competence expressed? Why? Trade competences not compulsory in UK.</td>
</tr>
</tbody>
</table>
Proportionate and Practical Health and Safety

Why have we over-complicated Health and Safety & CDM in the UK?

The Directive encourages business & growth with H&S Compliance
2013??

Designers would like:-

- more *simplification* of regs
- more *clarity* of regs
- less *guidance*
- *Sfarp* clarified by industry
- *Proportionality* accepted
- Better H&S *coordination*
- Better *design & value*
- Better H&S for all.
Collaboration and implementation

All we need to do is agree and apply them, proportionately?
Thank-you