

Position Paper

Team Approach to managing risks.

This note has been written to set out the ICE position with regards to responsibilities under CDM2015 when using a team approach to managing risk during the design stage.

Note: In the context of this note; “Designer” means any person (including a client, contractor or other person referred to in the CDM2015 Regulations who in the course or furtherance of a business —

(a) prepares or modifies a design; or

(b) arranges for, or instructs, any person under their control to do so,

Note: Although this note refers to the CDM15 Regulations throughout, it is also relevant to Northern Ireland and The Construction (Design and Management) Regulations (Northern Ireland) 2016 (CDM-NI 2016).

Summary

Designers (or Design Organisations) are responsible for their own design output and compliance with Regulation 9 (as well as other obligations under the Act.) This is not to say that other designers and the wider team members engaged on the project cannot contribute to a discussion on the risk identified during design and offer opinion and advice about how the obligations in Regulation 9 can be achieved, particularly where there is an interface with their own design. However they need to appreciate that any formal involvement will attract statutory responsibility and may take them outside their contracted scope of service (note: it is a requirement under Regulation 8(1) that the *Designer* must have the skills, knowledge and experience to fulfil the role. Where there is an interface there is an obligation to communicate, co-ordinate and co-operate as required under Regulation 8.

Successful design requires consideration of a multitude of factors and therefore the contribution of other team members engaged on the project is invaluable to the *Designer*. However, only one *Designer (or Design Organisation)* is responsible for completing the actual design task for that design element and when doing so they are responsible for ensuring compliance with Regulation 9. Responsibility for that duty cannot be abdicated from by indicating that the design decisions were made by a collective.

Based on Discussions of The ICE H&S Expert Panel / Community - March 2018

All *Designers (and Design Organisations)* should however, co-operate and coordinate with each other in relation to a project where the matter impinges on their design or their design impinges on others such that the best outcome with regards to Health Safety and wellbeing of all those concerned is reached. This is set out specifically in Regulation 8 (4)

Under Regulation 11 (4) it is, however, the Principal Designer's responsibility to ensure all designers comply with their duties under Regulation 9.

Discussion

Under CDM2015, Regulation 9 requires the *Designer (or Design Organisation)* to manage foreseeable risks to the health and safety of those involved in the construction, commissioning, operation or use, repair and maintenance and demolition of a structure or asset.

When making decisions as part of complying with Regulation 9; such as deciding how to eliminate or reduce risks, the *Designer (or Design Organisation)* will need to refer to the ICE DRM Guide [1] for advice on how to deal with the formal requirement to take action 'so far as is reasonably practicable'. Although other designers may contribute by co-operating and co-ordinating, it is the *Designer (or Design Organisation)* alone who does this, and needs to be satisfied the solution is compliant.

The reasons for this are best illustrated via examples included in Appendix A.

Concern has been raised that getting consensus from a larger group of people about how to deal with the risk may be leading to a false sense of security with regards to whether or not the risk has been dealt with in a way that is sufficient to discharge the *Designer's* duties under Regulation 9, specifically in relation to the phrase "So Far As is Reasonably Practicable" (SFARP).

However, the ICE view is that the *Designer (or Design Organisation)* whose design or element of design may have given rise to the risk in the first place, needs to be satisfied that the solution complies with Regulation 9, in respect of that risk; other designers need to have co-operated and co-ordinated as appropriate, and their own design needs to satisfy Regulation 9 likewise.

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For the avoidance of doubt, this note does not discourage team work; in fact it is to be encouraged: we need more in the sense of building relationships, communication, co-operation and co-ordination. But, for the industry as it stands, none of this requires, allows, or creates the circumstances for relying on ‘collective decisions’ when trying to manage specific/individual risks identified during the design process.

Principal Designer

It should be noted that Regulation 9 is a duty placed upon the *Designer (or Design Organisation)* and not on the *Principal Designer* (except where the *Principal Designer* also acts in the role of *Designer* and carries out their own design) or on the wider design team. Ultimately the responsibility for carrying out the design or element of design in accordance with the Regulations lies with the *Designer (or Design Organisation)*.

Of course, the *Principal Designer, where appointed*, also has a role to play. The *Principal Designer* is key in supporting the various different parties involved in the project in working together to identify potential risks and the ways that they can be controlled. In this way each *Designer (or Design Organisation)* understands how their own design decisions impact on the overall project during construction, commissioning, operation or use, repair and maintenance and ultimately in demolition. The *Principal Designer* is not, however, responsible for the design output of others; the role is about promoting co-operation and communication between design teams and ensuring that Health and Safety is considered throughout the design process.

Informal Approach

The *Designer (or Design Organisation)* also needs to recognise that not all members of the wider project team will have the same drivers as the *Designer (or Design Organisation)*. The knowledge of CDM and the need for compliance may vary across the project team, as will the priority of design risk management when compared to other project drivers such as time or cost. Equally some team members will have more design/construction experience and so will be able to assist in suggesting solutions. Whilst the opinion and risk appetite of the wider team can be a useful contributing factor in any decision; it is ultimately the responsibility of the *Designer (or Design Organisation)* to carry out the tasks in Regulation 9 and to demonstrate that they have complied.

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The iterative nature of design means that design solutions are often re-worked in the light of new information or proposals or changes. This involves communication and collaboration between designers as risks are considered and managed as required under Regulation 8. This may include informal discussions between Designers, but may also involve formal discussions; the output of the latter should be an agreement which will then identify which *Designer (or Design Organisation)* is responsible for which decisions.

Interfaces

There may be circumstances where two different design organisations may have to modify their designs in parallel with each other as the risk presented is at the interface of the two design elements. Collaborative working and some collective decisions will be required, often co-ordinated by the *Principal Designer*, however ultimately each *Designer (or Design Organisation)* is responsible for its own design output and for ensuring that their own amended/final designs satisfy Regulation 9. They need to be comfortable that their designs can be amended to address health and safety issues, if that is required, and that this in turn does not introduce new risks elsewhere. Any associated cost implications will also need to be considered and reported back as appropriate by the *Designer* who owns the risk with reference to the original issue and Clients advised as required.

This does not mean that it is not possible for more than one *Designer (or Design Organisation)* to be in breach of its obligations under Reg 9, or, more generally, The Health and Safety at Work Act arising out of the same facts.

Investigations

An investigation following any incident during installation may involve a number of *Designers (or Design organisations)*. The regulator will look at the role of each of the duty holders and assess whether they discharged their obligations. If they believe they were all in breach (either because they worked in silos or worked as a team but got it wrong) then the regulator may prosecute more than one *Designer* albeit that the terms of the prosecution might vary slightly.

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Conclusion

Civil Engineers should also bear in mind the ICE Code of Professional Conduct Rule 3 which also requires its members to take all reasonable steps to protect the health and safety of members of the public and of those engaged in the project. This covers the whole life of a project during construction, operation, maintenance and decommissioning.

The ICE recognises the need to collaborate and communicate within the wider project team and that team work is vital to the success of a project. Indeed, the team approach to managing risk can often bring advantages such as a broader set of experiences and knowledge from the wider team. *Designers* (or Design Organisations) must, however, ensure that they are content with the resultant design and that they have taken into account the general principals of prevention to adequately manage any risks as required by Regulation 9.

Appendix A - Examples

Example 1

The safety and health aspects of installing, maintaining and removing equipment (for example, a pump) in a building once the main structure is complete.

The responsibility for dealing with the risks associated with these activities lie with the Building Services Engineer (BSE). We know this because this company is appointed to be responsible for all building services i.e. they have contractual responsibility. They also have statutory responsibility because they are the ones that chose the pump and its location, which give rise to the risks being considered.

However, other designers e.g. the Structural Engineer, and the Architect, are obliged (in this example) to co-operate and co-ordinate with the Building Services Engineer as this issue may require:

- i) Hatches in floor and a hoist from first floor to ground floor (structural engineer)
- ii) Facility for removing floor finishes over the hatch (architect),

i.e. there is an interface issue.

These two parties have no responsibility for the plant, but do have responsibility to reasonably co-operate and co-ordinate and to ensure their own modified designs are safe and do not inadvertently raise some other risk. Although options may have been discussed with the structural engineer and architect, e.g. using a removable wall panel in lieu of a hatch in the floor, the BSE alone is responsible for the scheme chosen, in respect of the plant item itself. The structural engineer and architect will take responsibility for their own modified designs.

It is not appropriate to assume that the risk arising from the plant is a collective responsibility risk, or its mitigation should result from a collective decision, as:

- i) Only the Building Services Engineer has the capability in this field (with respect to the pump)
- ii) The Structural Engineer and Architect will not have any PI to cover work on plant
- iii) The Structural Engineer and the Architect have no contractual authority to make decisions directly related to plant.

Thus this is a 'team effort' in the broad sense, but it needs to be recognised that there are different roles in delivering a solution.

Example 2

The *Designer* is considering reducing the size of paving slabs to reduce musculoskeletal issues (see L153)

The design of the paving, and risks arising, is allocated to the civil engineer. This is because they are contractually responsible, and as the *Designer*, have attracted responsibilities under Reg 9.

In this instance, there are no interfaces with other designers; no other designer has the capability in this field, nor the contractual authority to become involved. Thus the solution is entirely in the remit of the one designer. There is no 'teamwork'. (The solution may be found on the ICE website)

Example 3

One *Designer* produces a permanent works design which, in order to be constructed, will require temporary works. The permanent works designer is responsible for the design of the permanent works to meet operating requirements including maintenance, and provision of suitable information to enable its construction. The contractor will design temporary works such as shuttering, propping and sequencing using information provided by the permanent works designer. The temporary works designer may need to liaise with the permanent works designer to ensure that the permanent works are not compromised by the temporary works. Each *Designer* is responsible for their own designs, but not for the designs of the other.

Additional examples are available at: [ice website hyperlink](#)