

TEMPORARY WORKS BS5975:2019

AN OVERVIEW

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WHAT ARE WE GOING TO COVER?

- What do we mean by ‘temporary works’?
- Which organisations are affected by BS5975:2019?
- The changes from 2008 +A1:2011 edition
- Roles Of Client, PC, PD, Designers, Suppliers, etc
 - Definitions DI, TWD, TWC, TWS
- What is in your procedure
- Summary

BUT FIRSTSOME QUESTIONS?

- What do you consider to be temporary works?
- What do you consider to be mandatory?
 - Working at Height Regulations
 - Highway Code
 - BS 12812 Performance Requirement and General design of Falsework
- Do you need a design for temporary works?
- Do you need to have a TW design brief?
- Do you need to be qualified to be a temporary works coordinator (TWC) or supervisor (TWS)?
- Do you need to have both (i.e. TWC and TWS) on all sites?

WHAT DO WE MEAN BY “TEMPORARY WORKS”?

5.1.1.1 Temporary works can be described as providing an "engineered solution" that is used to support or protect either an existing structure or the permanent works during construction, or to support an item of plant or equipment, or the vertical sides or side-slopes of an excavation during construction operations on site or to provide access. It is used to control stability, strength, deflection, fatigue, geotechnical effects and hydraulic effects within defined limits.

This description of temporary works includes, but is not limited to:

a) supporting or protecting either an existing structure or the permanent works during construction, modification or demolition;

WHAT DO WE MEAN BY “TEMPORARY WORKS”?

- b) provision of stability to the permanent structure during construction, pre-weakening or demolition (e.g. propping, shoring, facade retention etc.);
- c) securing a site, or providing access to a site or workplace on site or segregation of pedestrians and vehicles (e.g. hoarding, haul roads, fencing, stairs);
- d) supporting or restraining plant, materials or equipment, including stability of water-borne craft;
- e) provision of earthworks or slopes to an excavation or supports to the side or roof of an excavation or supports or diversions to watercourse during construction operations;

WHAT DO WE MEAN BY “TEMPORARY WORKS”?

- f) providing a safe platform for work activity on land or water (e.g. jetty, scaffolding, edge protection or towers);
- g) providing measures to control noise, dust, debris, fume, air quality, groundwater or any site discharges during construction or demolition (e.g. screens, bunds, de-watering, demolition debris);
- h) providing protection or support to services; and
- i) facilitating testing (e.g. pressure testing pipes, pile testing, pre-demolition floor load capacity testing).

WHAT DO WE MEAN BY “TEMPORARY WORKS”?

Further consideration

5.1.1.2 The temporary works could be removed or left in place (hence becoming sacrificial, e.g. profiled metal decking) after the completion of the permanent works, but in the latter case would not necessarily contribute to the strength of the permanent works.

WHICH ORGANISATIONS ARE AFFECTED BY BS5975:2019?

5.1.1.3 When a project has, or might be anticipated to have, the requirement for any temporary works, all organizations involved in the management of the temporary works, whether implemented by themselves or others, should have and implement a procedure which outlines how they are to discharge their duties in relation to the temporary works.

So that means:

- Clients, - (not domestic)
- Contractors – Principal, specialists – all
- Designers – Principal, specialists –all
- Suppliers – Specialists e.g. Formwork

THE CHANGES FROM 2008 +A1: 2011

What has changed since 2008?

- CDM Regulations 2015
 - PC, PD and other roles/duties.
 - Duty to Plan, Manage and liaise with others
e.g. Coordinate the work
- More specialist contractors taking on managing temporary works
 - Potential reduction in main contractors experience
 - Confusion over the role and duties of TWC and TWS
- Organisations lacking understanding of TW and the involvement

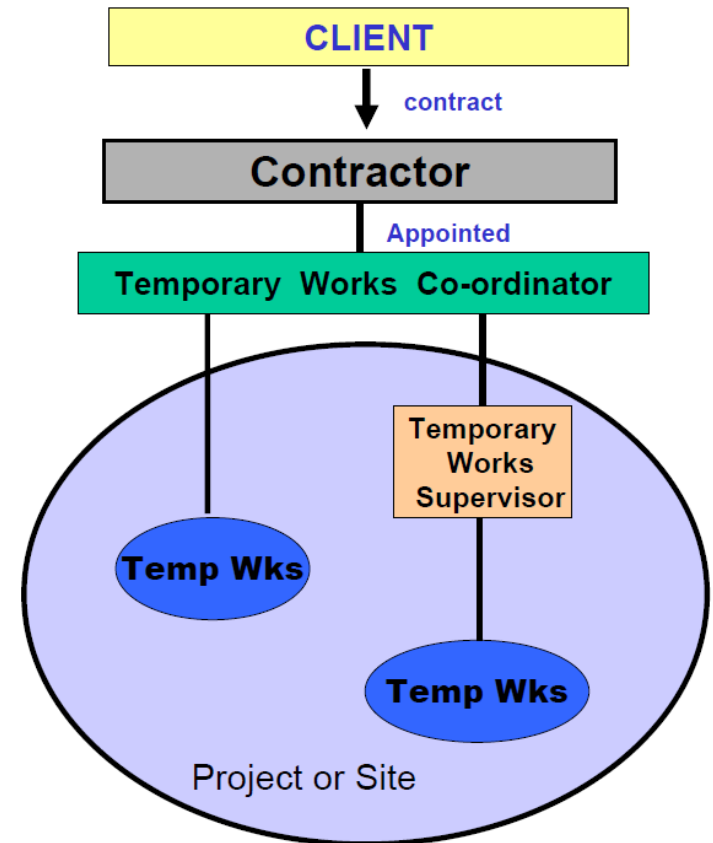
THE CHANGES FROM 2008 +A1: 2011

CDM REGULATION 2015

A typical single contractor on a **small project**

Who is the PD, PC?

PD could be client if PC is not appointed to undertake role of PD.

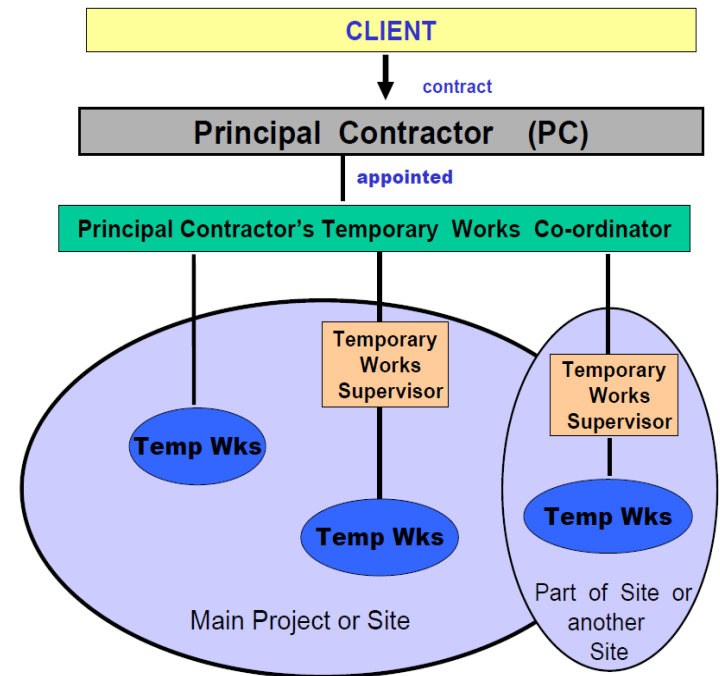


THE CHANGES FROM 2008 +A1: 2011

CDM REGULATION 2015

An example of when **more than one contractor has been employed** and client has appointed the PC on one project/site.

TWC appointed and supported by TWSs from their own organisations.



THE CHANGES FROM 2008 +A1: 2011

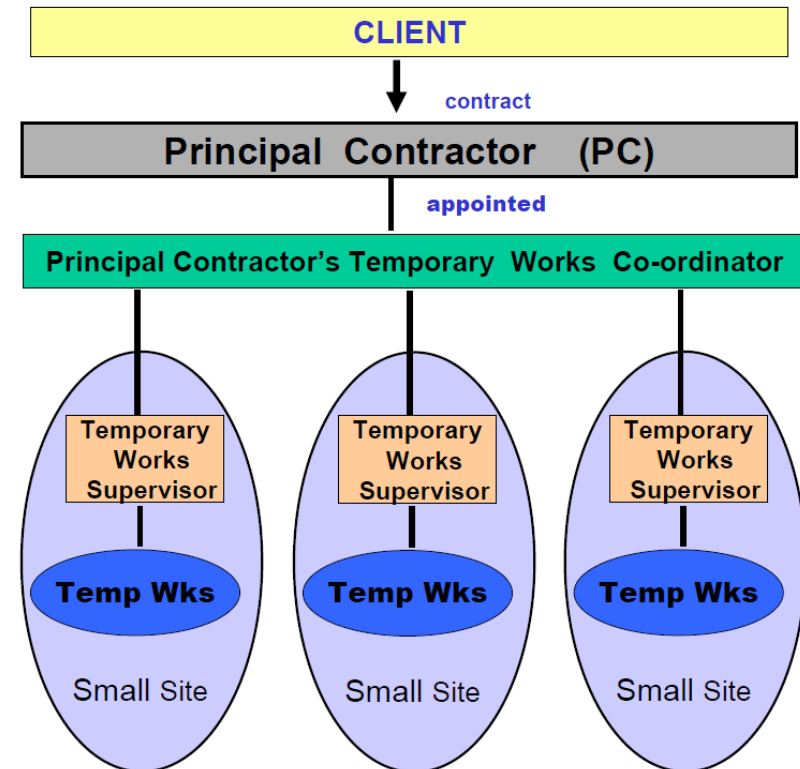
CDM REGULATION 2015

An example when a contractor has several small sites. E.g. house builder, utility company or reactive contractor

TWC appointed by PCs designated individual (DI)

TWC project/ site commitments should be limited and proportional to size and complexity of the project.

Further TWCs to be appointed as necessary



THE CHANGES FROM 2008 +A1: 2011

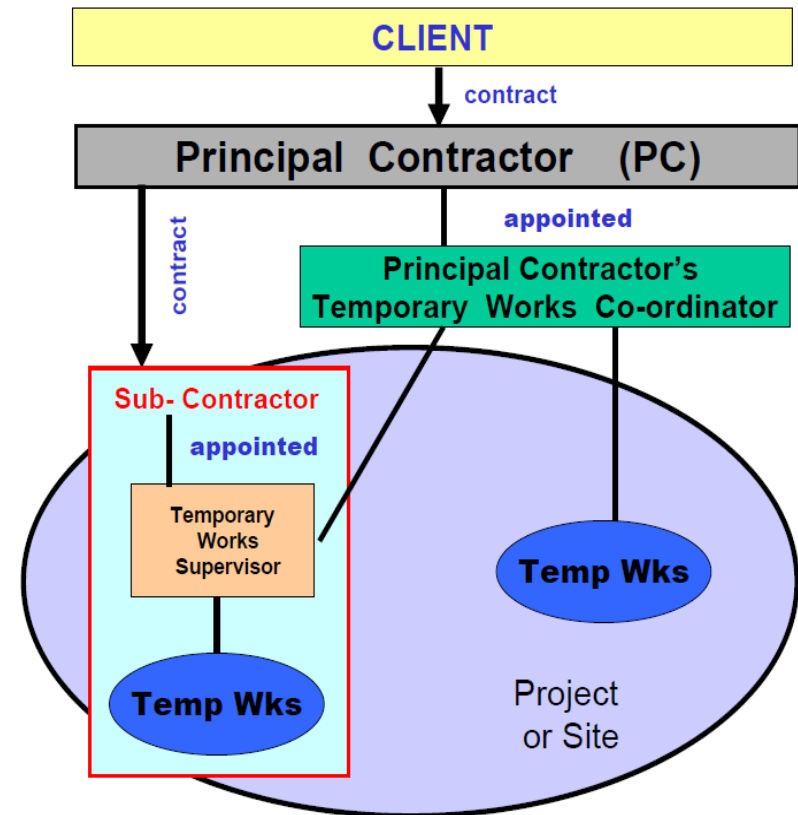
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An example when a PC appointed and specialist is employed to undertake a specific element of temporary work. E.g. Installation of propping equipment.

TWC appointed by PCs designated individual (DI)

TWC project/ site commitments should be limited and proportional to size and complexity of the project.

Further TWCs to be appointed as necessary



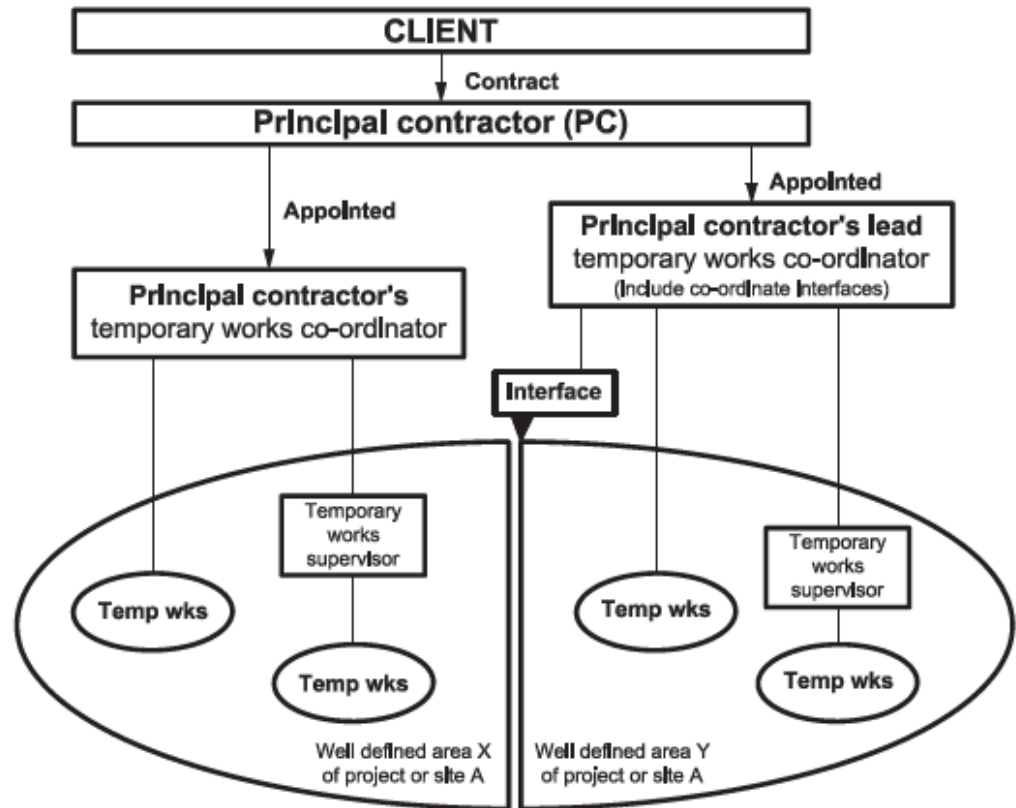
THE CHANGES FROM 2008 +A1: 2011

CDM REGULATION 2015

PC on a large and/or complex scheme

Hinkley Point – C has

32 TWCs and 96 TWSs all overseen by a lead TWC



THE CHANGES FROM 2008 +A1: 2011

CDM REGULATION 2015

19 (1) All practicable steps **must** be taken, where necessary to prevent danger to any person, to ensure that any new or existing structure does not collapse if, due to carrying out construction work, it-

(a) may become unstable; or

(b) is in a temporary state of weakness or instability.

19 (2) Any buttress, temporary support or temporary structure must-

(a) be of such design and installed and maintained so as to withstand any **foreseeable** loads which may be imposed on it.

THE CHANGES FROM 2008 +A1: 2011

Foreseeable Loading !!



WHAT IS IN YOUR PROCEDURE?

HOW ARE YOU MANAGING TW?

Definition of which organisations should have a procedure has changed :-

6.1.1.1 When a project has, or might be anticipated to have, the requirement for any temporary works, the organizations listed in **6.1.1.2** should have and implement a procedure which outlines how that organization is to discharge its duties in relation to temporary works.

WHAT IS IN YOUR PROCEDURE?



WHO ARE THE ORGANISATIONS

- **Clients**
- **Contractors**
- **Designers**
- **Suppliers**
- **Manufacturers**

WHAT IS IN YOUR PROCEDURE?

HOW ARE YOU MANAGING TW?

- Who is your DI
- What are the competence requirements for TWC and TWS
- Are the duties clear for TWC and TWS
- Do you have forms for:
 - Design Brief
 - TW Register
 - TW checks for design and/or on site
 - Permits to use/load/lift/dismantle?
 - Material data sheets
 - Handling/transportation requirements
- Has the procedure been briefed out?

WHAT IS REQUIRED FOR TWC AND TWS?

5.2.1 All those managing TW should have, as a minimum,

- **an understanding of the procedures outlined in Section 2 of BS5975**
- **understand and be able to operate the company temporary works procedure the risk management aspect associated with TW**
- **technical knowledge relevant to both the role and complexity of the work; and**
- **practical knowledge relevant to the complexity.**

SOME..... ... CLOSING QUESTIONS?

- What do you consider to be temporary works?
- What do you consider to be mandatory?
- Do you need a design for temporary works?
- Do you need to have a design brief?
- Do you need to be qualified to be a temporary works coordinator (TWC) or supervisor (TWS)?
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SUMMARY

REMEMBER THE THREE FUNDAMENTAL PRINCIPLES FOR MANAGING TW.

ONE: All organisations have a duty to manage and control their work. - Procedure

TWO: The contractor is responsible for building the permanent works, and that includes any associated temporary works necessary. – DI appoints TWC and as required TWS is appointed

THREE: ONE person should take overall responsibility for managing the TW. – Lead TWC

(BS5975:2019 accepts that on very large sites duties can be allocated for defined areas)

THANK YOU