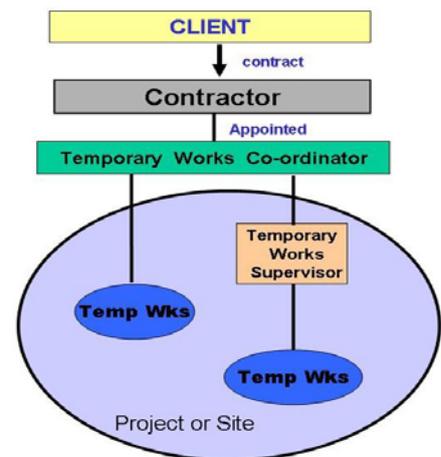


**VIEWPOINT by Eur. Ing. Peter Pallett on TW Procedures**

As I come to the end of my career I have seen many changes in our procedural control of temporary works. I actually visited the Lodon Viaduct shortly before it's collapse and the subsequent Government Enquiry that led to the Bragg report. The industry has changed, since my first involvement all those years ago. The concerns of our industry in 2017 highlighted a particular "head in the sands" attitude to temporary works which needed addressing. BS 5975 published in 2019 gives management solutions to many of the concerns. Whether organisations get involved in Standards preparation or not, the three essential principles for controlling temporary works remain unaltered since the 1970's :-

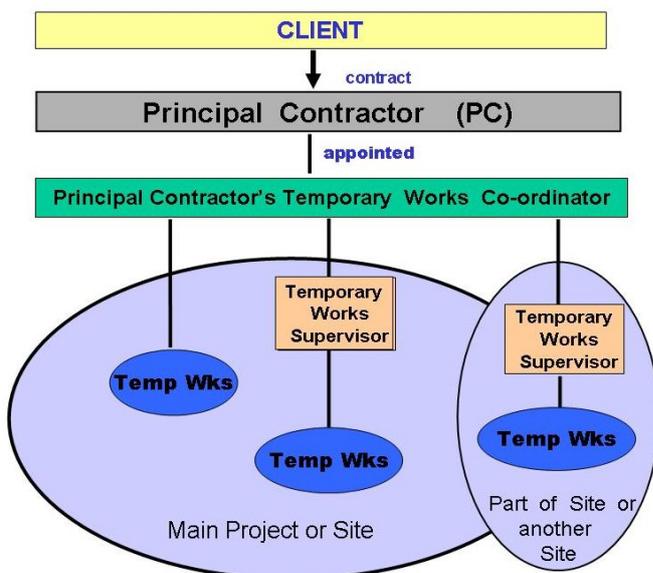
- ONE: The contractor is responsible for building the permanent works, and that will include any associated temporary works in order to construct the project.
- TWO: Only one person can take responsibility for the temporary works on a site.
- THREE: All organisations have a duty to manage and control their work.

To emphasise the role in Principle TWO, the concept was established in 2004 that the person appointed to manage the temporary works be called a "Temporary Works Co-ordinator". Where there is only one contractor on a small site the "contractor" would already have someone, a company director, responsible for the technical work of the company. Based from head office their responsibility would include any temporary works. The site could have a trade based supervisor handling the day to day site temporary works. This is the way, shown in Figure 1 (a) that the majority of small organisations, including builders and small scaffolders operate today.



**Fig. 1 (a) Single contractor on small project**

Since the 1970's the law has developed so that, if there is more than one contractor, one should be appointed as the Principal Contractor (PC); and it's the PC who takes the responsibility for the site and all the construction on it, whoever carries it out. Principle ONE



**Fig 1 (b) Principal contractor appointed by client**

As there can only be ONE TWC responsible for an area of the project, then to avoid confusion of having other TWC's in other organisations the term "PC's TWC" was adopted by BSI. The TWC's role and responsibilities are well established and certificated training courses already exist for a TWC. This has not been changed.

Clients and designers have roles, but it is the PC who has ultimate control over the temporary works.

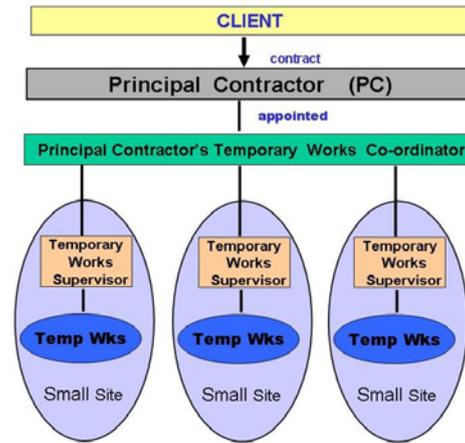
Depending on how big the site is, and/or the scope, the temporary works could be controlled either directly by the PC's TWC or by responsible TWSs. See Figure 1 (b) In fact, if there are local sites or the site is big, other TWS's could be incorporated into the management control.

The arrangement at Fig 1 (b) is common to construction sites handling their own staff.

## A Viewpoint on Temporary Works Procedures

BS5975 allows for the many utility companies that operate with multiple small sites, but need to be subject to the same procedures. The work is often routine, but still needs the same temporary works controls. The appointment of more global TWC's with day to day advice left to the responsible TWS on each small site, suits this procedure, as shown at Figure 1 ( c ) . This is common practice with utility organisations.

In fact many small builders with local house construction sites also appoint someone in a regional/local office as PC's TWC.

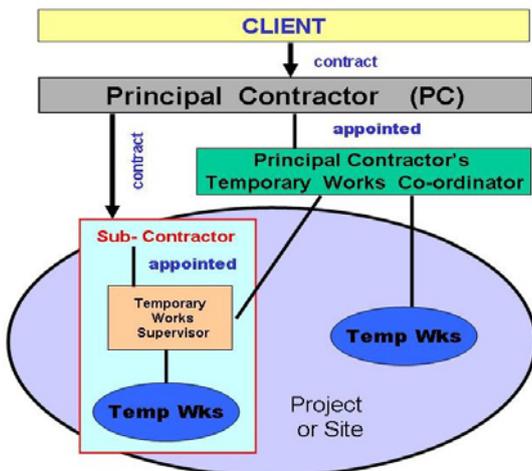


**Fig 1 ( c ) Principal contractor with several small sites**

In the previous examples, the contractor has been employing their own labour for the work, but recently the industry has seen the contractor arranging the labour through a sub contractor, but managing the temporary works themselves.

This is shown in Figure 1 ( d ). The sub contractor has a duty under Principle THREE to manage their own work and they will appoint TWS(s) for day to day responsibility, but the TWS reports always to the PC's TWC.

This is a common occurrence in construction.



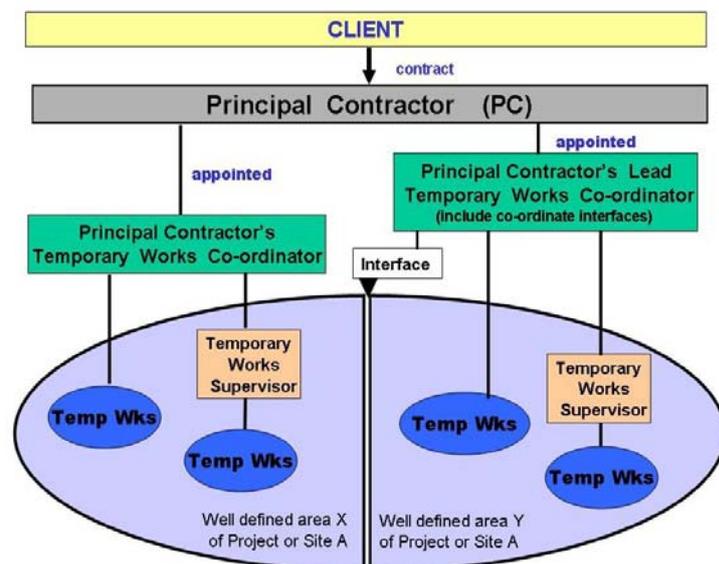
**Fig 1 ( d ) Sub contractor appointed by PC**

In consideration of Principle TWO, BS5975 accepts that the principle has to be sufficiently flexible to allow for particularly technically or logistically complex projects, often defined in distinct areas of work e.g. a motorway, power station or railway. One person can't realistically know everything in all areas, so BS5975 accepts that a site can be split into two or more areas, so that a PC's TWC can be appointed for each well defined area. One TWC will be appointed as lead PC's TWC to oversee all procedures, to establish the defined areas and to ensure that all the interfaces between the areas are managed.

Each individual PC's TWC is responsible for all the temporary works in the defined area allocated, irrespective of which organisation carries out the temporary works in that area. See Figure 1 ( e ).

The principle remains that only one PC's TWC should be responsible for a specific defined area at any one time.

It is extremely rare that a building project would justify more than one PC's TWC.



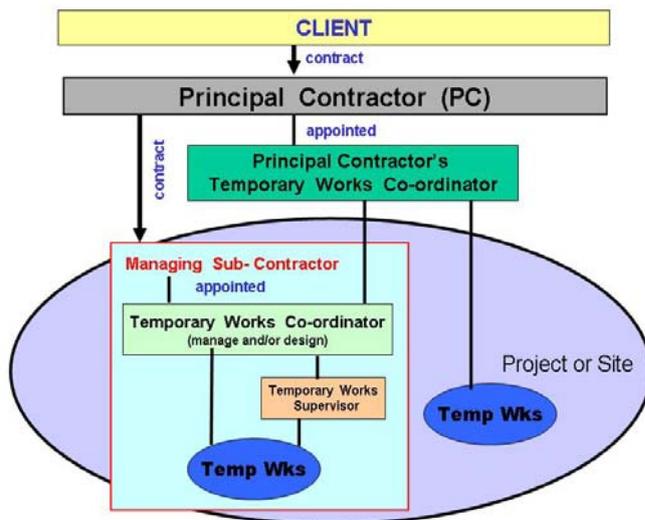
**Fig 1 ( e ) Complex project able to be split into well defined areas.**

## A Viewpoint on Temporary Works Procedures

The big change in the 21<sup>st</sup> Century has been the growth of speciality contractors, such as Reinforced Concrete Frame contractors, ground work contractors, demolition contractors etc., who have developed the skills and management procedures to organise their own temporary works. They are often very specialised within their field, but can offer an attractive “package of measures” to a Principal Contractor, and in many cases will have more expertise in managing the relevant temporary works. The specialist has a duty to manage their own works (Principle THREE) but can now take on some of the work in Principle TWO for the PC.

The Principal Contractor has a duty to check that the Specialist has the ability and processes to manage temporary works, and only then can the PC contract the subcontractor to manage the temporary works under their specific control (i.e. Principle THREE).

This implies that the specialist should appoint a TWC in their own right, but this contradicts Principle TWO relating to the other aspects of temporary works on the same site.



**Fig 2 (a) Managing Subcontractor appointed by PC**

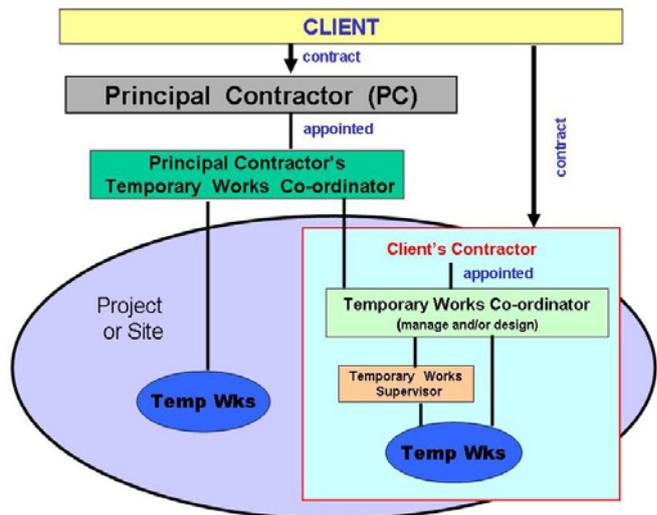
For example, a Frame Contractor would not be aware that the ground worker was digging a 5m trench across the site that week – there is NO contract between the ground worker and the specialist Frame supplier!! Only the PC's TWC will be aware of the interfaces between the contractors.

Figure 2 (a) highlights the lines of responsibility with the PC's TWC retaining ultimate responsibility.

BS5975 uses the term “TWC” for the subcontractor's person managing their temporary works, to differentiate with the overall role of the PC's TWC. BS5975 accepts that BOTH the TWCs will have had similar training & experience.

Where a client appoints a contractor directly, such as installing complex M&E, the implications for the site and the PC can be significant – especially as there is NO formal contract between the parties involved.

BS5975 recommends a TWC to be appointed by the client's contractor, see Figure 2 (b), and recommends that this TWC be requested to report to the PC's TWC. This provides a method of communication between the site and the other contractors for temporary works, after all it remains the PC's TWC who is responsible for all the temporary works.



**Fig 2 (b) Client appointed contractor**

### **SUMMARY**

Although BS 5975:2019 makes recommendations on names, terms, roles and responsibilities, it remains the responsibility of each organisation to ensure their procedure suits their type of work and is acceptable. BS 5975:2019 procedures is organisation-focussed giving recommendations for the various organisations that have temporary works involvement. It provides the framework for organisations to update their procedures.