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CLAIMS IN CIVIL ENGINEERING CONTRACTS

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Abstract

This paper considers claims arising during civil engineering construction contracts. The meaning of the word 'claim' is considered and its possible implications for additional cost and time to completion. The conditions of the construction contract selected will influence the risk apportionment between contractor and client and the price offered by the contractor for the work. Competitive bidding constraints and profit margins in the construction industry, however, may also influence the price offered. This in turn can influence the likelihood of claims arising. The client from his point of view is concerned to complete the work within an agreed time and budget. The circumstances under which claims may arise are reviewed in relation to typical conditions of contract. These circumstances are then related to the CERN LHC civil works. Ways of avoiding claims, where this is possible, are considered. Finally, the means of evaluation of claims and their settlement are considered.

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1 INTRODUCTION

The word 'claim' when used in the context of civil engineering construction has traditionally struck apprehension and sometimes dismay into the minds of clients undertaking civil engineering works. Claims can produce an uncertainty of cost and timely completion that can play havoc with carefully planned budgets and integrated programmes for major construction works.

Large civil engineering works are almost always undertaken within the framework of a contract. This contract will generally be subject to local and/or international contract law. It will usually contain provisions for the contractor to 'claim' for genuine additional costs and/or delays affecting completion. These genuine costs/delays can arise from him being instructed to carry out various types of additional work or encountering circumstances or hindrances which are beyond his control and that he could not reasonably have foreseen in the course of preparing his bid for the job.

Some contractors have in the past, however, been tempted to use these provisions of their contracts not just to ensure fair recompense for changed circumstances but also, from the client's perception at least, for apparently exaggerated attempts to ensure or enhance the profitability of their contract regardless of the actual entitlement. The contractor's perception of this may be that he is only endeavouring to ensure at least a favourable outcome for the total costs incurred in carrying out the construction.

For the purpose of this paper, a 'claim' is any notification or request by the contractor for payment additional to that envisaged in the contract for measured work and other items which comprise the contract sum; or for additional time to complete the contract. This paper attempts to examine the way in which claims arise, how they are evaluated and some of the ways they can be avoided.

2 BACKGROUND

As mentioned in the Introduction, the contract conditions under which large civil engineering works are undertaken will usually be subject to local and/or international contract law. Such contracts for civil engineering works, between a client and a contractor, will generally be within the framework of standard, national or international conditions of contract for construction work. The intention of the conditions of contract is usually to share the risks fairly between client and contractor. Traditionally, the contractor has had to carry such risks as those of the weather and working in an unfamiliar location, while the client carries the risks such as those associated with unforeseeable conditions like Force Majeure.

As also mentioned above, the contract will usually contain provisions for the contractor to claim for additional costs and/or time for completion should he encounter circumstances that he could not have reasonably foreseen and which are beyond his control as defined by the contract. The contract will also usually contain 'time barring' provisions which require the contractor to give notice of any circumstances which may give rise to a claim within a short period of the circumstances first arising. To avoid being time barred, contractors therefore appear to rush to give notice of a claim whenever they perceive that circumstances might have changed, even slightly. This is done to cover all options and in case the circumstances, maybe initially of minor consequence, later become of major significance. Such provisions are in the

interest of the contractor and the client in that they are intended to avoid delay in finalization of claims.

Civil engineering construction works tend by their nature to have a greater degree of uncertainty to their progress and cost than other engineering works. The work may be carried out possibly far from the home base of the construction company, working in conditions that are generally less than ideal. At least initially, the work will be executed out-of-doors where it will be subject to the vagaries of the weather. Protection from the weather is rarely available until towards the end of construction. The majority of the workforce is likely to be locally recruited and employed especially for the work to be undertaken. They will probably have no allegiance to the contractor employing them and may benefit from the work being delayed, resulting in the extension of their employment. Suppliers of goods and services are also likely to be arranged locally using suppliers with whom the contractor will be unfamiliar. Local regulations may be another source of uncertainty. Once the work is underway, the uncertainties of the conditions lying below the ground surface have to be contended with. Water inflow and flooding of the working area are possible threats and the variability of soil and rock conditions may be unpredictable.

The work will usually be designed by independent consulting engineers to a specification written expressly for the work concerned and with which the contractor will probably be unfamiliar. His appreciation of what may be important in the specification may be very different from that of those responsible for supervising the construction. Furthermore, the tendering period is usually short, giving the contractor limited time to fully comprehend a possibly complex specification and contract details with which he is unfamiliar.

The designers for civil engineering works tend to specify the quality or performance of only the intermediate components, i.e. the materials. By contrast, mechanical and electrical engineering works are commonly specified and paid for in terms of end product capability which leads to the manufacturer also undertaking the design.

Such risks are well known in advance to contractors, but their relative impact on any particular construction project is unpredictable. This leads to uncertainty of cost, making the accurate pricing for the work a difficult exercise. Usually, the work will be awarded by competitive tendering and the competition to win the work will be fierce. The potential contractors will be striving to find a way in which they can gain an advantage on their rivals. Commonly this leads to over-optimism by the bidders in overcoming the potential difficulties, knowing that if they were to make cost allowance for the worst possible combination of circumstances, they would never win the work.

In order to avoid making a loss on a contract, a situation that may not become apparent until the contract is well underway, some contractors are constantly looking for opportunities to claim. Furthermore, the additional cost and/or time extension claimed may be exaggerated in the expectation that he will only get a percentage of success and that by overvaluing, he will increase the chances of getting the 'bottom line' figure to which he believes he is fairly entitled.

Experience has shown that disputes that go to arbitration, often the ultimate court of resolution under the contract, will cost a large amount in legal fees. This makes clients hesitant to take disputes to arbitration and to seek resolution of the dispute without utilising

this final resort. The intermediate course through adjudication, as provided for in the CERN LHC project, has become an alternative recourse for dispute resolution.

3 PRICING BY CONTRACTOR

The contractor's costs for a construction contract are considered as being divided into indirect costs and direct costs. Indirect costs include head office and site overheads. Direct costs include for labour, equipment and materials for the construction work to be done. Indirect costs, plus a profit margin, may be spread amongst the rates and prices for carrying out the work, or may be incorporated in a separate section of the bid. The rates and prices should also take account of the risks involved in the contract and these should be reflected in the margins that are included.

Increases in costs due to escalation over the period of the contract are now generally allowed for by including an 'indexation' clause. This links the payments to be made to an appropriate index of rates and prices and thereby eliminates or reduces any risks in this respect.

Profit margins in the industry are not large. Typical figures, as seen in the accounts of publicly quoted construction companies, are 3 to 5% of annual turnover.

Contractors are continually trying to gain a pricing advantage on their competitors by being innovative or more efficient. Sometimes this will prove very successful and substantial profits may result. However such success is rarely predictable and it is usually only towards the end of a contract when the accounts are nearly finalised that the profit or loss situation becomes more certain.

When contractors underestimate or take an optimistic view of the risks involved, underpricing of their tender offer may win them work. This inevitably forces the selected contractor to take every opportunity to improve his commercial position once the work has commenced. Making claims under the contract is the main way of doing this.

Of the claims that are made, many will probably end up being rejected by the supervising engineers and client for reasons stemming from the contract conditions. The contractor may withdraw others because the cause of his initial concern proved in the end to be unfounded. Most of those that have some genuine contractual justification will be resolved between the parties, although perhaps only after much discussion. Only the minority, usually those of large financial or time significance, will be the subject of protracted discussion. Ultimately, most contractors are less interested in the niceties of contractual arguments than in achieving a total payment that satisfies their accountants.

4 CAUSES OF CLAIMS

There are many different circumstances that can give rise to claims for additional cost and extension of time. These will vary from contract to contract depending on the particular conditions of each contract.

The most common circumstances are identified and described below:

- i) Changes to construction requirements post-contract that vary the scope of the work or introduce changes that will extend the programme. The scope of the work may be changed in form or quality by, for instance requiring construction of an extra building

or requiring the foundation to be constructed of stronger concrete. In the CERN LHC conditions of contract, such changes are described only as variations but disagreement on the reimbursement due can equally well arise;

- ii) Changes in legislation. Additional costs can arise from changes to tax rates and laws, changes to employment legislation and changes to company law^{*)};
- iii) Costs and delays outside the contractor's control, often known as 'excepted risks'. These may include war, rebellion, riot commotion, disorder, ionizing radiation and pressure waves. They may also include exceptional weather and earthquakes. 'Disorder' includes nation-wide strikes of specific industrial sectors affecting the supply of goods and services^{*)};
- iv) Delayed issue of instructions and drawings;
- v) Physical obstructions, such as changed ground conditions (commonly a significant factor in tunnelling and underground works) or unpredicted service lines^{*)};
- vi) Provision of incorrect survey data;
- vii) Suspension of the works and/or occupation of the site by the Client (there are specific provisions in the CERN contracts for this to be permitted under certain conditions);
- viii) Discovery of fossils and antiquities^{*)};
- ix) Supply of facilities for other contractors (for example temporary site accommodation or service connections);
- x) Testing, investigating and uncovering of the works where these are not provided for;
- xi) Delayed possession of all or part of the site;
- xii) Costs and consequent delays arising from the design and remedying of faults where the contractor is not responsible.

5 AVOIDANCE OF CLAIMS

Some of the circumstances giving rise to claims are beyond the control of the client and supervising engineer but many may be within their joint control. In the case of the latter, they can take steps to avoid claims arising. Examples of this are the timely handing over of site areas and facilities to be supplied by the Client; the timely supply of construction details; and avoiding changes to construction details and requirements from those envisaged at the time of tender. All of these examples are potential sources of claims on the CERN LHC Project, but most should be alleviated, if not avoided, by appropriate controls and forward planning.

The occurrence of claims for which the cause is outwith the control of the Client and Engineer can generally not be predicted in advance. Unfortunately these also tend to be the higher value claims. Those causes of claims which are considered to be beyond the control of the Client are identified with a '(*)' in the schedule above. Two of these causes are under the control of others while the remaining two are beyond even human control. From the information currently available, most of these causes appear to be unlikely to arise on the CERN LHC Project but it would be a brave person who would state that they would definitely not occur. Such is the uncertainty of civil engineering construction.

6 EVALUATION AND SETTLEMENT OF CLAIMS

Initial consideration of claims may be split into two parts. Firstly, consideration of the principles of the claim (i.e. whether the contractor's arguments for claiming are accepted or

not) and secondly, if the principle is accepted, evaluation of the actual time extension and costs due. Although the second part need not be considered until the first has been resolved, the two are very often considered concurrently.

If the principle of the claim is accepted, an evaluation of the time and/or costs due should be done as quickly as possible if the additional delay and/or costs have already occurred.

Time extension due will be evaluated from consideration of the contract programme and the effect of the changed circumstances upon it. This can be relatively straightforward, for example in the case of an additional national holiday. In most instances however it is more complex where, for instance, ground conditions are worse than expected, possibly due to excessive water inflow or unexpectedly hard or weak rock conditions, or additional work is required such as the changed details for construction of a new building. Time extension will only be due if the changed circumstances affect progress on the programme's critical path.

Additional payment due can be determined using the rates and prices already existing in the bill of quantities or by identifying the resources used and costing these for the period when they are working on the works which are the subject of the claim. Usually, but by no means always, additional payment will be due for any extension of time awarded. The payment due in this case will often consist of the contractor's overheads over the extended construction period. These can be difficult to determine.

As mentioned earlier, adjudication can be used as a means of resolving claims when the three main parties to the contract (client, supervising engineer and contractor) are unable to reach an agreement. Adjudication provisions have been included in the CERN LHC civil works contracts. The adjudicators can be called upon to resolve both the principles of claims and the method(s) of evaluation. Members of the adjudication panel, generally three to five persons, are normally selected for their wide technical and contractual experience in the field concerned. It is essential that all the parties accept them as being entirely impartial. It is CERN's intention that the adjudication panel will make regular visits to the construction site to gain familiarity with the work and will be kept informed of major issues as they arise. The consideration of all the contentious issues by the adjudicators is normally much quicker and certainly a lot less costly than arbitration.

Ultimately, there is no substitute for all the parties concerned have a mutual respect and faith in each other's abilities. This will stand them in good stead in reaching satisfactory agreement of claims and a fair and amicable final settlement of the contract.