Claim management

Khaled Bu-Bshait and Ignacio Manzanera*

Construction contracts are seldom ideal, and claims for time extensions or financial compensation often have to be made by one party on another. This paper is concerned with the typical causes of claims, how claims are analysed, and how they can be prevented. It also looks at the legal implications of CPM schedules, and at the importance of the efficient management of records.

Keywords: claim analysis, claim management, claim prevention, contracts, CPM schedules, record management

Claim analysis has become such an important issue for project management that it cannot be left out of any respectable publication on the subject. As with any human endeavour where more than two parties are involved, contracting operations are fraught with controversy and dispute, and it has become very important to know how to prevent and solve claims in time to avoid compounding the problem later on in the contract. It is everybody's dream to have a construction contract where the conditions are ideal, to have a job that is completed on schedule and within budget with few changes in scope and without unexpected occurrences. Unfortunately, such conditions are seldom found.

This discussion will deal with the subject of claims on construction contracts, and related areas, as follows:

- typical construction claims against owners
- typical construction claims against the contractor
- legal implications of critical path method schedules
- claim-analysis procedures
- claim-prevention suggestions
- record management.

College of Industrial Management, King Fahd University of Petroleum and Minerals, KFUPM Box 950, Dhahran 31261, Saudi Arabia

* Aramco, P O Box 10089 Dhahran, Saudi Arabia 31311

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TYPICAL CONSTRUCTION CLAIMS AGAINST OWNERS

The most frequently found reasons for filing a claim against the owner of a project are:

- poor project planning
- scope changes
- constructive change orders
- errors and omissions
- contract acceleration and expediting
- work suspension and stoppages
- site access or availability
- other contractors' interference and delays
- strikes and acts of God
- low bidders.

A brief discussion of each of these follows.

Poor project planning

Inadequate attention to front-end project planning usually ends in inadequately defined scope of work, or incomplete and/or incorrect design. Most of the time, poor planning is attributed to fast-track projects that bring about:

- shortened bid periods
- limited site investigation
- unreasonable construction periods
- badly specified construction materials
- inappropriate manpower.

Whatever the reason, claims are abundant when planning is not taken seriously enough to produce an adequate environment to develop a project.

Scope changes

Scope changes are usually initiated by a change order, letter of intent, or field directive. All of these may direct changes or deletions in the work required by the contract, but within physical limits and the general scope of the work.

Project Management

Change orders become part of the contract as soon as they are signed by the contractual owner authorities. The contractor may or may not sign the change order but is required to proceed immediately. If the contractor does not agree with the change order time or price he must contest it within the prescribed period of time as stated in the contract document. Change orders are said to be *unilateral* when no agreement in time or price is reached at the negotiating time, and these are the usual source of claims.

Constructive change orders

When owners or their authorized representatives give or fail to give directions that interfere with the normal contract development and have such an effect as if a formal change order has been issued, a constructive change is usually claimed by the contractors. Constructive changes are sometimes found after the fact, when reviewing schedules, records, letters or minutes of meetings. This does not negate the contractor's right to a claim. Contractors are advised to train their construction teams to recognize constructive changes since this can make the difference between a profit and a loss situation.

Errors and omissions

A potential for claims arises when the contractor questions plans and specifications given by contractual terms and the owner or his representative fails to recognize this as a valid change order.

Contract acceleration and expediting

Contractors are frequently directed to accelerate performance of the contract or a portion of it within the original or adjusted completion date. This direction constitutes a change in the contractual obligations and the contractor has the right to pursue compensation for it.

Occasionally, contractors may expend extra effort in response to a directed increase in work without an increase in time. This constitutes a constructive acceleration. Validation of this kind of claim is, of course, difficult and requires the contractor to prove his case.

Work suspension and stoppages

When contractors are notified to suspend work under circumstances other than those for which they are to blame, they have the right to be compensated for the time and cost involved in the suspension or part of the suspension if the contract document calls for workaround directives.

Site access or availability

When the contractor schedules activities which need a right of way or a specific location in order to proceed and the owner fails to provide this on time, the contractor should pursue compensation for the time and cost of the resources scheduled and not produced.

Other contractors' interference and delays

When contractual obligations force the contractor to joint-occupancy, interference resulting from the lack of progress by the other owner's contractors in the area may hamper performance and a justifiable claim for compensation will arise.

Strikes and acts of God

Time delays due to factors beyond the contractor's control, such as strikes, boycotts, unusual weather, earthquakes, fires and floods are excusable delays and the contractor is entitled to a time extension.

Low bidders

For certain reasons such as: failure to understand the scope of the job, misunderstanding technical requirements, bid mistakes or the desire to improve competitive edge, contractors sometimes come up with extremely low bids that make them excessively costconscious in their efforts to recover from their tight situation, bringing disputes and claims for almost every other issue during the contractual period. Figure 1 provides a checklist of owner actions which usually affect contractual performance.

TYPICAL CLAIMS AGAINST THE CONTRACTOR

Owners also have the right to claim in respect of issues that may harm them economically. Claims by owners usually concern:

- Materials out of specification
- Defective work
- Property damage
- Contractor's late completion

Materials out of specification

Discrepancies may result from differences in interpretation of contractual material specifications. Contract specification omissions are frequent, with the undesirable result that decisions have to be waited for or

- Improper assumption of direction of field operations which are the contractor's responsibility
- · Failure to grant access to construction site
- Approval delays for:
- Shop drawings
- Design modifications
- Change orders
- Additional work
- Manpower security passes
- Work permits
- Inspection routines
 Planning and scheduling revisions
- Final acceptance
- O Final acceptance
- Arbitrary or unreasonable actions
 Failure to disclose information needed for performance
- Failure to produce payments as required by contract
- Excessive number of changes

Figure 1. Checklist for owner actions affecting contractor's performance directions given at the job site, with consequent delays and/or increases in scope of the job.

The main problem comes while supplying materials where it is known that there are numerous competitive manufacturers which may substitute for one another. Decisions have to be taken on the run and it is usually all left to the discretion of the owner's engineer.

The contract language is to be followed, but when the issue is material specifications complications arise since every owner wants to save money by competitive bidding prices from different manufacturers while at the same time achieving the maximum financial and functional efficiency.

Defective work

Contractors are responsible for the quality of their work as specified in contractual terms. This is not always easy to establish due to the fact that by definition defective work is difficult to spot and decide upon.

Defective work may be blamed on the designer because of lack of adequate specifications, on the owner because of after-the-fact actions that affected the original design; or on the contractor because of a lack of skills.

Property damages

Property damage claims may result from such sources as: damage to owner's installations when performing the contract; damage to neighbouring installations when performing work; violation of the rights of property owners adjacent to the construction battery limits; and violation of government area regulations.

Even though contractual clauses call for holding the owner blameless in all of these cases, it may happen that law suits may be settled by the owner before he can pass the blame to the contractor and accepted by him.

Contractor's late completion

Contracts usually call for a completion date on the assumption that the owner is in need of the facility by that date. A late finish by the contractor may bring inconvenience and/or financial losses to the owner.

Some contracts include clauses which penalize the contractor in the event of completion delays, but whether or not the contract contains such a clause, the owner may claim damages for late completion.

LEGAL IMPLICATIONS OF CRITICAL PATH METHODS

Critical path methods (CPMs) have become the most useful and practical tool for negotiating contractual disputes. Properly designed schedules contain consideration of the total scope of the job; an organized sequence of activities needed to perform the job; specification of the duration of all activities involved; and details of the resources needed to acomplish each activity. In other words critical path method schedules depict what has to be done, when it has to be done, how it has to be done, who has to do it, and where it has to be done.

Contractual obligations usually include the following:

- approval of an original CPM
- procedures to update the CPM periodically
- procedures to revise the CPM
- procedure to utilize the CPM as a tool for claim settlements.

Figure 2 provides a checklist for planning and scheduling administration.

The legal implications of an approved CPM schedule are as follows:

- Both parties are bound to follow the schedule specifications.
- There is an implied guarantee by both parties that they will not hinder, delay or disrupt the other party.
- Manpower levels and crew sizes established in the schedule have to be followed unless changes are duly authorized.
- Equipment utilization incorporated in the schedule is binding and failure to follow it constitutes a breach of contract.
- Materials, tools and consumables as specified in the schedule are equally binding.
- Contractors are liable for productivity lower than that allocated in the schedule.
- Job manning and lay-off schedules are contractual obligations and lack of compliance constitutes a breach of contract.
- Inspections and approvals from the owner should be performed according to schedule.
- Any deviation from schedule should be settled as per contractual procedures involving schedule revisions.

CLAIM-ANALYSIS PROCEDURES

The main purpose of establishing a claim-analysis procedure is to have a comprehensive, consistent and systematic approach to claim analysis and evaluation during the negotiation period. Figure 3 is a flow diagram of a particular procedure for handling claims.

The following outline has proved successful in accumulating the required data for an analysis, as well as aiding the analyst in his approach to the problem at hand. All available documentation and information

- Generate and approve a working schedule within the first two contract weeks
- Establish and maintain planning and scheduling
- Establish and maintain a procedure to notify and negotiate plan and schedule revisions
- Process plan and schedule modifications promptly and avoid further complications
- Establish and maintain detailed record-keeping, including:
 - Schedules
 - Memos
 - Minutes of meetings
 - Photographs
 - Change justifications
 - Manpower curves
 - Material procurement
 Passyary schedules
- O Recovery schedules
- Periodical progress measurement

Figure 2. Checklist for planning and scheduling administration

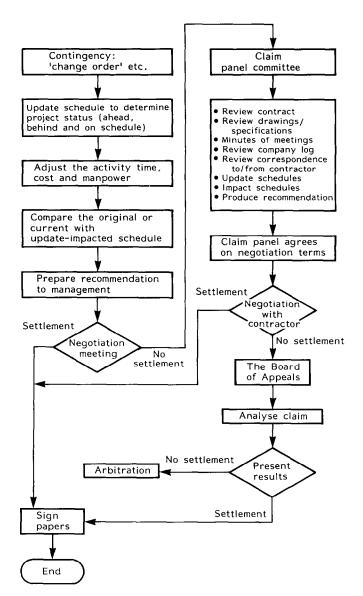


Figure 3. Claim analysis cycle

pertinent to the claim should be gathered and examined closely. It is essential to realize that the analyst should be thorough and unbiased in reviewing the contractor's position, as well as that of the owner.

Study review data pertinent to the claim must be categorized as follows:

Brief of the case

Contract study. Contracts should be read and analysed carefully. Contracts differ depending on the nature of the job; special clauses can be found, scheduling requirements are not always the same, unit rates do not necessarily follow a set pattern, and a number of minor changes peculiar to the claim in hand may have to be taken into consideration. The analyst must not forget that the contract is his most important document and that having a detailed knowledge of it facilitates understanding and appropriate interpretation.

Claim submission. Study of the claim submitted by the contractor gives the analyst the necessary guidance in

deciding which areas of the contract should be investigated in greater detail than others. Furthermore, it sets out the contractor's standing and pretensions.

Change-order log and associated schedule areas. Since most of the problems during the development of a contract are derived from change-order generation, it is essential to have a well-organized change-order log which must include schedule association, type of settlement, job definition and resources allocation.

Progress reports. This document will show figures duly approved by both parties and provide a firm basis for reconstruction of the facts. It will form the basis of an as-built schedule which in turn will present irrefutable evidence.

Minutes of the job-explanation meeting. Having a good record of what transpired during the job-explanation meeting has proved helpful in resolving parts of the claim which may be subject to different interpretations, all of them apparently reasonable.

Minutes of the weekly construction meeting. A careful reading of the minutes of the weekly construction meeting gives the analyst a good idea of how the relationship between the owner and the contractor developed and how problems in different areas were handled.

Once the brief of the case, as outlined above, has been completed, the analyst will have formed his own opinion of the job and can now start to study the owner's position on the claim.

Owner's position

Job philosophy. Due to ever-changing circumstances, owner policies at times affect the contractor in a way that might be overlooked by the owner's representatives, thereby creating an unfair situation for the contractor. The analyst must determine from his studies and job-related interviews if the job philosophy has been changed at any time and decide thereafter what kind of impact changes might have produced.

Scope of the job. Careful study of all drawings and specifications stipulated in the contract is a must for the analyst and will give him the edge at the negotiating table over any misinterpretation of the scope of the job by the owner or the contractor.

Owner expectations. Owner expectations are generally understated, seeking the lowest starting position in negotiations. Recognition of this fact should enable the analyst to make unbiased recommendations.

The contractor's position

Scope of the claim. Having an open and receptive mind when analysing the contractor's claim will allow the analyst to understand clearly what are the foundations for the claim and to avoid getting involved in issues that are not being addressed by the contractor. Figure 4 provides a checklist of damages usually claimed by contractors.

- Extended field office expenses
- Extended main office expenses
- Increased bond and insurance expenses
- Extended equipment expenses
- Escalated wage and materials costs
 Claim-preparation costs
- Interest on claim amount
- Small tools and materials storage
- Maintenance of roads
- Inefficiency and acceleration
- Work out of sequence
- Cost of correcting work
- Loss of revenue

Figure 4. Checklist of damages usually claimed by contractors

Contractor expectations. Contractors' claims are generally overstated, seeking the highest starting point in negotiations. Analysts must be aware of this fact and be ready to disclose it at the first contact with the contractor. Figure 5 provides a checklist of disallowable claims that usually inflate contractors' claims.

Analysis and evaluation

Based on all the information gathered thus far the analyst should be able to organize the available data to establish a comparison between what was planned and what actually happened and why. In evaluating the results of the above-mentioned comparison the analyst must keep in mind that contractual stipulations will govern decision-making at this stage.

If schedules are an essential part of the claim, 'asplanned' and 'as-built' schedules must present a clear picture to all parties. Schedules should only show the part of them that has been affected by the issue in dispute and the resulting impact on major milestones. Figure 6 shows an example of what is called a fragnet in scheduling jargon.

Recommendations

The analyst should complete the investigation by offering specific, constructive suggestions in terms familiar to the parties' representatives. Presentation is a key factor in claim analysis. If all parties can understand the results and recommendations presented by the analyst, they will create an environment for fruitful, positive negotiations.

Figure 7 shows a good example of how to present claim-evaluation results.

CLAIM-PREVENTION SUGGESTIONS

- 1. Carefully analyse and consider exactly what is being built and precisely how it will be built so that the contractor does not have to make assumptions or guesses about any aspect of the job.
- 2. Complete the project design before the contract is bid, and if some parts of the project cannot be completely designed at bid stage, clearly identify them and their possible impact.
- 3. Conduct a thorough review of the design prior to the bid stage to identify and correct any design errors or inadequacies.

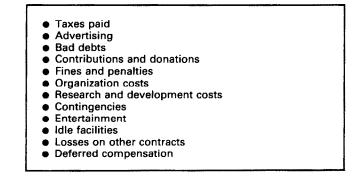


Figure 5. Checklist of disallowable construction claims

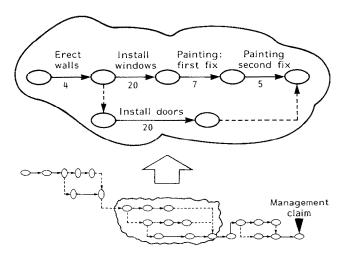


Figure 6. Fragnet

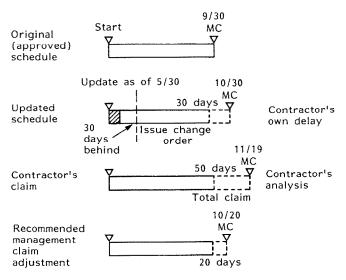


Figure 7. Claim summary

- 4. Give bidders sufficient time to carry out a complete review of the bid package and an investigation of the construction site.
- 5. Allow enough construction time, remembering that in this context, time is not money. Do not assume that bidders will simply increase their bids to cover a short schedule.
- 6. Identify with enough anticipation what type of contract will best suit the project.

- 7. Think about every sentence included in the contract and why it is there, and whether it is necessary.
- 8. Clearly identify in the contract every operation that the contractor must accomplish to complete the job.
- 9. Draft for clarity, not confusion. Use a standard list of definitions, and always use the same defined word consistently. Never use such statements as: about 2 metres, roughly, firm (how firm?), as soon as possible, frequently (how frequent?).
- 10. Consider any material arrival schedule as part of the contract. Identify long lead items and possible vendors in the bid package. Avoid sole-source procurement unless absolutely necessary.
- 11. Clearly identify who will be responsible for material delays.
- 12. Analyse all potential bidders before preparing a bid slate. Examine contractors' prior contracting experience, claims history, management capabilities and financial ability.
- 13. Carefully analyse contractors' technical proposals, paying particular attention to the proposed method of construction and the planned number of manhours claimed necessary to execute the job.
- 14. Seriously question contractors' excessively low bidding on: scope of the job; technical requirements; schedules and crew sizes; and materials suppliers.
- 15. If you are forced to live with a low contractor, anticipate a claim and work on it from the beginning. Get your law department involved in all transactions. Reinforce your cost estimating and planning and scheduling units. Alert all members of the project team. Keep extremely tight¹ records, especially on progress measurement and quality assurance.
- 16. Be reasonable when analysing contractors' complaints about changes and omissions. Negotiate settlement as soon as possible, keeping in mind that the older the issue is the more difficult it will be to settle.
- 17. Appreciate that the contractor has the right to perform the contract in any fashion he deems appropriate, as long as the methods and results conform to contractually specified standards.
- 18. Keep in mind that the owner has the obligation to provide: a suitable construction site; accurate plans and specifications; a well-defined scope of the job; and inspection without interference.
- 19. Understand that many factors can affect a contract and delay and disrupt the work. Cooperate to establish an atmosphere of understanding and mutual respect.
- 20. Keep strict control of: progress reports; daily meetings; schedule revisions; cost estimates; change orders and their justification; and correspondence.
- 21. Develop a document control plan, which includes provisions for
 - Drafting letters to and from contractors.
 - Handling drawing transmissions between design group and contract administration, and between contract administrator and contractor
 - Responding to any query within three days, even if only to say 'we are working on your query'. Do

not let change orders pile up, deal promptly with schedule extension requests so that the contractor knows where he stands.

- Producing accurate minutes of all meetings, and having the contractor's signature on them. Ask at every meeting if there are unresolved claims or delays, or changed work without change orders, and document the reponses. Be sure the minutes reflect the problems like lack of manning, lack of productivity, broken-down equipment and the like.
- Taking job progress photographs, mounting them with accurate captions, and filing them with their corresponding negatives.

Figure 8 provides a checklist of management actions that help prevent claims.

RECORD MANAGEMENT

Good, accurate records are a great help when negotiating changes and disputes. This is particularly true for contractors since they usually have the burden of proving the effect of the issue under dispute.

The records usually needed to substantiate a claim are:

- progress schedules
- daily and weekly reports
- change-order log
- purchase orders and delivery receipts
- correspondence to and from the contractor
- photographs
- job diary
- plan and schedules revisions
- minutes of daily and weekly meetings.

Performance is usually documented through a periodic review of the project approved schedule. Updates determine the project status of scheduled versus actual performance so that anybody can visualize the work completed to date, the rate at which the work has been performed, and the costs incurred.

Daily and weekly reports should include:

- Make your project team aware of contractual, legal and professional implications from the beginning of the contract
- Keep organized records of all transactions
- Document, analyse and decide claim issues promptly
- Be fair and reasonable at all times
- Enforce periodical analysis and updating of plans and schedules
- Stick to plans and budgets
- Establish and enforce levels of authority for field directions and document them on a daily basis
- Anticipate contract performance requirements
- Communicate effectively with the project team members and with the contractor
- Do not settle for future probabilities
- Recognize the value of computer applications for storing, organizing and sorting information

Figure 8. Checklist of management actions that help prevent claims

- issue date, weather conditions
- manpower levels
- equipment used and idle
- materials utilized and future requirements
- subcontractor's performance
- details of controversial matters
- change-order work
- safety.

Since change orders are one of the major causes of claims, it is important to maintain good records of them, including:

- initiations
- cost and time estimates
- approvals
- current status
- requests for project completion revision
- daily progress

Keeping the correspondence well organized by subject will provide the means of understanding what happened in an after-the-fact claim and of relating new problems to old ones.

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Khaled Bu-Bushait is Assistant Professor of Project/Operation Management at King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia. He received his undergraduate diploma in applied civil engineering, his MBA from KFUPM, and his PhD from Georgia State University, Atlanta, Georgia, USA. He is a member of the International Project Management Association and has run a number of project management seminars at KFUPM.



Ignacio Manzanera qualified as a mechanical engineer at the National University, Colombia, in 1968. He has ten years' experience in maintenance management and nine years' experience in project management. He spent three years as Assistant Professor in Automatic Controls and Analog Computers in the Engineering Faculty of the National University, Columbia, and is a past president of the American Association of Cost Engineers, Arabian Gulf Section. He is currently working as a planning and scheduling engineer for the Aramco oil company, Saudi Arabia.