6

PROGRAMME

6.1 Where a contractor submits a programme which is approved or accepted by the architect/engineer, is he obliged to follow it or can he amend it at his own discretion?

6.1.1 The programme is usually intended to be a flexible document. If the contractor gets behind, say due to the insolvency of a subcontractor, he would normally expect to revise the programme in an attempt to make up lost time. For this reason programmes are rarely listed as contract documents. It is the requirement of most contracts that obligations provided for in contract documents must be carried out to the letter. With a programme containing some hundred or more activities, compliance with the start and finish date for each without the possibility of revision would be impractical. For this reason programmes should not be contract documents.

6.1.2 Nevertheless some forms of contract will not permit the contractor to amend its programme once accepted without approval. For example, GC/Works /1 1998 condition 33(2) states:

‘the contractor may at any time submit for the PM’s agreement proposals for the amendment of the Programme.’

MF/1 clause 14.4 is worded along similar lines to the effect that the engineer’s consent is required before the contractor can make any material change to the programme.

6.1.3 Clause 14(4) of the ICE 6th and 7th Editions empowers the engineer to require the contractor to produce a revised programme if progress of the work does not conform with the accepted programme. The revised programme must show the modifications to the accepted programme to ensure completion on time. That apart there is no restriction placed upon the contractor who wishes to revise his accepted programme.

6.1.4 The Engineering and Construction Contract (formerly the NEC) clause 32.1 calls on the contractor to show

‘on each revised programme

- the actual progress achieved on each operation and its effect upon the timing of the remaining work
- the effects of implemented compensation events and of notified early warning matters
• how the Contractor plans to deal with any delays and to correct notified Defects; and
• any other changes which the Contractor proposes to make to the Accepted programme.

Clause 32.2 goes on to add that the contractor is required to submit a revised programme to the project manager for acceptance.

6.1.5 Other forms of contract, for example JCT 98, do not expressly require the contractor to seek approval to the amendment of his programme. However if amendments are made without approval the architect may however feel under no obligation to issue drawings to meet the revised programme.

SUMMARY

Some forms of contract require the contractor to seek approval or acceptance before amending his programme, for example GC/Works/1 1998, MF/1 and the Engineering and Construction Contract.

In the absence of an express requirement to seek approval to amend, the contractor can revise his programme as he wishes. An architect or engineer who has not been asked to approve or accept an amended programme may feel under no obligation to issue drawings in good time to enable the contractor to comply with the revised programme.

6.2 Is a subcontractor obliged to follow a main contractor’s programme?

6.2.1 Most standard forms of contract provide for the contractor to produce a programme. A failure on the part of the contractor to produce the programme amounts to a breach of contract. It is not usual, however, for a contract to state expressly that a contractor must follow the programme. An exception is GC/Works/1 1998 which states in condition 34(1) that the contractor

‘shall . . . proceed with diligence and in accordance with the Programme or as may be Instructed by the PM . . .’

6.2.2 It is unusual for a programme to be classified in a contract as a contract document. If it were so then contractors would be required to carry out work strictly in accordance with the programme. This could prove very exacting and in many instances impossible.

6.2.3 The situation with subcontractors is similar to that of a main contractor. An example of the obligation of a subcontractor with regard to a main contractor’s programme occurred in Pigott Foundations v. Shepherd Construction (1994).

Pigott was employed as a domestic subcontractor to design and construct bored piling on a new fourteen storey office block. The main contract was JCT 80, the subcontract DOM/1, and Shepherd Construction the main contractor.
Pigott’s subcontract provided for work to be carried out in eight weeks. Piling work commenced on 26 June 1989. However the bulk of the work was not finished until 20 October 1989. Pigott then left site and returned in April 1990 to carry out the remaining nine piles.

After commencement, work had proceeded at a slow pace with only one pile completed in the first week and further difficulties arose due to piling work which was alleged to be defective. It was not clear whether this was due to faulty design or bad workmanship and Pigott claimed that the difficulties arose as a result of ground conditions. A solution to the problem was reached which involved installing additional piles.

It was decided in this case that where DOM/1 conditions apply a subcontractor is not required to comply with the main contractor’s programme.

6.2.4 If there exists an obligation for a subcontractor to carry out work to suit a main contractor’s programme it can be a two edged sword for the main contractor. Such a requirement would place an obligation upon the main contractor to provide access to enable the subcontractor to carry out the subcontract work in accordance with the main contractor’s programme. Contractors often experience difficulties in this respect as happened in the case of Kitson Sheet Metal Ltd v. Matthew Hall Mechanical & Electrical Engineers Ltd (1989). The court had to decide whether Kitsons, the subcontractors, were entitled under the contract to work to the programme and whether any written order requiring departure from it constituted a variation.

It was held that the parties must have recognised the likelihood of delays and of different trades getting in each other’s way and that the prospects of working to programme were small. Provided Matthew Hall had done their best to make areas available for work they were not in breach of contract even if Kitsons were brought to a complete stop. Kitsons were therefore unable to recover the additional cost due to a substantial overrun on the contractor’s programme.

A similar situation occurred in the case of Martin Grant & Co Ltd v. Sir Lindsay Parkinson & Co Ltd (1984). Again the court held that there was no entitlement for the subcontractor to claim extra due to delays to the main contract programme.

**SUMMARY**

A subcontractor is not required to follow a main contractor’s programme unless provided for expressly in the terms of the subcontract; equally the main contractor is not obliged to grant access etc. to enable the subcontractor to do so.

**6.3 Who owns float time in the contractor’s programme, the architect/engineer or the contractor?**

**6.3.1** Most prudent contractors will allow some form of contingency in their programme. Risk analysis is becoming a frontline skill in construction projects. More of the risk and hence uncertainty is being placed upon
contractors. Bad ground, strikes, weather conditions, shortages of labour and materials are now regularly allocated in the contract as the contractor’s risk. Contractors and their subcontractors often make mistakes which have to be corrected. The contractor therefore will be unwise not to make provision in his programme for these uncertainties.

A prudent contractor will always include an element of float in his programme to accommodate these variables.

6.3.2 The question however is this – if the contractor has clearly programmed an activity to take longer than is estimated to complete, can the employer take advantage of the float time free of cost? This might prove useful if the architect/engineer is late issuing drawings or delays have been caused by the employer himself.

It may be argued that float will not be on the critical path and so the employer using it will not cause any delay or disruption. Hence the contractor will not become entitled to compensation.

6.3.3 Nevertheless Keith Pickavance in his book *Delay and Disruption in Construction Contracts* at page 335 makes reference to a case heard before the Armed Services Board of Contract Appeals in the USA (*Heat Exchanges* (1963)). Here it was held that the contractor’s original cushion of time (which was not necessary for performance) should still be preserved when granting an extension of time for employer caused design delays. In an earlier case the Army Corporation of Engineer’s Board of Contract Appeals had recognised the contractor’s right to reprogramme, thereby giving him the benefit of the float. American courts also took the line on a management dispute that

Total float may be used to programme jobs for all contractors; free float belongs to one contractor for programming any one activity…

Neither total float nor free float is to be used for changes. (*Natten and Co v. George A Fuller & Co* (1972).

6.3.4 It would seem that in this country it is unlikely for an arbitrator to award an extension of time if the employer’s delay did not affect the completion date. However, most arbitrators would take a sympathetic view to a contractor who reprogrammes to overcome a delay in the early part of the contract due to his own errors or risk items and in so doing uses up the float in the latter part of the programme.

Float which the employer may wish to have taken advantage of has thus disappeared.

6.3.5 The matter of float time was in evidence in the case of *Ascon Contracting Ltd v. Alfred McAlpine Construction* (1999). McAlpine was the main contractor for the construction of a five-storey building known as Villiers Development in Douglas, Isle of Man, near to the sea front. Ascon was appointed as subcontractor for constructing the reinforced concrete floor slabs, basement perimeter walls and upright columns between floors. The subcontract period was 29 weeks commencing on 28 August 1996, with completion by 5 March 1997.

Practical completion of the subcontract work was not achieved until 9 May 1997, nine weeks late. No extension of time was granted. Ascon submitted a
claim for an extension of time and payment of £337,918. McAlpine counterclaimed £175,000 liquidated damages paid to the employer, plus its own loss and expense.

McAlpine’s claim against Ascon in respect of liquidated damages alleged to have been paid to the employer in the sum of £175,000 left the judge unimpressed. A dispute between McAlpine and the employer had been compromised by a final payment of £9475 inclusive of all McAlpine’s claims and explicitly no deduction was made for liquidated damages.

Part of McAlpine’s case against Ascon was that, had all subcontractors started and finished on time and McAlpine executed their own work on time, practical completion would have been achieved 5 weeks early. McAlpine’s argument was that the 5 weeks float was for their benefit to absorb their own delays. As the 5 weeks had been used by Ascon and other subcontractors, McAlpine claimed they were entitled to recover their lost benefit. The judge rejected this argument. He considered the float to be of value in the sense that delays could be accommodated in the float time. This would avoid an overrun to the contract period and hence any liability to pay liquidated damages to the employer. The judge went on to say that McAlpine, whilst accepting the benefit against the employer, could not claim against the subcontractors.

The judge seems to be taking the view that if float time is available it can be used on a first come first served basis.

6.3.6 The Society of Construction Law Delay and Disruption Protocol 2002 expresses an opinion concerning float time which is not dissimilar to the judgment in the Ascon case, where it states:

‘unless there is express provision to the contrary in the contract, where there is remaining float in the programme at the time of an Employer Risk Event, an EOT should only be granted to the extent that the Employer Delay is predicted to reduce to below zero the total float on the activity paths affected by the Employer Delay.’

What is being said is that if a contractor becomes entitled to an extension of time due to an employer’s delay, any remaining float time must be taken up first and only if there is then an anticipated delay to completion will an extension of time be relevant. Any contractor delays which occur after all float has been used and which affect the completion date will create a liability on the part of the contractor to pay liquidated damages to the employer.

**SUMMARY**

There is no hard and fast rule but it would seem that, as a contractor will normally include float in his programme to accommodate his risk items which cannot be accurately predetermined in terms of time involvement, and also to provide time for correcting mistakes, then the float belongs to him and the employer or architect/engineer cannot object if later reprogramming by the contractor absorbs it. There is however a conflicting view expressed in the Society of Construction Law Delay and Disruption Protocol.
2002 which states that float belongs to the project and may be used on a first come first served basis.

6.4 What is the effect of making the programme a contract document?

6.4.1 The standard forms in general use require the contractor to produce a programme.

JCT 98 clause 5.3.1.2 requires the contractor to produce two copies of his master programme as soon as possible after the execution of the contract. No details are given as to whether a bar chart will suffice or if a critical path network is required.

GC/Works/1 1998, condition 33(1) is more precisely worded:

‘The Contractor warrants that the Programme shows the sequence in which the Contractor proposes to execute the Works, details of any temporary work, method of work, labour and plant proposed to be employed, and events, which, in his opinion, are critical to the satisfactory completion of the Works; that the Programme is achievable, conforms with the requirements of the Contract, permits effective monitoring of progress, and allows reasonable periods of time for the provision of information required from the Employer; and that the Programme is based on a period for the execution of the Works to the Date or Dates of Completion.’

ICE 6th and 7th Editions in clause 14 require the contractor to submit a programme to the Engineer for approval within 21 days of the award of the contract. As with JCT 98 no reference is made to the type of programme required.

6.4.2 Whilst these standard forms require a programme to be provided, the programme itself is not listed as one of the contract documents. This is a very sensible arrangement. If a programme were to be given the status of a contract document, the contractor would be required to comply with it to the letter. All flexibility which is the key to catching up when progress gets behind would disappear.

6.4.3 However sometimes, however, by accident or design, a programme or method statement becomes a contract document. This was the situation in Yorkshire Water Authority v. Sir Alfred McAlpine & Son (Northern) Ltd (1985).

‘The plaintiff invited tenders for a tunnel at Grimwith Reservoir. The contract was to incorporate the ICE 5th Edition and clause 107 of the specification stated:

‘Programme of Work: In addition to the requirement of clause 14 of the conditions of contract, the contractor shall supply with his tender a programme in bar chart or critical path analysis form sufficiently detailed to show that he has taken note of the following requirements and that the estimated rates of progress for each section of the work are realistic in comparison with the labour and plant figures entered in the Schedule of Labour, Plant and Sub-Contractors…’

The defendant submitted a tender in the standard ICE form accompanied by a bar chart and method statement. The method statement was approved at a
meeting and two month’s later the defendant’s tender was accepted by letter. A formal agreement was signed incorporating, *inter alia*, the tender, the minutes of the meeting, the approved method statement and the plaintiff’s letter of acceptance.

The method statement had followed the tender documents in providing for the construction of the works upstream. The contractors maintained that in the event it was impossible to do so and, after a delay, the work proceeded downstream. The contractors contended that, in the circumstances, they were entitled to a variation order under clause 51(1) of the ICE conditions. The dispute was referred to arbitration.

The arbitrator made an interim award in favour of the contractor and the employer appealed.

It was held by the court:

(1) The method statement was not the programme submitted under clause 14 of the contract.

(2) The incorporation of the method statement into the contract imposed on the contractors an obligation to follow it in so far as it was legally or physically possible to do so.

(3) The method statement therefore became the specified method of construction so that if the variation which took place was necessary for completion of the works, because of impossibility within clause 13(1), the contractors were entitled to a variation order under clause 51 and payment under clause 51(2) and 52.


The instructions to tenderers provided that the tender should be accompanied by a full and detailed programme indicating the tenderer’s proposed work sequence together with a brief description of the arrangements and methods of demolition and construction which the tenderer proposed to adopt for the carrying out of the contract works. In due course, Kier prepared a method statement and enclosed it with their tender.

It provided that details for

- on site crushings of suitable demolition arisings, removal of unsuitable arisings and excavation material, and filling excavations with suitable crushed arisings.

Disputes arose as to whether or not the contractors, through their subcontractors, were entitled to export off site materials excavated which they thought uneconomic to crush. This dispute, *inter alia*, was referred to an arbitrator, whose decision was upheld by the court. His award was that Kier’s method statement was a contract document, but nevertheless the wording was such that under it the contractor remained free:

- to decide which arisings it was uneconomic to crush; and
- to import replacement fill in place of hard arisings he chose not to
- crush; and
- to export uncrushed hard arisings.
6.4.5 In *Havant Borough Council v. South Coast Shipping Company Ltd* (1996) a method statement was given the status of a contract document. The contractor was unable to follow the method statement due to a court injunction which restricted the hours of working. To overcome the problem which involved excessive noise the contractor worked a different system to that provided for in the method statement. The court held that this constituted a variation and he was entitled to be paid.

6.4.6 The Engineering and Construction Contract (NEC) includes original wording which is to be contrasted to wording traditionally used in construction contract. Clause 31.2 deals with the contractor’s obligations to submit a programme ‘within the period stated in the Contract Data’ unless the programme has been ‘identified in the Contract Data’.

It is not clear what is the status of ‘Contract Data’ and whether it would be considered by the courts as having the same effect as a contract document in the ICE 6th and 7th Editions.

The courts are likely to say that unless the contract clearly states that the contractor is duty bound to carry out work strictly in accordance with the programme then no such obligation exists.

6.4.7 Programmes provided by many contractors are drawn up with claims in mind. Often unrealistic timescales are given within which drawings and instructions for the expenditure of prime cost and provisional sums are to be produced. Architects and engineers need to be very watchful at the time programmes are submitted to ensure that proper notice is given to the contractor of their feelings as appropriate that the programme is unrealistic with regard to the timing of the architect/engineer’s functions.

Unfortunately there are no sanctions provided in the contract where a contractor neglects to provide a programme as required. In the absence of express wording, the architect/engineer would be in breach in refusing to allow a contractor who had not produced a programme to start work. The exception is the Engineering and Construction Contract (NEC) which provides in clause 50.3 for only 25% of payments due to be made until the contractor fulfils his obligation to provide a programme.

**SUMMARY**

If a programme is given the status of a contract document the contractor will be obliged to follow it to the letter. Should events not due to the contractor’s own negligence arise which make it impossible to follow the programme, then it is likely that a court would award the contractor a variation and additional cost necessary to overcome the problem.