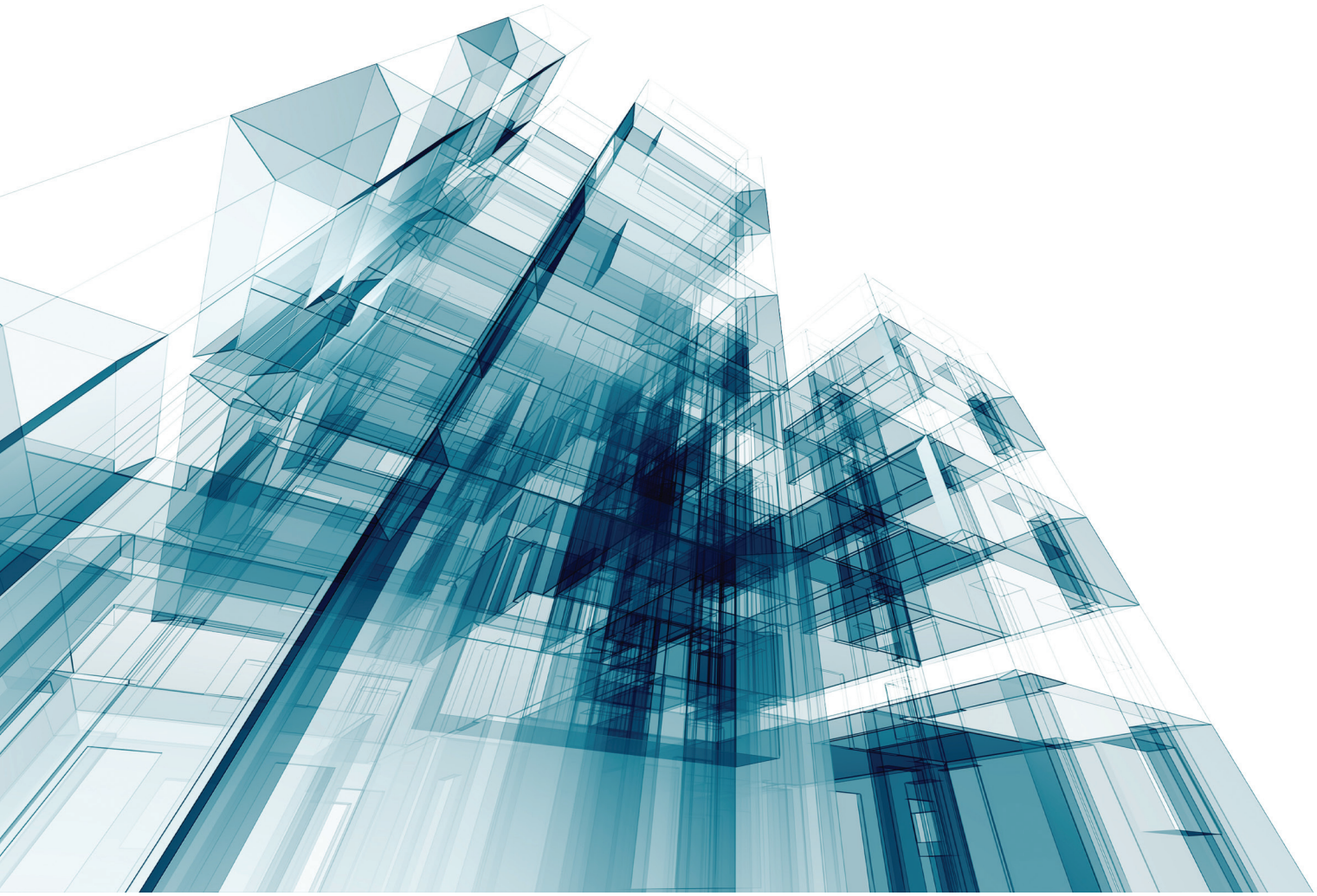
RICS professional guidance, UK

Ascertaining loss and expense

1st edition, July 2015



Ascertaining loss and expense

RICS guidance note, UK

1st edition, July 2015

Published by the Royal Institution of Chartered Surveyors (RICS)
Parliament Square
London
SW1P 3AD
UK
www.rics.org

Produced by the QS and Construction working group of the Royal Institution of Chartered Surveyors.

ISBN 978 1 78321 114 2

Typeset in Great Britain by Columns Design XML Ltd, Reading, Berks

Acknowledgments

RICS would like to thank the following for their contribution to this guidance note:

Technical author:

Nigel Willifer FRICS (Anncom Ltd)

Working group:

Chair: Andrew Smith FRICS (Laing O'Rourke)

Stuart Earl FRICS (Gleeds)

Roland Finch FRICS (NBS)

Christopher Green FRICS (Capita Property and Infrastructure)

John Littler MRICS (Q-Consult)

Roy Morledge FRICS (Nottingham Trent University)

Michelle Murray MRICS (DBK)

Alan Muse FRICS (RICS)

Michael T O'Connor FRICS (Carillion Construction Ltd)

Martin Stubbington MRICS (RICS)

Kevin Whitehead FRICS (McBains Cooper Consulting Ltd)

Contents

RICS professional guidance

International standards

RICS is at the forefront of developing international standards, working in coalitions with organisations around the world, acting in the public interest to raise standards and increase transparency within markets. International Property Measurement Standards (IPMS – ipmsc.org), International Construction Measurement Standards (ICMS), International Ethics Standards (IES) and others will be published and will be mandatory for RICS members. This guidance note links directly to these standards and underpins them. RICS members are advised to make themselves aware of the international standards (see www.rics.org) and the overarching principles with which this guidance note complies. Members of RICS are uniquely placed in the market by being trained, qualified and regulated by working to international standards and complying with this guidance note.

RICS guidance notes

This is a guidance note. Where recommendations are made for specific professional tasks, these are intended to represent 'best practice', i.e. recommendations that in the opinion of RICS meet a high standard of professional competence.

Although members are not required to follow the recommendations contained in the guidance note, they should take into account the following points.

When an allegation of professional negligence is made against a surveyor, a court or tribunal may take account of the contents of any relevant guidance notes published by RICS in deciding whether or not the member acted with reasonable competence.

In the opinion of RICS, a member conforming to the practices recommended in this guidance note should have at least a partial defence to an allegation of negligence if they have followed those practices. However, members have the responsibility of deciding when it is inappropriate to follow the guidance.

It is for each member to decide on the appropriate procedure to follow in any professional task. However, where members do not comply with the practice recommended in this guidance note, they should do so only for good reason. In the event of a legal dispute, a court or tribunal may require them to explain why they decided not to adopt the recommended practice.

Also, if members have not followed this guidance, and their actions are questioned in an RICS disciplinary case, they will be asked to explain the actions they did take and this may be taken into account by the Panel.

In some cases there may be existing national standards which may take precedence over this guidance note. National standards can be defined as professional standards that are either prescribed in law or federal/local legislation, or developed in collaboration with other relevant bodies.

In addition, guidance notes are relevant to professional competence in that each member should be up to date and should have knowledge of guidance notes within a reasonable time of their coming into effect.

This guidance note is believed to reflect case law and legislation applicable at its date of publication. It is the member's responsibility to establish if any changes in case law or legislation after the publication date have an impact on the guidance or information in this document.

Document status defined

RICS produces a range of professional guidance and standards documents. These have been defined in the table below. This document is a guidance note.

Type of document	Definition	Status
Standard		
International standard	An international high-level principle-based standard developed in collaboration with other relevant bodies.	Mandatory
Professional statement		
RICS professional statement	A document that provides members with mandatory requirements or a rule that a member or firm is expected to adhere to. This term encompasses practice statements, Red Book professional standards, global valuation practice statements, regulatory rules, RICS Rules of Conduct and government codes of practice.	Mandatory
Guidance		
RICS code of practice	Document approved by RICS, and endorsed by another professional body/stakeholder, that provides users with recommendations for accepted good practice as followed by conscientious practitioners.	Mandatory or recommended good practice (will be confirmed in the document itself).
RICS guidance note (GN)	Document that provides users with recommendations or approach for accepted good practice as followed by competent and conscientious practitioners.	Recommended best practice. Usual principles apply in cases of negligence if best practice is not followed.
RICS information paper (IP)	Practice-based document that provides users with the latest technical information, knowledge or common findings from regulatory reviews.	Information and/or recommended good practice. Usual principles apply in cases of negligence if technical information is known in the market.

1 Introduction

1.1 What is loss and expense in terms of a construction contract?

The ascertainment of loss and expense, sometimes referred to as loss and/or expense, is a set of tasks that endeavour to calculate as precisely as possible, and in accordance with the contract, the additional costs or losses incurred by one party directly due to a default of the other.

It is important to commence with some basic definitions for the terms used in this guidance note, which will assist in understanding the principles in ascertaining loss and expense.

To 'ascertain' means to 'find out something for certain or make sure of'. Current thinking is that the person compiling the claim for loss and expense, usually a quantity surveyor, must be furnished with relevant documents and information from which they can be reasonably satisfied that all of the loss and expense claimed is likely to be or has been incurred. They do not have to actually be 'certain'. Therefore ascertainment is the calculation of the costs that are due to a party.

Loss and expense in terms of a construction contract are the direct loss and expense which would not be reimbursed by a payment under other contract provisions. These are additional costs or losses the contractor suffers as a result of an employer-driven event, act, omission or default. The contractor is entitled to recover that loss and expense in order to put him or herself back in the financial position that he or she would otherwise have been in.

Note: throughout this guidance note, references to a 'contractor' and its relationship with the employer or client could equally apply to a subcontractor and its relationship with a contractor.

Relevant events relate to a breach of contract or subcontract. A relevant matter is a breach that comes with damages. A notice is a document served under terms described in the contract to preserve the right to damages i.e. liquidated and ascertained damages (LADs).

There are usually two parties to a standard construction contract; the contractor and the employer. Under common law, if one party to a contract is in breach then that party is liable to the other for costs that flow from that breach.

The magnitude of such costs has been established by a number of court cases which have endeavoured to clarify the 'rules' that apply to loss and expense claims, some of which will be discussed in section 2.2.

Under common law the monies recoverable are intended for one of the parties to be placed in the same situation with regard to costs, as if the contract had been performed.

Generally this guidance note is aimed at the chartered surveyor who, along with the contract administrator or architect, may be tasked with ascertaining the quantum, i.e. the amount of money due to one of the parties. This document could equally apply to the architect, contract administrator or employer.

This guidance note does not deal with delay analysis or extension of time or how liability is established and assumes liability has been or is in the process of being proven, see the RICS guidance note *Extensions of time*, 1st edition (2014).

This guidance note, *Ascertaining loss and expense*, 1st edition, is effective from 27 October 2015.

2 General principles (Level 1 – knowing)

2.1 Loss and expense in standard forms of contracts

Most of the standard forms of contracts contain clauses dealing with the entitlement of the contractor to recover direct loss and expense for events which cause delay or disruption to the regular progress of the works. This is provided that the event is or can be proved to be caused or having been derived from the actions for which the client is responsible.

Under the standard form contracts there are more often than not express provisions dealing with the recovery of direct loss and expense. Where this is applicable the requirements detailed in the contract must be adhered to. The reimbursement of loss and expense, if pursued correctly using the contract, is a contractual entitlement and does not require judgement of the court or an adjudication or arbitration. This however, does not mean the issues will be necessarily accepted by the other party.

This RICS guidance note deals with claims made under the contract. However, the provisions of the loss and expense clauses in such contracts are generally without prejudice to any other rights and remedies that the contractor may possess. He or she may wish to pursue again through arbitration or the courts and this includes recovery of damages at common law, rather than under the contract.

2.2 Background to contractual loss and expense clauses

It is important from the outset to be aware of the background to the development of loss and expense clause in construction contracts, for that reason some of the important cases are detailed in the following section. One of the earliest legal cases that is still quoted today to deal with this issue is known as *Hadley v Baxendale* (1854). Following that case, when it is asked 'What is the amount of damages to which an injured party is entitled for breach of contract?', the answer is generally 'An injured party may recover those damages reasonably considered to arise naturally from a breach of contract, or those damages within the reasonable contemplation of the parties at the time of contracting'.

The details of this case were that a shaft in Hadley's mill broke, rendering the mill inoperable. Hadley hired Baxendale to transport the broken mill shaft to an engineer in Greenwich so that he could make a duplicate. Hadley told Baxendale that the shaft must be sent immediately and Baxendale promised to deliver it the next day. Baxendale did not know that the mill would be inoperable until the new shaft arrived.

Baxendale was negligent and did not transport the mill shaft as promised, causing the mill to remain shut down for an additional five days. Hadley had paid a sum of £2 and 4 shillings to transport the mill shaft and sued for £300 in damages due to lost profits and wages. The jury at that time awarded Hadley £25 beyond the amount already paid to the court and Baxendale appealed.

Prior to *Hadley v Baxendale* the usual rule was that the claimant was entitled to the amount he or she would have received if the breaching party had performed; i.e. the plaintiff (the contractor, for example) is placed in the same position it would have been in had the breaching party performed. Under this rule, Hadley would have been entitled to recover lost profits from the five extra days the mill was inoperable.

The court held that if there were unique or special circumstances under which the contract had been made, then only if those circumstances were known to both parties at the time they made the contract would any breach of the contract result in damages that would naturally flow from those unique or special circumstances.

Consequential damages are linked to what has been termed as foreseeability at the time of contracting. These damages are effectively for loss other than those arising naturally. Back to modern times and courts tend to use foreseeability as the cornerstone to determine consequential damages. Ultimately what is reasonably foreseeable at the time of contracting requires evidence of the circumstances under which the contractor/client entered into the contract and the documents/knowledge that they possessed at that time.

The case of *Walter Lilly and Company Limited v Giles Mackay and DMW Developments Limited* [2012] EWHC 1773 (TCC) tackled a multitude of construction contract and claims issues. Mr Justice Akenhead dealt with these issues and one in particular is the level of information and also the burden of proof to be provided where the contract requires 'such details of such loss and/or expense as are reasonably necessary' to enable the architect (in this case) to ascertain the contractor's entitlement. This is an important case when considering loss and expense and on that basis the issues are mentioned below relating to the JCT standard form in operation at that time. The following section will then reference an updated JCT form of contract (see section 2.2.1).

With regard to the JCT Standard Form of Contract, Mr Justice Akenhead considered the application of a typical standard form 'loss and expense' clause. He concluded the following in relation to the JCT loss and expense clause under consideration related to Clause 26 (Now clause 4-20)

> 'That in consideration of clause 26.1.3, the Contractor will not lose the right to recover loss and expense whereby some elements of the loss details are not provided, he went on the say "otherwise, one can have the absurd position that where £10 out of a £1 million claim is not adequately detailed but the rest of the claim is, the whole claim would fail to satisfy the condition precedent"'

- Under clause 26.1.3 the contractor need only submit details which 'are reasonably necessary' for ascertaining loss and expense and that allowing the architect or quantity surveyor to inspect the contractor's records could constitute adequate submission of details.
- The requisite details 'do not necessarily include all the backup accounting information which might support such detail'.
- Clauses such as clause 26.1.3 should not be construed too strictly against the contractor 'bearing in mind that all the Clause 26.2 grounds which give rise to the loss and expense entitlements are the fault and risk of the employer.'
- 'It is legitimate to bear in mind that the Architect and the Quantity surveyor are not strangers to the project in considering what needs to be provided to them'.

Instead, Mr Justice Akenhead said that the wording of the contract could have imposed such a condition, but in his view the wording did not do so. Rather, the JCT 1998 (at that time) Contract required that the architect/quantity surveyor is put in a position to determine whether some or all of the loss and expense as claimed is likely to be or has been incurred and that they do not necessarily have to be certain of the amount.

Consequently, the contractor in the *Walter Lilly* case was able to supply less information than the employer argued should have been provided in order to satisfy the conditions precedent and, therefore, the contractor was entitled to recover loss and expense under the JCT's applicable clauses.

This case dealt with the position under JCT 1998 Standard Form of Contract, however, the reasoning of Mr Justice Akenhead is likely to apply to any similarly drafted contracts or subcontracts.

Further to these and other cases most standard construction contracts include the provision of loss and expense clauses. Some differences between the JCT Design and Build Contract 2011, NEC3 Form of Contract 2013 and FIDIC Contracts 1999 will be considered in the following sections.

2.3 JCT Design and Build Contract 2011

The JCT suite of contracts and subcontracts are often used throughout construction projects and are arguably the most commonly used standard forms. Loss and expense is detailed in certain clauses in the JCT suite. Loss and expense under the JCT Design and Build Contract 2011 is dealt with in clauses 4.20 to 4.23. These clauses include relevant matters that are dealt with under clause 4.21. These should not be confused with relevant events that are dealt with under clauses 2.26 and are related to adjustment of the completion date, rather than cost.

Relevant events are covered in detail in the RICS guidance note *Extensions of time*, 1st edition (2014), however the summary list of relevant events (adjustment to the completion date) under the JCT Design and Build Contract 2011 includes:

- changes such as variations and instructions
- delay in receipt of any permission or approval for the purposes of development control requirements and deferment of possession of the site
- suspension
- works by statutory undertakers
- exceptionally adverse weather
- civil commotion
- terrorism and strikes and
- any impediment, prevention or default, whether by act of omission by the employer.

2.3.1 The provisions relating to entitlement to recover loss and expense under the contract are found at clause 4.20:

> 'If in the execution of this contract the Contractor incurs or is likely to incur direct loss and expense for which he will not be reimbursed by a payment under any other provision in these Conditions due to a deferment of giving possession of the site or relevant part of it under clauses 2.4 or because of the regular progress of the Works or any part of them has been or is likely to be materially affected by any of the relevant matters, the Contractor may make an application to the Employer. If the Contractor makes such application, save where these Conditions provide that there shall be no addition to the Contract Sum or otherwise exclude the operation of this clause, the amount of the loss and/or expense which has been or is being incurred shall be ascertained and added to the Contract Sum; provided always that the Contractor shall:

1 make his application as soon as it has become, or should reasonably have become, apparent to him that the regular progress has been or is likely to be affected;

2 in support of his application submit to the Employer upon request such information and details as the Employer may reasonably require.'

2.3.2 The relevant matters referred to in clause 4.20 are then set out in clause 4.21.

In simple terms therefore, a claim for loss and expense commonly refers to a claim by the contractor for any monetary loss and expense he or she suffers as a result of an event that causes delay to the regular progress of the contract works.

In order to be compensated for that loss and expense, the delay has to be as a result of a relevant matter (not a relevant event). Note that an extension of time does not necessarily lead to a claim for loss and expense since there are some subtle differences between the relevant events (relating to time) and the relevant matters under clause 4.21 (relating to loss and expense). Under clause 4.20 there are certain provisos (or conditions precedent) that must be adhered to by the contractor to facilitate the prompt and accurate ascertainment of a loss and expense claim.

The first condition precedent that the contractor must satisfy to claim loss and expense under a JCT contract is to make an application as soon as it has become, or should reasonably have become, apparent that the regular progress of the works has been or is likely to be affected by a relevant matter. It is essential that the application is served promptly.

The second condition precedent is that the contractor is required, upon request, to submit such information as is reasonably necessary for the contract administrator or quantity surveyor to ascertain the amount of the loss and expense due to the relevant matter or matters.

In addition to those conditions precedent it is good practice for the contractor to compile and dispatch such information as is reasonably necessary to allow the contract administrator to form an opinion on whether regular progress has been affected by a relevant matter in the first instance, and to briefly set out the background to how the loss and expense has been or is likely to be incurred due to such delay.

In the 2012 case of *Walter Lilly* EWHC 1773 (TCC), the contract administrator had regularly attended site meetings and had received multiple applications from the contractor for extensions of time. It was therefore reasonable to expect that the contract administrator had a substantial amount of information already in his or her possession to help him or her form an opinion on whether the regular progress had been affected or that loss and expense had or is likely to be incurred due to a relevant matter.

Once an amount of loss and expense is ascertained the payment provisions under the JCT forms require the ascertained amounts to be included within interim payments. This requirement emphasises the need for prompt application and ascertainment.

Where JCT supplemental provisions apply the loss and expense provisions may be modified to allow contractor's estimates to be obtained. This supplemental provision contains a mechanism under which the contractor provides loss and expense estimates along with each interim application. The procedure then allows for further reasonable requests for information and the agreement or negotiation of the loss and expense.

Similar provisions to those noted in this section are also contained in many of the JCT contracts, albeit with slightly different wording and clause numbering.

2.4 NEC

In relation to extensions of time and loss and expense, the JCT contract has relevant matters and relevant events and time and money are dealt with as separate concepts. The NEC contract in contrast has the compensation event and it deals with both time and money. The whole concept of compensation events is that they are driven by process and dealt with in real time. The compensation events also have what is known as a condition precedent nature, and failure to notify the compensation event within the prescribed eight-week period can have serious consequences.

The NEC3 family of contracts and subcontracts are quite different to the JCT standard forms, which prioritises good management and on that basis the clauses within the NEC contract tends to reflect the fact that the different roles within the contract require different often detailed descriptions for output.

There are different Options A to F for the NEC3 which are demonstrated in the following table.

NEC form relationships in simple terms			
Lump sum basis	Cost reimbursement basis		
Option A and B	Option C and D Target cost	Option E and F Cost plus fee	
A Priced contract with activity schedule B Priced contract with bills of quantities	C Target contract with activity schedule D Target contract with bills of quantities	E Cost reimbursable contract	F Management contract

Mechanisms for recovery in NEC3

Compensation events fall under what is termed core clause 6. In particular the NEC3 issues relevant to claims for additional reimbursement and areas most often where disputes tend to arise include:

- evaluation of compensation events
- the effect of early warning notices
- risk review meetings
- risk registers and
- notice periods.

From the NEC3 forms table above and for the non-lump sum options, note the effect of defined cost and disallowable costs, particularly the effect of these on the pain/gain share mechanisms in Options C and D.

Further in the cost reimbursement Options C, D, Target cost and E and F, Cost plus fee; the 'defined cost' payable according to clause 11.2(23) relates to costs incurred. These costs include additional costs whether or not they are the subject of compensation events, but they are subject to deduction of Disallowed cost defined at clause 11.2(25). More often than not disputes arise over these issues.

Conversely from the NEC3 forms table and for the lump-sum basis, cost recovery is recouped by the use of the contract price, which is further detailed in the schedule of cost components or the bills of quantities in Options A and B.

This in effect means that the price rather than the cost of work done to date is allowed for with these forms. Therefore, this is the 'defined cost' which is described at clause 11.2(22) of the NEC3 Options A and B. As with JCT standard forms (where they are termed relevant matters), additional monies in the form of payments are tackled in NEC by the clauses relating to compensation events.

The pain/gain share mechanism in these options provides that the contractor and employer share, in pre-defined proportions:

- the excess cost arising from actual costs exceeding target
- savings arising from actual costs turning out to be lower than target and
- while the contractor may be incentivised to identify and achieve savings in actual cost against the target cost, this may lead to claims for larger adjustment of prices and therefore an increased target cost. However, by using the compensation events at the highest possible value, a greater buffer or more of comfortable upper margin between cost and target cost from which the contractor should gain by earning gain share and therefore avoiding pain share.

Loss and expense in NEC3 Options A and B

In these options recovery of additional costs is much like the JCT standard forms in that the party must prove its entitlement to the additional costs and hence additional payment.

This can be recovered through changes/variations or by indicating and detailing loss and expense; however, terminology is different under NEC3 for example:

- The fee – all the costs of the contractor that are not included in the defined costs.
- Defined costs – this includes only amounts calculated using rates and percentages stated in the contract data and other amounts at open market or competitively tendered prices with deductions for all discounts, rebates and taxes which can be recovered.
- Risk register – a 'live' document populated with both employer and contractor risks to be a part of the early warning system.
- Early warning – the purpose of which is to alert as soon as possible of anything that may affect the cost, Key date or timing of completion.
- Compensation events – claims for additional reimbursement.
- Notices – required for the notification of a compensation event.

Loss and expense in NEC3 Options C, D, E and F

Broadly for NEC 3 Options C, D, E, but slightly different for management contracting Option F, the contractor is reimbursed all 'legitimate' costs.

The said costs need to be admissible and it is the responsibility of the employer to show inadmissibility. The substantial differences between NEC3 target Options C and D and reimbursement Option E is that in C and D issues such as early warning notices and compensation events take on more relevance and importance.

This is due to them having a greater effect upon pain and gain share as they can strongly exert their direct influence on the adjustment of the NEC target cost.

Compensation events

The list of compensation events (claims for additional reimbursement) under the NEC3 contract includes:

1 The project manager gives an instruction changing the works information.

2 The employer does not allow access to and use of a part of the site by the later of its access date and the date shown on the accepted programme.

3 The employer does not provide something that he or she is to provide by the date for providing it shown on the accepted programme.

4 The project manager gives an instruction to stop or not start any work or to change a key date.

5 The employer or others do not work within the times shown on the accepted programme, do not work within the conditions stated in the works information, carry out work on the site that is not stated in the works information.

6 The project manager or the supervisor does not reply to a communication from the contractor within the period required by this contract.

7 The project manager gives an instruction for dealing with an object of value or of historical or other interest found within the site.

8 The project manager or the supervisor changes a decision which he/she has previously communicated to the contractor.

9 The project manager withholds an acceptance for a reason not stated in this contract.

10 The supervisor instructs the contractor to search for a defect and no defect is found unless the search is needed only because the contractor gave insufficient notice of doing work obstructing a required test or inspection.

11 A test or inspection done by the supervisor causes unnecessary delay.

12 The contractor encounters physical conditions that are within the site, are not weather conditions and an experienced contractor would have judged at the contract date to have such a small chance of occurring that it would have been unreasonable for him or her to have allowed for them.

13 A weather measurement is recorded, the value of which is shown to occur on average less frequently than once in 10 years.

14 An event that is an engineer's risk, which is stated in the contract.

15 The project manager certifies take-over of a part of the works before both completion and the completion date.

16 The employer does not provide materials, facilities and samples for tests and inspections as stated in the works information.

17 The project manager notifies a correction to an assumption that he or she has stated about a compensation event.

18 A breach of contract by the employer that is not one of the other compensation events in this contract.

19 An event that stops the contractor completing the works or completing the works by the date shown on the accepted programme.

In summary to this section, loss and expense will be awarded to the contractor under NEC3 if he or she can prove that a 'compensation event' as detailed above will mean that he or she suffers financial loss. However, certain actions have to be executed, for example under clause 61.3 the important provision for time-barring is made in that 'should the Contractor fail to notify a compensation event within eight weeks of becoming aware of that event, he will not recover relief either in the form of time or money, unless the Project Manager should have notified the Contractor of the event but did not'.

2.5 FIDIC

Similar to clause 4.21 of the JCT contract, the International Federation of Consulting Engineers (FIDIC) Contracts 1999 under clause 20.1 requires the contractor to give notice to the engineer of any event that may give rise to additional payment and an extension of time and states 'if the Contractor fails to give notice of a claim within such period of 28 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment and the Employer shall be discharged from all liability in connection with the claim'.

Then clause 20.1 of FIDIC provides a procedure for dealing with the notification of and substantiation of extension of time and additional payment claims, and sets out the mechanics of the decision-making process of the engineer in respect of those claims. Again all important is the notice which is initially required from the contractor 'describing the event or circumstances giving rise to the claim'. The important time-bar provision in FIDIC is that the notice must be given 'as soon as practicable' and then more particularly 'not later than 28 days after the Contractor became aware, or should have become aware' of the particular event or circumstance. It is then the second paragraph that sets out the time-bar provision i.e. the 28 day period.

In addition under clause 20.1 there is a requirement that the contractor is to submit **other** notices if and as appropriate under the contract, in accordance with the other clauses within the contract. Further, the contractor is to keep 'contemporary records' (documentation) to substantiate its claim. The engineer may also require further record keeping as directed or the keeping of further contemporary records for particular issues.

Clause 20.1 of FIDIC is divided into no less than nine separate paragraphs (the fifth paragraph containing three numbered sub-paragraphs).

First is the requirement for a notice:

If the contractor considers him or herself to be entitled to any extension of the time for completion and/or any additional payment, under any clause of these conditions or otherwise in connection with the contract, the contractor shall give notice to the engineer, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as is practicable; not later than 28 days after the contractor became aware, or should have become aware, of the event or circumstance.

Included in the second paragraph is the time bar to the claim, in that:

If the contractor fails to give notice of a claim within such period of 28 days, the time for completion shall not be extended, the contractor shall not be entitled to additional payment, and the employer shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this sub-clause shall apply.

Pursuant to clause 20.1 this notice might not be the only notice required of the contractor for example:

The contractor shall also submit any other notices that are required by the contract, and supporting particulars for the claim, all as relevant to such event or circumstance.

Contemporary records are also an important requirement:

The contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the site or at another location acceptable to the engineer. Without admitting the employer's liability, the engineer may, after receiving any notice under this sub-clause, monitor the record-keeping and instruct the contractor to keep further contemporary records. The contractor shall permit the engineer to inspect all these records, and shall (if instructed) submit copies to the engineer.

For the detailed claim submission:

With regard to the substantiated or detailed loss and expense claim, the contractor should submit within 42 days after him or her becoming aware (or 'should have become aware') of the event or circumstance giving rise to the claim, the contractor shall send to the engineer a fully detailed claim that includes full supporting particulars of the basis of the claim and of the additional payment and/or extension of time claimed. If the event or circumstance giving rise to the claim has a continuing effect:

(i) this fully detailed claim shall be considered as interim

(ii) the contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the engineer may reasonably require and

(iii) the contractor shall send a final claim within 28 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the contractor and approved by the engineer.

On receipt the engineer is to respond similarly within 42 days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the engineer and approved by the contractor, the engineer shall respond with approval, or with disapproval and detailed comments.

He or she may also request any necessary further particulars, but shall nevertheless give his or her response on the principles of the claim within such time.

However, only some of the heads of claim recoverable under other standard contracts are recoverable under the FIDIC suite of contracts:

Direct loss and expense – but only if they fall within the FIDIC definition of cost ('all expenditure reasonably incurred or to be incurred') by the contractor, whether on or off the site, including overhead and similar charges, but not including profit and are directly linked to the clause giving rise to the claim, they can be claimed.

Preliminaries and overheads are also recoverable. The cost of running the business, as distinct from general site costs, is expressly allowed for in the FIDIC definition of cost.

Loss of productivity/disruption in principle is recoverable but, in practice, proving this loss is difficult. The 'measured mile' approach compares work in disrupted and normal un-disrupted conditions with the difference between the two being the disruption factor. See also paragraph 4.1.2 of this guidance note.

Profit is not recoverable, unless expressly allowed for in the FIDIC contract. Profit however is excluded from both the definition of cost and under clause 17.6.

The payment process then must include substantiated claims:

Each payment certificate shall include such amounts for any claim as have been reasonably substantiated as due under the relevant provision of the contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the contractor shall only be entitled to payment for such part of the claim as he or she has been able to substantiate.

The engineer must determine any extension of time and additional payments:

The engineer shall proceed in accordance with subclause 3.5 (determination) to agree or determine:

(i) the extension (if any) of the time for completion (before or after its expiry) in accordance with sub-clause 8.4 and/or

(ii) the additional payment (if any) to which the contractor is entitled under the contract.

The contractor then has to substantiate the claim and likewise the engineer is to consider and approve or disapprove the claim. The relatively short period within which substantiation is made and the engineer either accepts or rejects the claim can be difficult when considering delay and additional costs during the course of a project, but this can mean that disputes are discussed and agreed earlier than on other standard forms of contract. A dispute can crystallise during the course of the project and then be dealt with by the 'dispute adjudication board' for example, assuming that the contractor or employer refers the matter to the board. However, FIDIC anticipates and provides for either party to progress

matters to a conclusion during the course of a project rather than wait until the end of the project.

However, of importance for the chartered surveyor is that if the contractor fails to give notice of a claim within such period of 28 days, the relevant completion date shall not be extended, in addition the contractor shall not be entitled to additional payment for loss and expense, and the employer shall be discharged from all liability in connection with the claim.

Within 42 days after the contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the contractor and approved by the engineer, the contractor shall send to the engineer a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed.

2.6 Costs related to loss and expense

Construction contracts will generally provide for the contractor to claim direct loss and/or expense as a result of the progress of the works being materially affected by relevant matters (or compensation events etc.) for which the employer is responsible, including some or the entire list of the following issues dependant on the standard contract form or related subcontract in question:

1.1.1 Failure to give the contractor possession of the site.

1.1.2 Failure to give the contractor access to and from the site.

1.1.3 Delays in receiving instructions.

1.1.4 Opening up works or testing works that then prove to have been carried out in accordance with the Standard Form Contract.

1.1.5 Discrepancies in the contract documents.

1.1.6 Disruption caused by works being carried out by the employer.

1.1.7 Failure by the client/employer to supply goods or materials.

1.1.8 Instructions relating to variations and expenditure of provisional sums.

1.1.9 Inaccurate forecasting of works described by approximate quantities.

1.1.10 Issues relating to CDM (*Construction Design and Management Regulations*).

1.1.11 Claims may comprise costs resulting from disruption to the works or from delays to the works (prolongation). See the separate section on these heads of claim. Such claims need not necessarily result in a delay to the completion date, and so claims for extensions of time do not always mean that a claim for loss and expense is payable.

Claims are restricted to 'direct' loss and expense and so 'consequential losses' (such as lost production) are generally excluded (see *Hadley v Baxendale* (1854) above). Direct losses are those that 'flow naturally' from the breach of contract. JCT, NEC, FIDIC and other contracts have differing views on whether items such as head office overheads can be included in claims for loss and expense; however, some court decisions have included and allowed such claims.

Note: NEC3 contains provision for the contractor to claim payment for 'compensation events' rather than loss and expense.

2.7 Global claims

What is a global claim? As a definition global claims are those where a composite sum or global sum, comprising many differing quantum elements, is asserted by the contractor. Often it takes the form of a very simple, sometimes rough, estimate covering several areas of cost or claim, rather than a more detailed, particularised assessment. Further it is often said to apply where it may be 'impractical' or 'impossible' to provide a breakdown or full subdivision of the sum being claimed.

However, it is still very important that the chartered surveyor or compiler of a contractor's claim keeps contemporaneous records for the ascertainment of the amount due, dispatches the correct timeous notice and endeavours to mitigate such losses that may arise.

Examples of common global claims would be where the employer instructs the issue of a number of instructions that are proven to be late, or where the employer instructs of a number of variations which in aggregate instigate additional and extra costs, but where their constituent parts are indistinguishable from one another.

A claim for additional monies can be entertained on a global basis; however, the global approach should be avoided. The global approach to ascertainment should be restricted solely to events that cannot necessarily be particularised. Similarly, if elements of the claim can be particularised and detailed in a way that subdivides them sufficiently then these issues should be tackled in that way.

However, as a reminder bear in mind that a civil standard of proof applies to the contractor to evidence cost incurred, i.e. on the balance of probabilities. The chartered surveyor does not have to provide evidence 'beyond all reasonable doubt'.

2.8 Can all losses be recovered?

In short, no, not all. Not all contracts are the same and the clauses within standard contracts from different issuing bodies have different inclusions aims and priorities. If there are specific consequential losses that the parties to the contract wish to exclude, it may be prudent to state these explicitly within the contract. A generic list of possible items admissible as part of an ascertainment of loss and expense (which is to be read in tandem with the particular contract in question, as well as including those attributable to subcontracts) is as follows:

- prolongation costs (i.e. time related costs)
- general disruption
- finance charges
- loss of profits and
- wasted management time.*

*Or loss of head office overheads, here sometimes particular employees or senior management will be engaged in dealing with a project for substantially longer than a contractor may have anticipated at the time of tendering. When management time has been spent in dealing with the consequences of events causing delay or disruption for which the employer is responsible, a contractor may seek to be compensated for the same by the employer.

In addition, prelim thickening is a permissible claim item but it needs to be able to be proven. Also, it needs to be related to the claimed causation.

An example could be the amount of late information and the magnitude and number of variations being sufficient in scope and significantly different to the base scope works to have resulted in a requirement for extra resources, during the original contract period.

The costs for claim preparation can be considerable and these are not generally recoverable by the disadvantaged party.

The costs of acceleration are permitted in common with most standard form contracts providing it is not the contractor at fault, in some cases the standard form contract allows for an acceleration quotation (under the JCT a quotation by the contractor for an acceleration). If acceleration is required it should be achieved by means of a separate agreement between the parties.

See the RICS guidance note *Acceleration*, 1st edition (2011).

With regard to loss of profit and overheads the recent *Walter Lilly* case again provides some guidance.

A substantial sum in excess of £250,000 was asserted for loss of profit and overheads. This claim was based on the fact that as a result of the delay to the project, Walter Lilly was unable to take on other projects and therefore lost profit as a result. Furthermore Walter Lilly 'lost the opportunity to spread the cost of its head office overheads onto those other projects'.

The court made the following observations in relation to loss of profit/overheads claims:

- Contractors are entitled to recover lost profit and/or overheads which stem from delays caused by factors which entitle the contractor to claim loss and expense.
- Contractors must prove on a balance of probabilities that if the delay had not occurred, it would have secured work which would have resulted in a profit and/or a contribution to head office overheads.
- Using a formula such as the Emden formula or the Hudson formula is a legitimate and helpful way of ascertaining the value of the lost profit/overheads.
- The court, which was upbeat about Walter Lilly's detailed substantiation and record keeping of missed and lost tender opportunities, upheld their claim for lost profit and overheads in its entirety.

Extensions of time and concurrent delay were also tackled with the *Walter Lilly* case. It was found that where there are concurrent delays and one of them stems from a relevant event, the contractor is entitled to a full extension of time for the full period of time caused by the relevant event in question. This is often referred to as the 'dominant event' and is regardless of any concurrent delay that may be the contractor's fault. There can only be one dominant event being the cause of any particular period of delay. If the dominant cause is the contractual responsibility of the employer, the contractor will be due loss and expense and does not become liable for liquidated damages. If the dominant cause is the contractual responsibility of the contractor, his or her claim for loss and expense fails and he or she must pay liquidated damages for the period of delay.

See the RICS guidance note *Extensions of time*, 1st edition (2014).

3 Practical application (Level 2 – doing)

3.1 Ascertainment of loss and expense

3.1.1 Relevant matters – client/employer breach

The contractor is required, upon request, to submit such information as is reasonably necessary to allow the contract administrator to form an opinion on whether regular progress has been affected by a relevant matter or that loss and expense has been or is likely to be incurred due to such delay.

Relevant matters are matters that are either the fault of the employer, or for which the employer bears the risk contractually, which cause delay. Examples include: variations to the contract, legitimate suspension by the contractor and instructions of the architect/contract administrator.

Importantly, the list of relevant matters is not the same as the list of relevant events. The latter only entitles a contractor to an extension of time, not money.

3.1.2 Relevant matters – client/employer risk events

The JCT Design and Build Contract 2011 was amended to address the changes to the *Construction Act* (The Act) which came into effect in October 2011. There were relatively minimal changes affecting the ascertainment of loss and expense.

What is the purpose of the loss and expense provisions?

If the works are delayed the contractor may incur additional costs as it will probably have to maintain its site office and other on-site facilities for longer than expected. The contractor may also incur additional costs where the works are disrupted. For example, if the employer gives the contractor late information, the contractor may have to carry out part of the works in a different order and that disrupted works may be carried out less efficiently.

The loss and expense provisions in the JCT contract suite allow the contractor to recover its additional direct costs where the cause of the delay or disruption is a relevant matter (i.e. an employer instruction). The direct costs often include the contractor's site set-up costs, overhead costs, finance charges and loss of overheads and profit.

Contractor issues

Timing of the loss and expense application is important, particularly where the employer amends the notice or application provisions to include a short timescale. The recent case of *WW Gear Construction Limited v McGee Group Limited* (2010) confirmed that unless the contractor complies with the relevant timescales the employer does not have to consider the contractor's application.

The contractor should also make sure that the application includes enough information so that the employer can ascertain the amount of the loss and expense. This can be more challenging for disruption claims as it can be difficult to attribute loss of productivity to a particular relevant matter, although good site records often help to manage this issue.

Employer issues

Some consider that the list of relevant matters favours the contractor and therefore the employer may want to amend that list. For example, some employers do not allow the contractor to recover any loss and expense for delay or disruption caused by dealing with fossils and antiquities on the site. It is also usual for the employer to clarify that where there are two simultaneous causes of delay or disruption, one of which is a relevant matter and one of which is a contractor risk, the contractor is not entitled to any loss and expense. Although arguably recent cases suggest that this is the position in common law, it is advisable to highlight this area to the commercial team.

JCT clauses reserving the contractor's common law rights go some way to providing the contractor possibly the best of both options, as it allows it to make a claim for general damages in common law in addition to its right to claim loss and expense under the contract. This clause is quite often amended or indeed deleted.

3.1.3 Records

The contractor must keep factual and contemporary records in order to substantiate its claim. Contemporary records are those that are original or 'primary documents', or (good) copies thereof, these documents should ideally be produced at the time of the claim in question occurring. FIDIC legal cases have emphasised the need for the instantaneous keeping of records, which document the events and circumstances at the time of, or certainly very close to the time of, the claim.

It is very important therefore for the claim writer or compiler to document the issue in question with the relevant, preferably primary, documents. Ordinarily documents are to be kept in date order for contemporaneous records and again preferably each given a unique reference.

Apart from drawings issued by the employer, written instructions and correspondence, other records that can be used to substantiate loss and expense claims include:

- contractor's programme and amendments
- relevant invoices and proofs of payment
- site diaries

- site reports
- site measures
- clerk of works reports
- day work records
- photographs (to include location, time and date)
- minutes of meetings and
- labour allocation sheets.

3.1.4 Notices

During the currency of the works in a project, the correct issue of a notice in accordance with the contract clauses is sometimes overlooked. But what can be the effect of this failure? In other words can this failure to submit a timely application for recovery of loss and expense ultimately prevent entitlement? A judgement in the case of *WW Gear Construction Limited v McGee Group Limited* [2010] EWHC 1460 TCC, found that it was held that the contractor's entitlement to pursue such losses under the contract would be compromised when failing to comply with the timing and application of the notice provisions as set out in the JCT contract (the contract in this case was an amended JCT Trade contract)

Therefore, on that basis it is important to follow the notice provisions in the particular contract. In the above case the contractor had no entitlement to recover loss and expense unless and until it had made a timely application, not later than two months after it became apparent that the progress of the works would be affected.

With NEC3 the contractor must notify the project manager within eight weeks of becoming aware of an event that it considers to constitute a compensation event.

If the contractor fails to do so, it may not be entitled to a change in price (clause 61.3). Or if the project manager decides that costs were incurred, whether pursuant to a compensation event or otherwise, only because the contractor failed to give an early warning notice required under the contract, then those costs become disallowed costs (clause 11.2(25)).

Early warning notices, risk registers and risk reduction meetings are formal requirements that are not present in the JCT Standard forms.

The NEC3 requirement for the contractor to provide quotations for compensation events has its own hurdles to overcome in terms of the notice itself, timing of submission of quotations, and responses by the project manager.

Assessments of defined cost and disallowed costs are often disputed; the provision in clause 11.2(25) for disallowing 'cost which the Project Manager decides is not justified by the Contractor's accounts and records' is a particularly renown area for scrutiny.

NEC3 requires the contractor to maintain auditable records with the sufficient level of detail. Invoices for example, require adequate detail to show that such expenditure has been properly incurred. Can the invoice be proven as paid? Also in addition can it be proven there was undue wastage?

Most standard contracts have time bar clauses. In FIDIC the provisions of clause 20.1 are intended to be a condition precedent to the contractor's claim for an extension of time and additional money/loss and expense.

Again, there is some gravity regarding the FIDIC provision as that will exclude the employer's liability to the contractor unless the contractor first provides the notice within time.

In the UK it appears that the courts have taken the view that timescales in construction contracts are not mandatory, but rather directory.

However, it is advised to follow the provisions of the particular contract or subcontract concerning the issue of notices in order that the party does everything possible to protect its position in its claim for additional money. The flip side of giving timely notices is that it may allow the party in default to remove that default or at least take steps to mitigate the loss and expense caused.

3.1.5 Disruption

Both disruption and prolongation are claims that can lead to loss and expense. The costs for disruption when tied to an employer/client event are generally related to loss of productivity and/or uneconomic working. This head of claim is different from prolongation costs, which are detailed in the following section. There may in fact be no delay at all, yet the contractor nevertheless incurs costs as a result of inefficient deployment of labour or plant (obviously not by his or her own volition).

If the contractor can show that the planned and actual use of labour and plant differed, and this difference can be tied to the said employer event the contractor can recover the costs incurred by working at a different time or in a different sequence. For example, such an employer event would be late changes imposed to the construction programme by the employer.

With this example, if the employer issues the contractor with information that is late and can be determined as such, the contractor may have to carry out part of the works in a different order and that disrupted works may be carried out less efficiently or uneconomically, but without delaying the completion date.

3.1.6 Prolongation

The costs for prolongation are generally borne from the costs of additional on- and off-site overheads occasioned by delay to construction works. Again this head of claim is different from disruption costs (see subsection 3.1.5). They may include 'fluctuations', allowing the contractor to recover increases in the cost of staff costs, materials or plant as a result of delay.

An example of prolongation would be the employer failing to give the contractor possession of the site for two months from the date specified in the contract and this consequently pushes the substructure build into the winter period.

Another example could be employer delays in giving instructions to the contractor and so on. Consequently the

contractor may incur additional time-related costs as a result of having to remain on site for longer than anticipated, hence incurring additional staff and supervision costs, plant and site set-up costs and off-site overheads (such costs are detailed in the lists in appendix A).

3.1.7 Mitigation of cost

This issue covers the mitigation of unnecessary costs and not the mitigation of delay (time) to the construction programme. So when a party has caused a breach of contract, damages may ensue in one form or another. The other party may, however, recover its loss and expense in taking reasonable steps to mitigate the loss due to breach of contract. The term reasonable steps can be interpreted differently, but in some instances even if the mitigation measure or measures taken ultimately are found to be unsuccessful and further increase the loss, these measures can be found to be reasonable and accepted. They can also reduce the quantum of the damages claimed.

4 Practical considerations (Level 3 – doing/advising)

4.1 Methods of analysis of loss and expense

4.1.1 Prolongation of preliminaries

In order to correctly ascertain the loss and expense for preliminaries it is important to subdivide them into their constituent parts, these are listed in appendix A and also summarised below:

(a) **Site set-up costs** which are certainly admissible where additional plant is properly brought onto the site. If plant is already on site, setting-up costs would rarely be admissible unless setting up has been delayed by a relevant matter and inflation has occurred which is not reimbursable under the fluctuations clauses.

(b) **Removal costs** which are admissible in the same way as setting-up costs.

(c) **Additional hire charges** are generally reimbursable if the particular item is required to be kept on site longer than otherwise would have been the case due to the relevant matter.

The comparison is between the period of time that the item would have been on site had the matter not occurred and the period of time that it was reasonable to have been on site given that the matter did occur. Where the plant in question is owned by the contractor, the measure of the loss is the amount (if any) that could have been earned by using the plant elsewhere had it not been tied up on the site for longer than would have been the case if the matter in question had not occurred. These can include accommodation, lighting and power for example.

(a) **Additional running charges** would be reimbursable if, due to a relevant matter, the particular item is required for a longer period than otherwise would have been the case. Again the comparison is between the period that the item would have been in use had the matter not occurred and the period that it was reasonable to have been in use given that the matter did occur. These can include staff, insurances, additional management, and security, for example.

4.1.2 Disruption (of labour)

The ascertainment of the cost of disruption to labour is invariably a difficult and wide reaching process. Consider the following:

(a) In all circumstances avoid the application of an overall percentage to global labour costs; it would be quite unusual that the whole project labour costs on a major scheme, for example, are disrupted.

(b) Wherever possible request that contemporary records be kept, noting the output achieved in practice by the particular labour resource that is being affected and hence disrupted. Project attendance records and/or clerk of works records and site diaries can be invaluable evidence of this.

(c) Be cognisant as to whether any delay comprises a multitude of fragmented or smaller delays or, in the alternative, a major delay. In the former case the proportional loss of output can be very high, whereas in the latter case the loss can be mitigated by reprogramming and redeploying resources elsewhere.

(d) Recognise that there can certainly be a 'learning curve' in most or if not all activities. The advantage of this can be lost if new resource is requested to undertake tasks that have become familiar to others; the resultant additional cost will be reimbursable.

Furthermore, if additional labour has to be recruited at short notice it may be necessary to pay premium rates that would in principle be reimbursable.

(a) With contract changes, whether multiple or large and onerous in nature, late instructions and so on, much of the work of labour will not actually be significantly affected. As an example, the fitting of wall tiles or screed floor finishes may suffer very minimal delay. The subsequent loss and expense may be associated with becoming familiar with an unexpected or unplanned task, or something not envisaged in the as planned programme.

(b) Economies can improve with some of the more repetitive tasks, for example hanging internal doors in terraced units with the same repetitive floor layout. However, when an event stops this flow the economy of repetition can be lost.

(c) The measured mile.

One of the most appropriate methods to employ to establish disruption is to apply a technique known as the 'measured mile'. This technique provides for the comparison of productivity achieved on a non-impacted (or 'base') part of the contract with that achieved on the impacted part.

This technique should dispel any argument concerning underestimating and inefficient working. An example of the measured mile technique can be seen by reference to the decision in a 1985 case *Whittall Builders Company Ltd v*

Chester – Le – Street District Council. On this project certain difficulties were experienced by the employer in giving possession of dwellings on a project. It was found that during the period when these problems arose the contractor was grossly hindered in the progress of the work and as a result ordinary planning was rendered impossible. This measured mile approach simply compared the 'value of work output' produced in a non-impacted period to that of an impacted period.

The calculation can be based upon the man-hour expended for the resource.

It is important to consider such impacted and non-impacted periods on a timeline after work considered to be on the 'learning curve' has already been executed.

4.1.3 Additional (extra waste) and abortive material purchase

These elements are often overlooked as they can be minimal or difficult to calculate, but in principle the repeated double handling of materials, stores or compounds following a relevant matter may well result in additional waste. Providing the contractor has not been at fault and he or she can prove as such, this cost will properly form part of any ascertainment.

In the alternative, it may be that materials properly purchased for the ongoing works (and purchased timeously) have been omitted by a subsequent contract change. Provided that such materials were not purchased prematurely the cost would again properly form part of any ascertainment.

4.1.4 Inflation

In times of low inflation this cost head may not be applicable, but if work is executed later than otherwise would have been possible as a result of a relevant matter and if inflation has caused the cost to rise then, provided that such costs are not reimbursable under the fluctuations clause, they will form part of the ascertainment. Even where the contract contains a fluctuations clause, if it contains a non-adjustable element, a delay in the execution of work might well increase the non-recoverable element, which would be reimbursable.

4.1.5 Increased costs of head office overheads

Loss in the recovery of head office overheads is an admissible item but the amount of such loss may be difficult to substantiate. Overall percentages, not related to the particular circumstances at hand, are not generally to be utilised.

The chartered surveyor should therefore consider the method adopted by the contractor as his or her policy in incorporating these costs in his or her tenders, which can comprise:

- a percentage
- lump sum(s) (detail how these are in fact compiled) and
- the spread in rates of all items.

The increased costs of head office overheads can involve much compilation of relevant data and records to provide proper substantiation, this can include for example:

- time records or diaries that may indicate additional time spent with consequential financial disbursements (this should be time arising from relevant events over and above that which would have been spent on the normal functions of administration of the contract)
- proof of payments made on all admissible items and
- details showing build-up of general head office costs at the relevant time or throughout any relevant period.

Wherever possible, seek proper verification of such items as extra site visits or greater involvement by head office staff in managing the project as a result of the matters giving rise to a claim. Since the 1960s construction case law (*Wraight Ltd v PHT Holdings Ltd* (1968) 13 BLR 26 and *Peak Construction (Liverpool) Ltd c McKinney Foundations Ltd* (1970) 1 BLR 114) has led to general agreement that head office overheads or 'unabsorbed overheads' are a legitimate constituent part of direct loss and expense, providing the contract conditions do not specifically exclude them.

Three methods using a formulaic approach, used as calculating the unabsorbed overhead as the overhead calculation, would otherwise be complex. However, the two main formula methods used in the United Kingdom are Hudson's and Emden's and the third Eichleay is very rarely used. Eichleay's formula was developed by Eichleay in the United States in the Appeal of Eichleay Corporation, ASBCA 5183, 60-2 BCA (CCH) 2688 (1960) and was approved in the United States case of *Capital Electric Company v United States*.

Hudson and Emden use the following formula:

$$\frac{h}{100} \times \frac{c}{cp} \times pd$$

Whereby:

- h = head office overheads and profit per cent included in the contract (Hudson's) or
- h = per cent arrived at by dividing total overhead costs and profit of the contractor's organisation as a whole by total turnover (Emden's)
- c = contract sum
- cp = contract period
- pd = period of delay in weeks.

However, if it can be evidenced that other work was available for tendering and that actual costs were used to calculate the unabsorbed overhead, then this is perhaps preferable to the formulaic method.

4.1.6 Loss of profit

If, as a direct result of a relevant matter referred to in the conditions of contract (for JCT), then potentially loss of profit is suffered that could have been gained in the normal

course of the contractor's business elsewhere, there is an entitlement to reimbursement of that profit.

This amount should be calculated by reference to the level of profit to have been made by the use of the resources on other projects during the period of retention on site as a direct result of the cause of delay. The level should be that prevailing in the market during the period immediately following the original date for completion or such earlier date at which the resources would have been released from the contract.

However, this can, in some instances, be greater or indeed less than that contemplated in the contract sum. Furthermore, where loss of profit is being calculated as a result of a delay caused by the execution of changes it is important that a deduction be made for any other profit reimbursed to the contractor for those changes priced at contract rates.

Note that for profit under FIDIC this is not recoverable, unless expressly allowed for in the contract. Profit is excluded from both the definition of cost and by clause 17.6. Likewise lost commercial opportunities and business interruption are generally not recoverable.

4.1.7 Finance charges

Interest may be chargeable on sums due under loss and expense. Under the conditions of JCT Design and Build Contract 2011, the definition and interpretation states that for the interest rate 'a rate of 5% per annum above the official dealing rate of the Bank of England at a date that a payment due under this contract becomes overdue'. The claiming party will have the statutory right available under the *Late Payment of Commercial Debts (Interest) Act* 1998. The JCT form expressly notes that the payment of contractual interest may not be construed as a waiver by the contractor of his or her rights to proper and timely payments. However, finance charges are not an interest on a debt, but a debt that has interest charges as one of its component parts that have been paid by a contractor on money that was borrowed (or interest that could not be earned on capital) in order to finance the prime cost of the loss and expense. Such finance charges are reimbursable.

Finance charges are recoverable from the date that the primary loss and expense was incurred up to the time that the certificate, which included the payment of that loss and expense, was issued, provided, as always, that the conditions in the contract in that respect have been met.

The rates and manner of interest payable should be those actually incurred (or being earned on capital).

4.2 Strengths and weaknesses of the various methods

Prolongation

With prolongation costs, the onus is often with the contractor to substantiate the additional costs borne from both on- and off-site overheads occasioned by delay to construction works. This can be a time consuming task requiring detailed and meticulous record keeping. The contractor may have sufficient resource to cater for this additional requirement but if not additional resource may be required. There will no doubt be an additional cost for the resource notwithstanding office space for the work and also storage of data and documentation. However, bear in mind that the actual costs in preparing the claim are inadmissible.

Disruption

General disruption is linked to the loss of productivity and/or uneconomic working that a contractor suffers. Difficulty can arise if the contractor's tender is not sufficiently particularised at tender to be able to determine what the baseline productivity should have been and what the individual outputs were envisaged to be. In these instances where the original productivity has to be assessed and then compared to the actual, criticism can be raised in that sufficient proof has not been provided for the comparison.

Finance charges

With this head of claim and where payments are overdue a percentage interest rate may be included in the standard form of contract, such as 5% above the official dealing rate of the Bank of England; if no such percentage rate is evident then the Late Payment of Commercial Debts (Interest) Act 1998 can be utilised to form the basis for the percentage rate for financing. This is 8% together with the Bank of England Base rate, currently this is 0.5%, and therefore in aggregate the statutory interest for a recent debt would be 8.5%. In loss and expense it is for the claim compiler to demonstrate the actual costs of the working capital to fund the additional expenditure that has been incurred.

Loss of head office overheads and profit

Loss of profit is generally not recoverable under FIDIC contracts. However, for other contracts, such as JCT, it is recoverable.

Again using the example of *Walter Lilly*, the court determined the following four principles:

1 A contractor can recover overhead and profit lost as a result of delay if that delay was caused by factors that entitle it to loss and expense (the relevant matters are listed in the contract). However, the relevant matters still have to be sufficiently detailed.

2 A contractor must prove, on the balance of probabilities, that if the delay had not occurred it would have secured new work or projects, which would have produced a return. This can be difficult to prove but can be evidenced by tender opportunities received during the period of time in question.

3 Use of a formula, such as the Hudson or Emden formula, is a legitimate way of determining entitlement on the balance of probabilities. However, the actual cost compiled logically would be difficult to refute, but may take much time resource to produce.

4 Finally 'Ascertainment' by the contract administrator of these losses does not mean he or she has to be 'certain'.

Loss and expense, whether pursued through the contract mechanism or through common law, does not need to be 100% precise, but additionally these costs cannot be the subject of 'loose' or 'say' estimates. There has to be a measure of logic and structure, furthermore if it has been ascertained that some costs can be substantiated but not others it can sometimes throw a difficult light on the balance of the loss and expense claim. For that reason when compiling a claim if certain items can be particularised and proven, for example such as the provision of an invoice together with a proof of payment of that invoice and the wording of the invoice is sufficiently detailed to show the additional resource, then this would again be difficult to refute.

The limitation to certainty can be raised as a weakness and hence a defence to a claim for lost profits. In general the rules regarding certainty apply to claims for loss of profit only.

With regard to claims for lost profit, it is important to distinguish between the profit lost directly say by the contractor from the non-performance of a contract and profits lost in a collateral transaction. To recover lost profits when the employer's actions prevents the contractor from profiting from a 'collateral transaction', the contractor must show that both the parties contemplated the contractor's entry into the collateral transaction. If it could be proven that the employer was aware of the contractor's collateral transaction when the contract was made then the lost profits will ordinarily be recoverable.

Wasted management time

This head of claim can be both difficult to record and difficult to prove. The other party must be able show that the other party's actions caused the loss. In addition for these claims for the recovery of wasted management time and the associated costs, the other party must show that the actions forced upon it caused a significant disruption to its business such that it was absolutely necessary to divert its employees or senior management away from their usual tasks and activities. Records are the best way to prove this head of claim as well as memoranda, letters and documents explaining the temporary diversion of staff.

However, even if the conditions precedent including notices, periods and submissions are all followed in accordance with the contract or subcontract, the material content may be deemed insufficient by the receiving party. It is therefore of vital importance to include as much relevant contemporaneous documentation and records as possible to substantiate the loss and expense claim.

4.3 Advice to the parties to a construction contract

When ascertaining a contractor's entitlement it is the actual loss and/or expense that are relevant. The prices in the contract bill of quantities, contract schedule of rates or preliminaries should not be used, as the actual costs may be more or less than these.

In addition, the general rule of damages is that the type or kind of loss payable is that 'as may reasonably be supposed to have been in the contemplation of both parties, at the time they made the contract, as the probable result of the actions of one of the parties.

Hence it is necessary that each application for additional monies in the form of loss and expense conforms fully to the rules written into the contract about them (i.e. time for notices, substantiation, for further and better particulars).

The contractor must keep such records as are necessary for the ascertainment of the amount due for loss and expense. This needs to be implemented at the time or near to the time of the relevant matter occurring.

A global approach to ascertainment of loss and expense should be avoided if possible or at the very least restricted to events that create indistinguishable effects or cannot be easily separated from one another. Therefore, it is not acceptable practice to endeavour to punish a contractor by denying reimbursement simply because additional costs were incurred that could not by their nature be particularised. However, if costs can at all be properly particularised they should be and not hidden within the global cost claim in the hope that they will be overlooked.

In general, the chartered surveyor should ensure that the basis, calculations and evidential records used in the ascertainment are recorded in writing. This may be a mandatory requirement on most public sector contracts.

The chartered surveyor or claim compiler has to include an element of professional judgement in ascertaining the contractor's entitlement to reimbursement of loss and expense. This is because judgement in estimation will be required as to what the contractor's cost would have been, had the relevant delay or disruption not taken place.

However, in forming that judgement the best evidence available should always be used in reference. For example, where there is continuous work that has not been affected by delay or disruption this might well provide good evidence of the progress that the contractor could have been expected to have made generally. Avoid provisional assessments unless the contract requires them so.

Thus, wherever ascertainment can properly be made part of a contractor's entitlement it is important that this is done promptly and the relevant amounts be certified for payment. If part of a contractor's entitlement can be wholly ascertained then it should be.

Appendix A: Preliminaries: ascertaining the cost of running a site: guide for use

Staff and administration

- staff salaries (including subsistence, guaranteed bonuses and allowances where paid)
- travel costs, including cars and fuel
- national insurance, pensions etc. – employer's contributions
- private health insurance – employer's contributions
- employer's liability insurance, third party insurance
- training levy, CITB costs
- redundancy fund, holidays with pay, superannuation and
- agency staff where applicable. These costs can also include security and welfare personnel and the supervisory roles and associated time of trades foreman and the like.

Temporary accommodation

- temporary offices – rental/repairs and maintenance
- site stores – rental/repairs and maintenance
- site canteen and equipment – rental/repairs and maintenance
- canteen consumables
- signage, site boards and notices
- extinguishers, fire-fighting equipment
- first-aid equipment
- nurse/first-aider
- site welfare and safety
- gas, water and electricity
- rates on temporary buildings
- telephone/PC/system rental
- land line and mobile telephone/Data usage/ servers/ telephone calls
- office furniture
- photocopiers – equipment and consumables
- office consumables and stationary
- drawing and copying
- postage/franking machine
- office cleaning
- sanitary accommodation and welfare facilities
- general cleaning and disposal
- general site wear and
- progress photographs and printing.

Plant

- craneage
- banksmen and slingers
- weighbridge
- wheel washing facilities
- compressors
- concrete batching/mixers
- pumps
- hoists
- site surveying equipment
- site/crane radio system
- concrete testing
- general site equipment
- small plant and tools and
- rubbish removal (skips).

Temporary works/access

- temporary roads – maintenance and
- clean access and site roads.

Fencing and security

- site boundary fencing/hoarding
- site compound fencing
- site security and
- temporary weather proofing.

Distribution

- service gang – cleaning, attendance and distribution
- forklifts, telehandlers and drivers
- dumpers and drivers
- telescopic hoists, including driver
- internal site transport and
- hoist attendants.

Scaffolding

- additional hire
- adaptations and
- additional work – for example safety rails where scaffolding removed.

Site temporary electrics

- equipment – generators, transformers etc.
- fuel consumption
- consumables and
- maintenance.

Temporary water

- water and sewerage – rates/metered consumption and
- maintenance.

Insurance

- contractor's all risk
- public liability
- professional indemnity and
- performance bond.

Head office staff cost

- The certain proportion of time spent on the project, which is only applicable if not booked directly to the project.

Confidence through professional standards

RICS promotes and enforces the highest professional qualifications and standards in the development and management of land, real estate, construction and infrastructure. Our name promises the consistent delivery of standards – bringing confidence to the markets we serve.

We accredit 118,000 professionals and any individual or firm registered with RICS is subject to our quality assurance. Their expertise covers property, asset valuation and real estate management; the costing and leadership of construction projects; the development of infrastructure; and the management of natural resources, such as mining, farms and woodland. From environmental assessments and building controls to negotiating land rights in an emerging economy; if our members are involved the same professional standards and ethics apply.

We believe that standards underpin effective markets. With up to seventy per cent of the world's wealth bound up in land and real estate, our sector is vital to economic development, helping to support stable, sustainable investment and growth around the globe.

With offices covering the major political and financial centres of the world, our market presence means we are ideally placed to influence policy and embed professional standards. We work at a cross-governmental level, delivering international standards that will support a safe and vibrant marketplace in land, real estate, construction and infrastructure, for the benefit of all.

We are proud of our reputation and we guard it fiercely, so clients who work with an RICS professional can have confidence in the quality and ethics of the services they receive.

United Kingdom RICS HQ
Parliament Square, London
SW1P 3AD United Kingdom

t +44 (0)24 7686 8555
f +44 (0)20 7334 3811
contactrics@rics.org

Media enquiries
pressoffice@rics.org

Ireland
38 Merrion Square, Dublin 2,
Ireland

t +353 1 644 5500
f +353 1 661 1797
ricsireland@rics.org

Europe
(excluding UK and Ireland)

Rue Ducale 67,
1000 Brussels,
Belgium

t +32 2 733 10 19
f +32 2 742 97 48
ricseurope@rics.org

Middle East
Office G14, Block 3,
Knowledge Village,
Dubai, United Arab Emirates

t +971 4 446 2808
f +971 4 427 2498
ricsmenea@rics.org

Africa
PO Box 3400,
Witkoppen 2068,
South Africa

t +27 11 467 2857
f +27 86 514 0655
ricsafrica@rics.org

Americas
One Grand Central Place,
60 East 42nd Street, Suite 2810,
New York 10165 – 2811, USA

t +1 212 847 7400
f +1 212 847 7401
ricsamericas@rics.org

South America
Rua Maranhão, 584 – cj 104,
São Paulo – SP, Brasil

t +55 11 2925 0068
ricsbrasil@rics.org

Oceania
Suite 1, Level 9,
1 Castlereagh Street,
Sydney NSW 2000. Australia

t +61 2 9216 2333
f +61 2 9232 5591
info@rics.org

North Asia
3707 Hopewell Centre,
183 Queen's Road East
Wanchai, Hong Kong

t +852 2537 7117
f +852 2537 2756
ricsasia@rics.org

ASEAN
10 Anson Road,
#06-22 International Plaza,
Singapore 079903

t +65 6635 4242
f +65 6635 4244
ricssingapore@rics.org

Japan
Level 14 Hibiya Central Building,
1-2-9 Nishi Shimbashi Minato-Ku,
Tokyo 105-0003, Japan

t +81 3 5532 8813
f +81 3 5532 8814
ricsjapan@rics.org

South Asia
48 & 49 Centrum Plaza,
Sector Road, Sector 53,
Gurgaon – 122002, India

t +91 124 459 5400
f +91 124 459 5402
ricsindia@rics.org