

Subcontracting

UK

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SUBCONTRACTING

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RICS professional standards and guidance

RICS guidance notes

Definition and scope

RICS guidance notes set out good practice for RICS members and for firms that are regulated by RICS. An RICS guidance note is a professional or personal standard for the purposes of *RICS Rules of Conduct*.

Guidance notes constitute areas of professional, behavioural competence and/or good practice. RICS recognises that there may be exceptional circumstances in which it is appropriate for a member to depart from these provisions – in such situations RICS may require the member to justify their decisions and actions.

Application of these provisions in legal or disciplinary proceedings

In regulatory or disciplinary proceedings, RICS will take account of relevant guidance notes in deciding whether a member acted professionally, appropriately and with reasonable competence. It is also likely that during any legal proceedings a judge, adjudicator or equivalent will take RICS guidance notes into account.

RICS recognises that there may be legislative requirements or regional, national or international standards that take precedence over an RICS guidance note.

Document status defined

The following table shows the categories of RICS professional content and their definitions.

Publications status

Type of document	Definition
RICS Rules of Conduct for Members and RICS Rules of Conduct for Firms	These Rules set out the standards of professional conduct and practice expected of members and firms registered for regulation by RICS.
International standard	High-level standard developed in collaboration with other relevant bodies.
RICS professional statement (PS)	Mandatory requirements for RICS members and RICS regulated firms.
RICS guidance note (GN)	A document that provides users with recommendations or an approach for accepted good practice as followed by competent and conscientious practitioners.
RICS code of practice (CoP)	A document developed in collaboration with other professional bodies and stakeholders that will have the status of a professional statement or guidance note.
RICS jurisdiction guide (JG)	This provides relevant local market information associated with an RICS international standard or RICS professional statement. This will include local legislation, associations and professional bodies as well as any other useful information that will help a user understand the local requirements connected with the standard or statement. This is not guidance or best practice material, but rather information to support adoption and implementation of the standard or statement locally.

Glossary

ACA	Association of Consultant Architects
CA	Architect/contract administrator
CECA	Civil Engineering Contractors Association
Construction Act	The Housing Grants, Construction and Regeneration Act 1996, as modified by the Local Democracy, Economic Development and Construction Act 2009
Contract sum	The sum to be paid by the employer to the main contractor under the main contract for carrying out the main contract works
Employer	The person who employs the main contractor to carry out and complete the main contract works
FIDIC	Fédération Internationale des Ingénieurs-Conseils (International Federation of Consulting Engineers)
ICE	Institution of Civil Engineers
ITT	Invitation to tender
JCT	The Joint Contracts Tribunal Limited
JCT DBSub 2016	JCT Design and Build Sub-Contract 2016
Main contract	The contract between the employer and the main contractor, under which the main contractor is employed to carry out and complete the main contract works
Main contractor	The person contracted by the employer to carry out and complete the main contract works under the main contract, and who employs the subcontractor to carry out and complete the subcontract works
Main contract works	The works to be carried out and completed by the main contractor under the main contract
NEC4 ECS	NEC Engineering and Construction Subcontract, fourth edition, June 2017

Step-down clause	A clause included in a subcontract under which the subcontractor agrees to observe, perform and comply with the main contractor's obligations under the main contract as they apply to the subcontract works	
Subcontract	The subcontract between the main contractor and the subcontractor under which the main contractor employs the subcontractor to carry out and complete the subcontract works	
Subcontractor	The person the main contractor employs to carry out and complete the subcontract works under the subcontract	
Subcontract package	A package of work (part of the main contract works) that is open to tenders from potential subcontractors	
Subcontract works	The works to be carried out and completed by the subcontractor under the subcontract, which form part of the main contract works	
Sub-subcontract	A contract between the subcontractor and a subsubcontractor, under which the subcontractor employs the sub-subcontractor to carry out and complete part of the subcontract works	
Sub-subcontractor	A person the subcontractor employs to carry out and complete the sub-subcontract works	
Sub-subcontract works	The works to be carried out and completed by the sub- subcontractor under the sub-subcontract, which form part of the subcontract works	

1 General principles (level 1 – knowing)

1.1 What this guidance note covers

As this guidance note forms part of the RICS quantity surveying and construction standards (the Black Book), it follows the standard structure, dividing the guidance into three chapters:

- general principles (level 1 knowing)
- practical application (level 2 doing) and
- practical considerations (level 3 doing/advising).

This guidance note covers most issues that can arise as a result of subcontracting on a major project, but some of these issues will not arise on most smaller projects. It is necessarily limited in its content and focuses on subcontracting in the context of building and civil engineering projects in the UK, but not private finance initiative (PFI) projects. It does not cover the management of subcontractors on site, or the role of suppliers of materials or goods.

1.2 What is a subcontractor and what is subcontracting?

In the context of a construction contract, a subcontractor is a person who agrees to perform some or all of the obligations that the main contractor is obliged to perform under a separate main contract with the employer. Subcontracting is therefore the subletting, by the main contractor to the subcontractor, of the performance of some or all of the main contractor's obligations under the main contract.

In many cases, the subcontract works will include supplying materials and carrying out work, and in some cases the subcontractor will also be obliged to carry out design work. In other cases, the subcontract works will only consist of carrying out work.

Almost all construction work involves subcontracting. It is not uncommon for the majority of the main contract works to be carried out by subcontractors, with the main contractor taking a role in managing and controlling the subcontractors. Therefore, the number of subcontractors involved in the main contract works may be very high – sometimes up to 100. This can include subcontractors who carry out a significant part of the main contract works (e.g. the structural works, the mechanical and electrical works or the cladding) and subcontractors who carry out other related works (e.g. the site hoarding works or site cleaning activities). The value of works carried out by subcontractors can be a very high proportion of the value of the main contract works, and could be as high as 85–90%.

Subcontracting of contractual obligations is permitted under law. It is also generally the case that the main contractor will remain responsible to the employer for the completion of the subcontract works. This may not apply if the employer selects the subcontractor and requires the main contractor to employ them; such a situation can alter the contractual responsibility of the main contractor for any failure to perform on the part of the subcontractor selected by the employer.

The main contract may expressly prohibit the main contractor from subcontracting any or all of its obligations under the main contract. Such a prohibition would be unusual, but it is common for main contracts to contain a term that prohibits the main contractor from subcontracting the whole or any part of the main contract without the employer's written consent (usually this consent must not be unreasonably delayed or withheld). In many cases, each subcontractor will be an essential member of the team that will carry out and complete the main contract works. The main contractor will usually view subcontractors in that way, and will work closely with them. In some cases the main contractor and subcontractor may have an arm's-length relationship, for example, where the subcontract works are not critical and form only a small part of the main contract works.

This chapter covers the following information concerning subcontracting:

- historical background
- key subcontractor bodies in the UK construction industry
- pros and cons of subcontracting
- types of subcontractors
- procurement and tendering overview
- post-tender changes
- key features of a subcontract
- providers of standard forms of subcontract
- amending standard forms of subcontract and
- bespoke/in-house forms of subcontract.

1.3 Historical background

Since the 1960s there has been a general increase in subcontracting as a result of economic, cultural and technological factors.

In 1966, the UK government introduced selective employment tax (SET), a tax on a firm's payroll. To reduce their tax liability, contractors therefore sought to reduce the percentage of their labour force that was directly employed. This increased the amount of work that was subcontracted. In 1972, a strike affected much of the UK construction industry. This acted as a disincentive for contractors to employ their own labour, which might be influenced by trade unions, causing a further increase in the amount of work that was subcontracted. Although SET was repealed in 1972, the trend was not reversed.

In addition, construction technology has become more complex. This gave rise to the need for highly developed skills and expertise, resulting in an increase in specialist trades. For example, mechanical and electrical services have become increasingly complex, with much of the work having to be subcontracted to specialists in particular disciplines, such as building management systems, electronic controls and data installations. The market drives the requirement to adopt the latest technologies; it follows that specialist subcontractors are essential to the success of a project.

1.4 Key subcontractor bodies in the UK construction industry

Build UK was formed in September 2015 by a merger of the UK Contractors' Group and the National Specialists Contractors' Council. The merger was in response to calls from the government for a single

voice for the construction industry. Build UK represents over 30 specialist trade associations, as well as some main contractors and client organisations.

SEC Group represents the interests of specialist contractors across the UK and is made up of the British Constructional Steelwork Association, Electrical Contractors' Association, Building Engineering Services Association, Lift and Escalator Industry Association, Scaffolding Association, SELECT (Electrical Contractors' Association for Scotland) and the Scottish and Northern Ireland Plumbing Employers' Federation (SNIPEF). The focus of SEC Group is on providing high-level, coordinated representation for engineering specialists and support trades working in the construction industry.

1.5 Pros and cons of subcontracting

1.5.1 Pros

The key reasons for subcontracting fall into project-related and business-related categories.

Project-related reasons include:

- The main contractor does not have the necessary skills to carry out the works to be subcontracted, such as specialist design and/or construction works.
- The main contractor requires additional resources for a particular project.

Business-related reasons include:

- The main contractor is able to respond to increases and decreases in workload without substantially increasing or decreasing its own resources, such as labour and plant; this provides them with additional flexibility.
- The main contractor might wish to transfer contractual risks and/or liabilities to subcontractors, for example, in relation to failure to complete work on time or defective work.
- The main contractor is better able to forecast and manage its cash flow, as money generally flows down a contractual chain: the employer pays the main contractor and the main contractor then pays the subcontractor.
- The main contractor can reduce the cost of training, research and development.
- Governments often seek to encourage enterprise and initiative, including by way of tax incentives, so that there is a larger pool of self-employed potential subcontractors available.

1.5.2 Cons

Although subcontracting is commonplace, it is not without potential drawbacks. This guidance note does not describe such drawbacks in detail, but some examples are set out below:

• Subcontracting might restrain the development of skills and innovation. Where an industry subcontracts a lot of work, a potential consequence is that specialists become the focal point for training, research and development. However, where specialists in a particular trade sit at a lower tier of the supply chain, they might lack the resources to provide the training, research and development required to improve skill levels and innovation. Main contractors might also decide that it is no longer business critical for them to develop skills and innovation in certain specialist trades, to the disadvantage of the main contractors, the specialists and the construction industry as a whole.

- Main contractors lose a degree of management and control over specialist work, which, coupled with the potential reduction in skill level of the main contractor's staff, may lead to a reduction in quality.
- Main contractors might form the view that subcontracting is a key part of their risk management strategy on the premise that if risks are passed down a contractual chain to subcontractors, the risks have been adequately managed. However, a better view is that passing risks to subcontractors is not a complete approach to risk management. At best, subcontracting might reduce but will not eliminate the impact of a risk on the main contractor if it occurs.
- Where risk is passed down the supply chain, it may go too far and become inappropriate 'risk dumping', for example, where the risk is passed to a subcontractor who has no hope of managing the risk. The potential for the risk to be improperly managed increases, and this can give rise to collateral problems and costly disputes.
- Subcontracting can lead to the industry operating by way of one-off (or project-specific) teams, which are disbanded at the end of the project with a consequent loss of learning, experience and know-how.

Some of these potential drawbacks can be overcome or mitigated through vertical integration, which involves a business operating at various stages of the project. In a construction setting, this can involve the main contractor using its own resources to carry out several elements of construction work, for example, the substructure, superstructure frame, cladding and mechanical and electrical services. Other work elements can be carried out by subcontractors the main contractor employs regularly and with whom it has strong business relationships.

1.6 Types of subcontractors

There are seven categories in the construction industry that are usually considered subcontractors or akin to subcontractors:

- nominated subcontractors
- named subcontractors
- domestic subcontractors
- works contractors
- trade contractors
- labour-only subcontractors and
- design consultants as subcontractors.

1.6.1 Nominated subcontractors

A nominated subcontractor is selected by the employer to carry out part of the main contract works. Subject to certain conditions, the main contractor is required to enter into a subcontract with the nominated subcontractor. Nomination provisions were common in UK standard form main contracts until 2005 but are not common now, and the standard form construction contracts reflected this change in the market. Therefore, the nomination of subcontractors is outside the scope of this guidance note.

1.6.2 Named subcontractors

A named subcontractor is named by the employer in the main contract and is employed by the main contractor to carry out part of the main contract works. Naming subcontractors enables the employer to steer the main contractor's choice of a subcontractor for particular works. The way in which naming is

dealt with in modern contracts varies; for example, although the naming provisions included in certain JCT contracts (JCT Design and Build Contract 2016, JCT Intermediate Building Contract 2016 (JCT IC 2016) and JCT Major Project Construction Contract 2016) contain similar features, the details of the provisions are different. Therefore, when considering or using naming provisions, check and understand the provisions that apply.

Perhaps the most common instance where naming is used is where the main contract is JCT IC 2016. In that case, the 'Named Sub-Contractor' may be named in one of two ways: 'Procedure One' and 'Procedure Two'.

Key features of Procedure One include:

- The subcontractor is named at the tender stage, in the tender documents, and the tenderer prices the subcontract works to be carried out by the named subcontractor.
- The subcontractor is also named in the main contract.
- If the main contractor is unable to enter into a subcontract with the named subcontractor, in accordance with the main contract and the particulars given in the contract documents, it must inform the CA, specifying which of the particulars prevent the execution of the subcontract. If the CA accepts the main contractor's position, it must issue an instruction that changes the particulars to remove the impediment to execution, omit the work, or omit the work and substitute a provisional sum; such an instruction is treated as a variation.

Key features of Procedure Two include:

- The subcontractor is named in an instruction concerning the expenditure of a provisional sum for work identified in the main contract.
- The main contractor has 14 days in which to make a reasonable objection to the named subcontractor identified in the instruction.
- If the main contractor is unable to enter into a subcontract with the named subcontractor, the CA may issue another instruction concerning the expenditure of the provisional sum.

If the named subcontractor's employment is terminated as a result of their default, insolvency or corrupt act, the CA may, by way of instructions, name another subcontractor, require the main contractor to carry out the work or omit the work. The main contractor may be entitled to an extension of time in such circumstances, but not loss and/or expense.

One of the purposes of the 'Named Sub-Contractor' provisions in JCT IC 2016 is to enable the employer to procure a specialist's design input. However, the main contractor is not responsible for defects in the named subcontractor's design (although the main contractor is responsible for the named subcontractor's quality in terms of materials and workmanship). So that the employer has adequate contractual recourse against the named subcontractor for defects in the named subcontractor's design, the employer should obtain a warranty from the named subcontractor. The JCT Intermediate Named Sub-Contractor/Employer Agreement (ICSub/NAM/E) can be used for this purpose.

1.6.3 Domestic subcontractors

A domestic subcontractor is selected and employed by the main contractor. Generally, a domestic subcontractor is any subcontractor other than a nominated subcontractor. The employer will have an interest in the domestic subcontractors the main contractor wishes to appoint. Therefore, the main

contractor must usually obtain the employer's consent to subcontract part of the main contract works. The main contractor is generally responsible for the proper performance of the domestic subcontractor.

1.6.4 Works contractors

A works contractor is not a subcontractor in the normal sense of the word. A works contractor is a contractor employed by a management contractor to carry out part of the main contract works that is the subject of the management contract.

The management contractor is contracted by the employer to manage the main contract works but does not itself carry out construction work. The management contractor directly employs specialist contractors (i.e. works contractors) to carry out the construction work under works contracts. The works contractors are liable to the management contractor. The management contractor is responsible for the administration of its contract with the works contractor, but the management contractor is usually not liable for the consequences of any default by the works contractor. Therefore, the employer will usually require adequate contractual recourse against the works contractor; this is normally achieved by way of a collateral warranty provided by the works contractor in favour of the employer.

The selection of works contractors is usually required to be agreed between the employer and the management contractor, and confirmed in an instruction given under the management contract.

1.6.5 Trade contractors

A trade contractor is not a subcontractor in the normal sense of the word, but is contracted by the employer to carry out part of the main contract works that is the subject of a construction management contract.

The construction manager is contracted by the employer to manage the procurement of the main contract works but does not itself carry out construction work. The essential function of the construction manager is to provide a consultancy and management service without the direct contractor role that a management contractor would have. The construction manager is also responsible for the overall management of the site. The construction work is carried out by trade contractors employed by the employer. The construction manager is not a party to a trade contract. However, the construction manager will assist the employer with the selection of trade contractors and the negotiation of trade contracts. The employer is obliged to appoint trade contractors to carry out the main contract works, after giving due consideration to any recommendations made by the construction manager. The construction manager acts as the employer's agent and as a certifier in administrating the trade contract.

1.6.6 Labour-only subcontractors

A labour-only subcontractor carries out subcontract works but does not supply materials. The main contractor might decide that subcontracting on a labour-only basis has commercial advantages, for example, if the main contractor believes that it can purchase materials more cost-effectively than the subcontractor. The extent and type of labour-only subcontracting varies. However, it is not uncommon for the main contractor to subcontract trades such as groundworks, brickwork and carpentry on a labour-only basis.

1.6.7 Design consultants as subcontractors

Where the main contractor is responsible for the design of some or all of the main contract works, it may decide to subcontract design work to design consultants (such as architects and engineers). In those

circumstances the design consultants become subcontractors, although they are somewhat different from other subcontractors in that they do not supply construction materials or carry out construction work. The industry often refers to such consultants as subconsultants.

The main contractor might employ its design consultants through appointments entered into directly between the main contractor and the consultant. However, in some cases the employer will have appointed design consultants prior to appointing the main contractor and, as part of the contractual matrix for the main contract, the employer might require that its consultants' appointments are novated to the main contractor. Once the consultant's appointment is novated from the employer to the main contractor, the consultant becomes in effect a subcontractor to the main contractor.

1.7 Procurement and tendering overview

1.7.1 Procurement

Procurement is the obtaining of services or goods from external sources. Therefore, the procurement of subcontract works is the obtaining of such works from external sources, for example, the main contractor procures the subcontract works from the subcontractor. Procurement involves deciding the strategy for how the subcontract works are to be obtained. A procurement strategy involves reviewing and setting the requirements for the subcontract works (for example, the division of the main contract works into various subcontract works, scope, quality, time and cost), and assessing such requirements against associated risks.

1.7.2 Tendering

Tendering is the bidding process phase of the procurement strategy, in which potential subcontractors (tenderers) submit offers (tenders) to carry out the subcontract works. The tenderer's price for the subcontract works is an important component of the tender, but other aspects that may not have been fixed in the ITT (e.g. the programme for the subcontract works) may also be important. Tendering can be a sophisticated process; a 'one size fits all' approach may not be appropriate. Therefore, the procurement strategy may state that different tendering procedures should be adopted for different subcontract works. The current edition of *Tendering strategies*, RICS guidance note, and the JCT *Tendering* Practice Note (2017) contain further guidance on tendering, including information about the main approaches, including single-stage tendering, two-stage tendering and negotiated tendering.

A tender bond – sometimes called a bid bond – is designed to act as security by reimbursing the main contractor for losses incurred if a tenderer does not complete, or abuses, the tender process. The use of tender bonds is rare in the UK. However, they are sometimes used in the procurement process for international construction and engineering contracts.

1.8 Key features of a subcontract

The structure and content of a subcontract are not fixed and can vary. However, subcontracts tend to contain some common features, many of which are similar to other forms of building contract. The most significant features of a subcontract are identified in this section.

1.8.1 Agreement

In many cases, the subcontract agreement forms the base of the subcontract and is of central importance. As a minimum, it should set out:

- the date on which the agreement is entered into
- the names and addresses of the main contractor and the subcontractor and
- the attestation or execution of the subcontract, whether as a deed or under hand.

The subcontract agreement may also contain a description of the subcontract works, as well as recitals and articles of agreement (see section 2.8.4).

1.8.2 Conditions

The subcontract conditions set out the main operative provisions of the subcontract, which are usually numbered and referred to as 'clauses', or in some cases 'paragraphs'. The subcontract conditions may be a standard form such as JCT or NEC based on a standard form or bespoke. They may be relatively simple or very sophisticated. The subcontract conditions will typically deal with:

- interpretation and definitions
- compliance with the main contract
- discrepancies in documents
- carrying out the subcontract works:
 - design responsibility
 - quality
 - time for commencement of the subcontract works
 - time for completion of the subcontract works
 - extension of time
 - completion and
 - defects.
- control of the subcontract works:
 - instructions
 - health and safety and
 - suspension.
- attendances
- collateral warranties and third-party rights
- payment:
 - interim payments
 - final payment
 - retention
 - fluctuations
 - claims, loss and expense and
 - VAT.

- variations, including the valuation of variations
- injury, damage and insurance
- termination
- notices
- dispute resolution
- governing law and jurisdiction and
- forms of guarantee, bonds, collateral warranties and third-party rights.

1.8.3 Particulars

Each subcontract will contain details that are specific to the subcontract and the subcontract works and reflect part of the bargain struck between the main contractor and the subcontractor. They are often referred to as 'particulars' or 'data'. Such particulars or data are usually set out in a document that is agreed by the main contractor and the subcontractor, and which forms part of the subcontract.

1.8.4 Scope

The subcontract must identify the subcontract works. This is often called the scope. It is common for the scope of the subcontract works to be identified in a short description set out in the recitals, articles or particulars/data, and also set out at length in a scope document included in the subcontract. The work that the subcontractor is obliged to do should be shown and described clearly and unambiguously.

1.8.5 Technical documents

The technical documents will include drawings and specifications that show or describe the requirements for the subcontract works. Such documents will usually mirror the technical documents included in the main contract. However, if the subcontract is entered into some time after the main contract is entered into, the technical documents in the main contract may have been altered (for example, due to design development or variations), and so the technical documents to be included in the subcontract may be revised versions of the documents included in the main contract. In addition, the technical documents in the subcontract might not be included in the main contract at all, for example, where the subcontractor has prepared design proposals for the subcontract works prior to entering into the subcontract and it is agreed that such proposals should be included in the subcontract.

1.8.6 Attendances

In the absence of anything to the contrary, the subcontractor will usually be required to provide everything necessary to carry out and complete the subcontract works. However, it is often appropriate for the main contractor to provide certain attendances, which often include facilities and services such as scaffolding, fuel and skips.

1.8.7 Security

The subcontract should set out the type of security, and the specific wording of that security, that the subcontractor is obliged to provide in favour of the main contractor, which is generally a parent company guarantee, bonds or a letter of credit.

1.8.8 Collateral warranties and third-party rights

The current edition of *Construction security and performance documents*, RICS guidance note, contains helpful guidance in respect of collateral warranties and third-party rights.

In the context of a subcontract, a collateral warranty is a contract between the subcontractor (as warrantor) and a third party (as beneficiary) under which the subcontractor warrants to the beneficiary that it has complied with the subcontract. A third-party right is a right that allows a person who is not a party to the subcontract (a third party or a beneficiary) to enforce the benefit of a term of the subcontract.

The work elements in respect of which collateral warranties or third-party rights are commonly provided vary and can be dependent on the nature of the main contract works. For example, the warranties or third-party rights commonly provided in relation to commercial buildings differ from those provided for infrastructure works. However, it is common for warranties or third-party rights to be provided by subcontractors who have significant design responsibility for the subcontract works and in respect of work elements such as piling (but not necessarily other substructure works), structural steelwork, mechanical and electrical services, waterproofing and cladding.

In many cases, the form of collateral warranty that the subcontractor will be required to enter into, and the form of third-party rights that the subcontractor will be required to grant, will be set out in the main contract and included by the main contractor in the subcontract. It is commonplace for such forms to be drafted by solicitors acting on behalf of the employer and so are often bespoke.

However, standard forms do exist; for example, JCT publishes a range of collateral warranties and schedules of third-party rights for use with its various forms of contract.

Where a subcontractor is required to provide a collateral warranty, the employer may request the main contractor to provide a copy of the subcontract, albeit commercially sensitive information would usually be redacted from the copy.

1.8.9 Special requirements

It is likely that the main contractor will have its own special requirements for the subcontractor to comply with. These will not be requirements of the main contract but will reflect the main contractor's way of doing business. For example, they may relate to the main contractor's policies or procedures concerning health and safety, pollution, noise, waste, site security, the environment, sustainability or modern slavery.

In addition, there may be requirements set down by the employer that the subcontractor must comply with, for example, where the main contract works are being carried out on the employer's campus, the employer may call for the main contractor and the subcontractors to comply with the rules that apply to the campus.

Consideration should also be given as to whether the subcontract should contain drafting to address matters that are not dealt with, or that the main contractor or subcontractor may believe are not dealt with adequately, in standard form subcontracts or by conventional drafting. Matters of this type can vary from time to time and from project to project, but examples might include Brexit, COVID-19 and the introduction of new initiatives by government (e.g. the UK government's publication of the *Construction Playbook* in December 2020). The machinery for dealing with such matters and the allocation of risk in respect of them should be considered and, where necessary, dealt with in the subcontract. In addition, the subcontract might need to deal with matters that emerge from the nature of the subcontract works, for example, if the subcontract works involve a high degree of off-site manufacturing or modern methods of

construction, consideration should be given to whether special drafting is required to reflect the technical, commercial and legal issues associated with the same.

1.9 Providers of standard forms of subcontract

The construction industry has for a long time recognised the benefit of using standard forms of contract, which contain conditions that are applicable to a wide range of construction projects. Some of the standard forms of subcontract are described in section 2.7. Organisations that publish standard forms of subcontract include:

- **JCT:** This organisation consists of seven member bodies, one of which is Build UK, which is a key participant (i.e. a signatory) in the contract process. The JCT Council contains 47 representatives from its member bodies, who comprise the company's five colleges. New forms of contract and amendments to existing contracts are produced through the colleges, which include specialists and subcontractors. JCT publishes many forms of contract, including subcontracts.
- Construction Industry Publications (CIP): CIP are publishers and mail-order booksellers for the construction industry. Prior to 2002, the two most commonly used subcontracts in the UK construction industry were the domestic subcontracts DOM/1 and DOM/2. These were published by the Construction Confederation, which was wound up in 2009. In 2011, CIP published updated editions of DOM/1 and DOM/2, and new editions were published in 2018. DOM/1 and DOM/2 are not commonly used, mainly because they are intended for use where the main contract is a JCT contract and main contractors prefer to use JCT subcontracts, which form part of the family of JCT contracts and are consistent with the relevant JCT main contract. CIP also publish a short form of subcontract, which was updated in 2020.
- New Engineering Contract (NEC): NEC is a division of Thomas Telford Limited, which is a wholly owned subsidiary of the Institution of Civil Engineers (ICE), the owner and developer of the NEC suite of contracts. Much of the guidance used in the industry refers to the third edition of the Engineering and Construction Contract (NEC3). However, in 2017 a fourth edition was published (NEC4), so this guidance note refers to NEC4. NEC publishes two key standard forms of subcontract.
- Civil Engineering Contractor's Association (CECA)/Association for Consultancy and Engineering (ACE): Prior to the introduction of NEC, civil engineering works were generally carried out under an ICE form of contract, i.e. one of the versions of civil engineering contract (known as the ICE Conditions) published by ICE, ACE and CECA. In 2009, ICE formally endorsed NEC, and in 2010 it withdrew as a sponsoring body of the ICE Conditions, leaving ownership with ACE and CECA. In 2011, ACE and CECA published new main contracts under a new title, Infrastructure Conditions of Contract (ICC). ICC was based on the ICE Conditions. CECA had for a long time published forms of subcontract for use with the ICE Conditions, and it decided to publish subcontracts for use with ICC. It appears that ICC is not often used, primarily because NEC is frequently used in relation to civil engineering and infrastructure works. Therefore, the subcontracts for use with ICC are also not often used.
- Association of Consultant Architects (ACA): ACA publishes a main contract the ACA Form of Building Agreement, Third Edition 1998 (2003 Revision) – and a standard form of specialist contract for project partnering (SPC 2000). ACA also publishes the ACA Form of Subcontract Third Edition 1998 (2003 Revision) for use with the ACA main contract. Neither the ACA main contract nor the subcontract are used often.

• **FIDIC:** FIDIC is an international federation of associations of consulting engineers, representing the profession in their respective countries. It is known for its rainbow suite of contracts. FIDIC also publishes two standard forms of subcontract.

Some standard forms of subcontract form part of a family of standard forms of contract, which may also include the associated main contract(s) and sub-subcontract(s). The benefits of using a standard form of subcontract, including a subcontract that forms part of a family, are:

- The cost and time involved in entering into the subcontract should be reduced.
- The likelihood that the contractual allocation of responsibility and risk is properly understood by the parties should increase.
- Issues that often arise in relation to subcontract works can be dealt with expressly.
- The generally acceptable market position can be reflected.
- Lessons learned from the adoption of the standard form and judicial guidance can be used to good effect.

Copies of the various standard forms of subcontract can be obtained from specialist bookshops (including the RICS bookshop), and from the websites of the relevant publishers. Some publishers also provide guidance notes for their standard forms of subcontract. Check the publisher's website for any available guidance notes.

1.10 Amending standard forms of subcontract

Although the benefits of using standard forms of subcontract is widely recognised, they are frequently amended by the parties to the subcontract. In most cases, the main contractor will draft the amendments and include them in the invitation to tender, and then in the eventual subcontract.

There are two main reasons why the main contractor would wish to amend the standard form:

- to reflect relevant project-specific amendments included in the main contract (e.g. an obligation to comply with third-party agreements such as an agreement for lease) and
- to reflect the main contractor's business needs (e.g. regarding performance security).

There is nothing inherently wrong with the parties to the subcontract agreeing amendments to the standard form subcontract that they have chosen to use. However, there are five main considerations to bear in mind:

- The amendments should not lead to discrepancies or ambiguities in the subcontract.
- The amendments should accurately reflect the commercial intention of the parties to the subcontract.
- The amendments should be drafted in the same style as the standard form (e.g. terminology and tense).
- The amendments should be lawful.
- The amendments should be properly incorporated into the subcontract, generally through an enabling article or clause.

1.11 Bespoke/in-house forms of subcontract

Although standard forms of subcontract are often used, unless the main contract requires the main contractor to employ a subcontractor under a standard form of subcontract, the main contractor and the

subcontractor are generally free to agree the form of the subcontract. For example, the main contractor or the subcontractor might have its own bespoke/in-house form of subcontract that it wishes to use. However, this is much more likely to be proposed by the main contractor than the subcontractor.

A bespoke/in-house form can benefit the party proposing it because it can be tailored to suit that party's own circumstances (e.g. regarding risk allocation, payment terms, policies and procedures). Therefore, a bespoke/in-house form is likely to favour the party that proposes it. As that party is likely to be the main contractor, the subcontractor should review the form in detail, and where applicable seek professional advice on the terms and contractual allocation of risk. This is particularly important because the allocation of risk in a bespoke/in-house form (e.g. for site/physical ground conditions, adverse weather, etc.) might be different from the allocation of risk in the standard forms a party is familiar with.

At some levels of the market, the commercial leverage that can be exercised by the main contractor can lead to a bespoke/in-house form being used with little room for negotiation by the subcontractor. However, at other levels that position can be reversed and the subcontractor might have the upper hand (e.g. where a particular – perhaps commercially strong – specialist subcontractor has been named in the main contract, with the result that the main contractor has little or no option but to employ that particular subcontractor).

2 Practical application (level 2 – doing)

This chapter expands upon the information on the principles of subcontracting, and applies it in the context of:

- procurement of subcontract works (and related topics) and
- drafting the subcontract.

2.1 Developing a procurement strategy

A procurement strategy for subcontract works involves reviewing and setting requirements (e.g. the division of the main contract works into various subcontract works, scope, quality, time and cost), and assessing such requirements against associated risks.

The procurement strategy can be set at various stages of the project. For example, where the employer wishes to be actively involved in the subcontracting procurement strategy, it may draft a strategy at the same time as it drafts the procurement strategy for the main contract works. In that case care should be taken to check that the procurement strategy (and the content of subcontract packages) is appropriate and achieves best value, For example, if a particular package contains scope that is not appropriate to the package it can result in the package being less attractive than it should be and, consequently, may not be best value. In addition, an employer's procurement strategy should seek to obtain the benefits of a main contractor using its own in-house specialists and should be prepared with that in mind, but also having regard to the objective of achieving best value.

Where the main contractor sets the procurement strategy for subcontract works, which is what will be discussed in this section, it is likely to do so when it prepares its tender for the main contract works. A well-drafted and executed procurement strategy will help the main contractor to obtain suitable, well-considered tenders from the subcontract market. The main contractor could instead set a procurement strategy for the first time after it has been awarded the main contract.

The procurement strategy should set out how the various subcontract works will be procured. It has become common for procurement strategies to use the expression 'subcontract packages' instead of subcontract works, so that expression is used in this section.

A detailed procurement programme should be prepared and included in the procurement strategy. The procurement programme should be consistent with the demands of the design and construction activities. For each subcontract package, the procurement programme should contain, as a minimum, activities for:

- pre-qualification
- issuing the invitation to tender (ITT)
- receipt of tenders
- assessment of tenders
- selection of the subcontractor

- entering into the subcontract
- design of the subcontract works
- off-site subcontract works:
 - procurement of subcontractor's materials
 - design/fabrication drawings.
- commencement of subcontract works on site.
- key dates/sections and
- completion of subcontract works

The durations allocated to the activities included in the procurement programme should be appropriate and realistic. If, for example, tenderers are given insufficient time to prepare their tenders properly, the quality of tenders is likely to be inadequate. In the worst case, if the tender duration is too short, it may cause potential tenderers to withdraw from the tender process entirely.

If a tenderer requests an extension of time to the tender period, this should be given all due consideration. If an extension is given, it should be given to all tenderers so that each tenderer is treated fairly and is seen to be treated fairly. By the same token, a tenderer who has indicated to the main contractor that it will submit a tender must take steps to ensure that it submits a bona fide tender on time.

A procurement strategy prepared by the main contractor for subcontract packages will be different from a procurement strategy prepared by or on behalf of the employer for the main contract works. The division of the main contract works into subcontract packages often results in procurement strategies that are more sophisticated and complex than a procurement strategy for use in the procurement of the main contract works.

The content of the procurement strategy for the subcontract packages will vary depending on the circumstances of the project. An example contents list is set out in Appendix A. The procurement strategy should be considered a 'live' document and be subject to revision as circumstances require.

2.2 Subcontract packages

The main contractor should determine the subcontract packages into which the main contract works are to be divided. For example, it is not unusual for the main contractor to choose to subcontract the mechanical and electrical works. However, there are many ways in which this can be done. The main contractor could decide that the whole of the mechanical and electrical works is one subcontract package, and subcontract it to one specialist subcontractor. Or the main contractor could decide that the mechanical works comprise one subcontract package and the electrical works comprise a separate package. Alternatively, the main contractor could decide that the mechanical works should be split into several packages, for example, ductwork, insulation, controls and sprinklers.

The main contractor should determine the budget that is available to spend on each subcontract package. In most cases the budget will be derived from the allowance made by the main contractor in the contract sum for a particular subcontract package. However, the determination of that allowance may not always be straightforward. For example, if during its tender stage the main contractor's estimator did not price the main contract works using packages that are the same as those subsequently set in the procurement strategy, the financial allowance for a particular package might not be clear. In those circumstances, the main contractor will need to make decisions as to how its budget is allocated between

different subcontract packages. The main contractor should also decide the way in which it will allocate any contingency or inflation allowance that may be included in the contract sum.

It is good practice for the main contractor to determine its subcontract package philosophy at the beginning of the procurement process. Options include:

- Use the main contractor's in-house specialists: Where the main contractor is a member of a group of companies, other members of the same group may be employed as subcontractors. For example, the main contractor's group may include in-house design specialists or in-house specialist subcontractors in areas such as earthworks, piling, concrete works, mechanical and electrical works, and cladding. The extent to which the main contractor employs in-house companies may be determined as a matter of corporate governance, or it may be determined on a project-specific basis.
- Use the main contractor's existing supply chain arrangements: Where the main contractor has existing arrangements in place with members of its supply chain, decide the extent to which those arrangements will be used in the procurement of subcontract packages. In addition, the main contractor may have formal relationships, such as preferred subcontractor agreements, with certain subcontractors. Such agreements may grant the main contractor and the relevant subcontractor certain rights; for example, the main contractor may have the right to appoint the relevant subcontractor under pre-agreed terms, or the subcontractor may have the right to tender for certain works.
- Strategic subcontract packages: It is good practice for the procurement strategy to identify any strategic subcontract packages, i.e. packages that are particularly significant to the main contract works. Packages can be considered significant for many reasons, including monetary value, criticality to the programme or where there are few subcontractors available. Whether a particular subcontract package will be classed as strategic will vary from project to project. However, in the case of a commercial office development the subcontract packages of piling, structural frame, mechanical and electrical, lifts, cladding and roofing are likely to be included in a list of strategic packages. Unusual circumstances should also be considered. For example, the programme for the main contract works may dictate that works to divert existing underground services (water, gas, electricity and telecoms) on or adjacent to the site are critical to allow excavation works to begin. In those circumstances, service diversion works would be treated as strategic subcontract packages.
- **Transactional subcontract packages:** The procurement strategy should also identify transactional subcontract packages, i.e. packages that are not as significant as strategic packages. These may include subcontract packages that are lower value, not critical to the programme or where there are many subcontractors available.

2.3 Procurement strategy

If the employer wishes to take an active part in procuring the subcontract works, it may wish to set a strategy in which it liaises with potential subcontractors before the main contractor is invited to tender for the main contract works. This liaison can range from initial discussions to obtain the subcontractor's views and opinions concerning the subcontract works, to something far more sophisticated. The employer could even go as far as to procure formal tenders for subcontract works from several tenderers and subsequently pass those tenders on to the main contractor. This is considered further in section 2.4.

A key point to consider is which works are to be subcontracted. Specialist works such as piling, structural steelwork, mechanical and electrical services, cladding and roofing are almost always subcontracted. However, where a main contractor has the in-house capability to carry out specialist works, it may decide

to use its own resources or not subcontract such works beyond the group of companies of which it is a member. This approach can bring significant benefits in terms of working relationships, communication channels, joined-up thinking, programme and cost.

2.3.1 Accreditation

Accreditation is the recognition that an organisation is competent to perform specific activities in a reliable, credible and accurate manner. The main contractor may have its own accreditation scheme, whereby it gathers relevant information about a potential subcontractor and decides whether it should be named on the main contractor's own list of accredited subcontractors. A more informal means of accreditation may apply, where the main contractor chooses to rely on strong business-to-business relationships rather than operate a particular accreditation scheme. This may be common at the lower-value end of the market.

Accreditation may also be derived from construction industry bodies. For example, if a potential subcontractor is required to carry out piling works, it would be worthwhile to discover whether it has been audited by, and has satisfied the requirements of, a recognised industry body such as the Federation of Piling Specialists.

2.3.2 Pre-qualification

Once the list of potential subcontractors has been determined, it is important to establish that each of the potential subcontractors is suitable, willing and able to tender. This is achieved by way of a pre-qualification procedure. The pre-qualification procedure should identify the criteria to be used in assessing whether the potential subcontractor will be selected to tender. The criteria should be objective, fair, accountable and transparent. The assessment may include an interview.

Each potential subcontractor should be sent a pre-qualification enquiry letter, which should enclose a schedule of project information and a pre-qualification questionnaire. The JCT *Tendering* Practice Note (2017) contains useful guidance on the pre-qualification process in the context of a tender for main contract works. Such guidance can be used to inform the requirements for pre-qualification for subcontract works, but any pre-qualification procedure should recognise and address the specific issues that arise in relation to the subcontract works in question.

Responses from potential subcontractors should be assessed against the selection criteria. Potential subcontractors who have not been selected to tender should be informed.

It is very important to note that the pre-qualification procedure should be appropriate and proportionate. While the main contractor requires information to establish that a potential subcontractor is competent, it should recognise that providing such information may involve the potential subcontractor incurring significant costs. Therefore, the pre-qualification procedure should be efficient and effective, so that the potential subcontractor's valuable resources are not misused. Lessons can be learned from the principle underlying BSI PAS 91:2013+A1:2017 *Construction prequalification questionnaires*. PAS 91 is a publicly available specification that sets out the content, format and use of questions that are widely applicable to pre-qualification for construction tendering. Using common criteria helps to streamline the tendering process by reducing the need for inefficient or repetitive completion of multiple pre-qualification processes. PAS 91 and its amendment of 2017 were the result of consultation with both professional bodies and subcontractor bodies, including the Specialist Engineering Contractors' Group and the Electrical Contractors' Association.

2.4 Early subcontractor involvement (ESCI)

ESCI is a procurement route in which a specialist subcontractor is introduced at an early stage of the project in order to bring knowledge of specialist design, construction and cost efficiencies to the preconstruction phase. This can be achieved by a two-stage tender procedure, or other procurement procedures such as management contracting or construction management.

ESCI can be implemented by the employer or the main contractor, or both. For example, if the employer has appointed its design consultants and their work will benefit from input by a specialist subcontractor (e.g. a cladding specialist), the employer may appoint a specialist subcontractor under a consultancy agreement or a pre-construction services agreement. The specialist subcontractor then works with the design consultants and contributes to the cladding design, which is incorporated into the design for the main contract works. Similarly, the main contractor might appoint a specialist subcontractor to assist with its tender for the main contract works, for example, where the main contract works involve significant specialist works such as modular accommodation, complex foundations/deep excavations or process engineering works.

2.4.1 Pros and cons of ESCI

Pros include:

- early collaboration and teamwork
- specialist contribution to the design of the subcontract works
- the specialist subcontractor can be selected swiftly, on the basis of technical expertise, its ability to add value and its commitment to agree prices
- increased opportunities for innovation and value engineering
- improved risk management
- greater certainty on outturn costs and on-time completion
- reduced likelihood of disputes and
- reduced dispute resolution costs.

Cons include:

- competitive pricing from the subcontractor market is reduced
- other potential tenderers will abandon interest in the subcontract works
- potential uncertainty as to the roles and responsibilities of design consultants and subcontractors and
- increased opportunities for last-minute negotiation.

2.5 The tendering process

2.5.1 Selecting the appropriate tendering procedure

The selection of the tendering procedure for subcontract packages is not straightforward. Whereas the main contract works will generally only have one kind of tendering procedure (e.g. single-stage tendering or two-stage tendering), the tendering procedure for the various subcontract packages may vary from package to package.

The main contractor may use single-stage tendering for many subcontract packages, and may invite tenders from subcontractors to whom it issued enquires during the tender period for the main contract works, from new tenderers or from a combination of both.

Where the main contractor seeks tenders for subcontract works several months after it sought enquiries during the tender period for the main contract works, it is important that the main contractor seeks competitive tenders because the market may have shifted in the meantime.

If the main contractor does not have a free hand in selecting the procedure (e.g. the main contractor is obliged to demonstrate best value to the employer), it might have no option other than to use single-stage tendering.

Where the programme demands of the main contract works (e.g. a swift start on site) dictate that the main contractor must procure subcontract works without delay, it may select negotiated tendering and seek to negotiate with only one subcontractor. Such works might include early preliminary works, or early permanent works such as piling.

During the course of the main contract works, the main contractor may receive an instruction to carry out a variation that is best undertaken by a particular specialist subcontractor (e.g. the fitting out of a gym in a leisure centre, which was initially intended to be left as a shell). The main contractor may use negotiated tendering to procure the fitting-out subcontractor best suited to carry out the work.

It is possible that the absence of competitive tendering for such works will result in the main contractor paying a higher price than would be the case if single-stage competitive tenders were obtained. This has to be taken into account by the main contractor when selecting its preferred tendering procedure.

In some cases, the main contractor may select two-stage tendering. For instance, where the main contractor is obliged to design and build the main contract works, it may be important to procure the design for particular subcontract works reasonably swiftly after entering into the main contract, and a long time before those works are planned to commence on site. There may be barriers that prevent the main contractor and subcontractor from entering into a subcontract at that time (e.g. the design may not be sufficiently advanced, or the price and programme have not been agreed). In those circumstances, the main contractor may use a two-stage tendering procedure.

Where the main contractor has a free hand in selecting the subcontractor and the main contractor's procurement strategy has determined that it wishes to employ an in-house company to carry out the works, in the absence of any rules imposed by the main contractor's own corporate governance the main contractor may choose not to seek tenders for those works at all, and simply negotiate with its in-house company.

2.5.2 The invitation to tender (ITT)

The ITT is the formal document in which the potential subcontractor is invited to submit a tender for specific subcontract works. Therefore, it is very important that the ITT is appropriate, correct and complete. The content of the ITT will vary depending on the tendering procedure selected for use with the particular subcontract package. Guidance on the content of an ITT when pricing main contract works is given in the JCT *Tendering* Practice Note (2017), and much of that guidance is applicable when procuring tenders for subcontract works.

The procurement strategy should set out the stage of design that is required (or at least desired) for the purpose of preparing the ITT for each particular subcontract package. The level of design work required

and its quality will have an effect on the quality of the tenders that are submitted. Where the subcontract package is to be procured shortly after the main contractor enters into the main contract (which may apply in the case of piling, for example), the design of the subcontract works included in the ITT may be the same as that in the main contract. If the design is not complete, the tenderers might perceive a need to qualify their tenders or include a greater allowance for risk in their tender price. Alternatively, where the design of a particular subcontract package has been developed by the main contractor beyond the incomplete design included in the main contract, into a completed design for the purpose of the ITT, in most cases it is appropriate to include the completed design in the ITT.

The ITT cover letter acts as the tenderer's first window into the tender and the subcontract package. It should contain:

- the formal invitation to submit a tender
- a description of the main contract works
- a description of the subcontract package
- the date for the submission of the tender and
- how the tender must be submitted (e.g. in writing, sealed in an envelope; uploaded to a portal for electronic submission; etc.).

The instructions to tenderers contain the rules that apply to the tendering process. In most cases, these instructions do not form part of any future subcontract. It is good practice for the instructions to make that position plain. The JCT *Tendering* Practice Note (2017) contains guidance on the contents of instructions to tenderers.

The form of tender is a document that the tenderer must complete and submit with its tender. Its purpose is to set out the tenderer's offer and to provide certain confirmations and information to the main contractor. The content of the form of tender will vary from package to package. In many cases, the form of tender will be a relatively simple document, but it should contain information that is essential to the tender (e.g. an unequivocal offer). The form of tender should also be drafted in a manner that facilitates the inclusion of documents that are required to be submitted with the tender (e.g. pricing document, programme and method statement).

The ITT should contain information regarding the form of subcontract that will apply if the tenderer is appointed by the main contractor. The extent of such information may vary depending on the circumstances. At one end of the spectrum, the information may consist of only the name of the form of subcontract (e.g. JCT Design and Build Sub-Contract 2016) and a copy of any amendments to that form of subcontract that the main contractor requires. At the other end of the spectrum, the ITT may contain a draft of the completed subcontract, with all the information included and all the project-specific details completed. In that case, only the price for the subcontract works and the name of the subcontractor need to be inserted into the draft to complete the subcontract.

It is not good practice for the ITT to contain limited information about the form of subcontract. It is much better for the ITT to contain a draft of the completed subcontract. In practice, however, it is sometimes difficult to complete every part of a draft subcontract for the purpose of an ITT. Where a draft subcontract is not included in the ITT, the information required by the subcontract should, as far as possible, be included in the ITT by other means (e.g. by a cross-reference to the relevant standard form of subcontract).

The particulars or data specific to the subcontract should be included in the ITT so that the tenderer can take them into account when preparing its tender; examples are set out in section 2.8.5.

Particulars or data are often set out in a standard form; for example, where the form of subcontract is JCT DBSub 2016 they are included in the Sub-Contract Particulars, and where an NEC4 ECS is used they are included in the Subcontract Data.

The ITT should identify the scope of the subcontract works. This should consist of a description of the subcontract works, along with relevant technical documents such as drawings and specifications. The ITT should also identify whether the tenderer will be obliged to design all or part of the subcontract works. Almost all subcontract works have interfaces with other parts of the main contract works. The ITT should clearly state the extent of the subcontract works and the relevant interfaces.

The ITT should set out any special requirements of the main contractor. The main contractor may have its own policies that are relevant to the subcontract works (see section 1.8.9). For example, if the main contractor's health and safety policy requires a subcontractor's operatives to attend particular inductions on site, this may affect the tenderer's price and should be included in the ITT.

Similarly, where the main contractor has developed a particular logistics regime for the execution of the main contract works and requires the tenderer to comply with it, details of the regime should also be included.

In most cases, the ITT will require the tenderer to submit a completed pricing document as part of its tender. Therefore, the ITT should identify the form of pricing document required.

Where the main contract works are procured by an employer-led design team using full bills of quantities prepared by or on behalf of the employer, the main contractor may choose to extract the parts that relate to the subcontract works from those bills, and use those extracts as the pricing document for the purpose of the ITT.

Where bills of quantities have not been prepared by or on behalf of the employer, the main contractor may have prepared its own bills for the main contract works and may decide to use relevant extracts as the pricing document for the ITT. In those cases, the main contractor will need to consider whether it wishes to accept the risk that the quantities stated in the pricing document may be incorrect or it wishes to pass such risk on to the tenderer. This should be dealt with in the ITT so that the tenderer knows whether it will be required to accept the risk of such quantities.

Alternatively, the tenderer may be required to prepare its own pricing document. For example, in some cases the tenderer may be required to prepare a priced schedule of the activities forming the subcontract works (an activity schedule). Each tenderer may view the activities in a different way, so the activity schedule may differ between tenderers. JCT DBSub 2016 and NEC4 ECS (Options A and C) envisage that an activity schedule is included in the subcontract.

Provisional sums should also be considered. If the main contractor requires the tenderer to include provisional sums in its tender, the amount of the provisional sum should be stated in the ITT, along with an appropriate description of the work it covers given the extent and quality of the design information available. The classification of the provisional sum should also be considered. Where the *RICS new rules of measurement* (NRM) apply, provisional sums should be identified as being either defined or undefined so that the tenderer is aware of which rules apply to which provisional sum. Where NRM does not apply, take care to identify the contractual allocation of risk that applies to the provisional sums, for example, whether the tenderer's offer is expected to have made due allowance for programming, planning and pricing preliminaries for the provisional sum work. The ITT should also identify whether the provisional sum is expected to include the tenderer's overheads and profit. In most cases, it is appropriate for the provisional sum to exclude overheads and profit, which should be dealt with elsewhere in the pricing document.

The ITT should contain information concerning the main contract, in sufficient detail to enable the tenderer to understand the main contract and the context in which the subcontract works will be executed. It is good practice for the ITT to contain a copy of the main contract (or the amendments to the main contract) with confidential and/or commercially sensitive information redacted.

The ITT should also address other matters that may affect the tender, for example, requirements for insurances, collateral warranties, third-party rights and performance security.

2.5.3 Issuing and amending the ITT

The main contractor may be free to choose the manner in which the ITT is issued or, in some cases, it may be obliged to issue the ITT in accordance with a procedure determined by the main contract. For example, if the main contract requires the main contractor to procure tenders for work that are dealt with by a provisional sum, the provisional sum provisions included in the main contract may require the main contractor to issue the ITT to tenderers in a specified manner.

The traditional way in which the ITT is prepared and issued is to print paper copies of all the relevant documents and issue an identical ITT to each tenderer at the same time (usually by special delivery or recorded post). A paper ITT may be large and expensive to produce (for instance where the relevant drawings and specifications are extensive).

Online e-tendering – the electronic issuing of tender documentation as part of the procurement process – has become common in recent years. Further information on e-tendering is set out in section 3.1.

The ITT should set out the process for the submission of, and response to, tender queries. It is difficult to prepare an ITT that covers all the issues that may arise, so the submission of tender queries is not unusual.

However, the procurement of tenders from potential subcontractors raises several specific issues. For example, the ITT should identify the scope of the subcontract works with accuracy and address any interfaces between separate subcontract packages. This is not an easy task. The tenderer's price will be a function of the scope, so the tenderer will want to be clear that it understands the scope with certainty. Therefore, even where the ITT is well-drafted, tender queries in relation to scope and interfaces are likely to arise. In addition, the fact that the tenderer will be acting as a subcontractor to the main contractor raises issues regarding health and safety, programme, attendances, logistics, site setup, etc. In most cases, the submission of tender queries by potential subcontractors should be viewed as a good thing: it shows that the tenderers are considering the ITT seriously and helps the main contractor to iron out any ambiguities, reducing the risk that they surface later in the procurement process, or even after the subcontract is entered into.

All queries should be addressed in a professional manner. In many cases, it will be necessary for the subject matter of the tender query and the response to be reflected in any eventual subcontract. Therefore, when issuing the response it is important to bear in mind that such wording may be included in the subcontract.

There are three key features of good practice when responding to tender queries:

- The tenderer who raised the tender query should not be identified in the response.
- The response should be issued to all tenderers at the same time, so that all tenderers are treated equally.

• Each response should be issued as soon as practical. Where time allows, it may be appropriate to respond to several tender queries at the same time; however, this should be avoided if doing so would unnecessarily delay any particular response.

If it is necessary to issue an amendment to the ITT – sometimes called a 'tender addendum' – each tenderer should receive the amendment at the same time. Amendments to the ITT cause difficulties for tenderers and are likely to increase the cost of tendering. Therefore, they should be avoided where possible.

However, amendments to the ITT may be essential. For example, where during the tender period the main contract works are subject to a significant variation that affects the scope of the subcontract works, it may be appropriate for the ITT to be amended to reflect this variation. During the tender period it may also become apparent that certain documents related to the main contract works, but which were not included in the ITT, are important to tenderers. In those circumstances the ITT should be amended to include these documents. Also, if during the tender period the main contractor makes changes that may affect the carrying out of the subcontract works (e.g. access strategy, logistics, the number or type of tower cranes, etc.), the ITT should be amended to reflect these changes.

Mid-tender reviews may not be necessary for each subcontract package. However, it is good practice to carry out a mid-tender review or a meeting where the scope of the subcontract package is significant or critical to the main contract works. It is an opportunity for the main contractor and the tenderer to discuss concerns in detail so that the tenderer is able to make a properly informed offer. Mid-tender reviews and meetings can lead to the ITT being amended.

2.5.4 Receiving and reviewing submitted tenders

The receipt and review of tenders by the main contractor should be carried out in a professional manner. The main contractor might seek tenders from the same tenderers on several occasions, so it is important that each tenderer is confident that its tender will be properly received and reviewed, and that each tender is treated equally.

Any procedure for opening tenders should be open, fair and transparent. It is good practice for tender opening to be recorded in a prescribed form, along with key information such as whether the tenderer has submitted the required documents, price, programme, qualifications and/or exclusions.

The instructions to tenderers should have specified the documents that are required to be submitted with the tender. Each tender should be checked to establish whether it complies with these instructions. For example, if the instructions to tenderers required the tenderer to submit a method statement for a particular part of the subcontract works and the tenderer has not done so, the absence of the required method statement should be taken into account when assessing the tender.

Each tender should be checked to establish whether it contains any errors, qualifications and exclusions.

A tender may contain several types of error. First, the tenderer's price may contain computational errors, which should be dealt with in the manner set out in the instructions to tenderers. There are two main alternatives:

- require the tenderer to affirm its price or else withdraw its tender or
- allow the tenderer to amend its price.

The choice of which alternative to adopt will vary depending on the circumstances. The first option is more likely to lead to tendering that has been properly considered, and a disadvantage of the second option is

that it is open to abuse. However, for tenders submitted by potential subcontractors the second option is usually a more practical solution. The tender may also contain errors of detail (e.g. in terms of programme), or the documents submitted with the tender may be incorrect; in those cases, the tenderer should be contacted to clarify their position.

It is not unusual for tenders to contain qualifications and/or exclusions. The main contractor should deal with these so that tenders are considered on an equal basis. Where appropriate, it is good practice for the main contractor to submit a query to the tenderer so that it is given an opportunity to withdraw the qualification or exclusion. This process should not provide an opportunity for the tenderer to submit a different tender.

For example, if the ITT requires the tenderer to base its price on procuring construction plant from a particular plant hire company and the tenderer qualifies its tender to the effect that its price is based on a different plant hire company, the tenderer should be informed that its price will be considered as being based on using the specified plant hire company and the tenderer's consent to this should be obtained in writing. The tenderer should not be permitted to submit a new tender.

Where the tenderer submits technical proposals with its tender, they should be checked to establish whether they meet the technical requirements set out in the ITT. This may not be a straightforward task, and it may be necessary to hold post-tender meetings so that the main contractor is better able to understand the technical proposals submitted with the tender.

If all the submitted tenders comply with the instructions to tenderers and meet the requirements of the ITT, comparing them should be straightforward. However, if they do not comply with the instructions or are qualified, the comparison will be difficult. In some cases, a measure of commercial judgement may be needed to develop a meaningful comparison. The way in which tenders will be assessed should be stated in the instructions to tenderers and used for comparison purposes.

Once the tenders have been opened, checked and compared, the next step is to prepare a tender recommendation report. This is a recommendation to management as to which of the tenderers should be appointed as the subcontractor. The content of the tender recommendation report will vary depending on the circumstances; an example is set out in Appendix B.

The tender recommendation report and/or consideration of it by management may generate queries or issues that are best resolved through discussion and/or negotiation with the tenderer recommended in the report. Queries should be raised and addressed in a manner that respects the tendering procedure. Where the main contractor and the tenderer are commercial organisations, it is common for a degree of negotiation to take place regarding the details of the tenderer's offer and the contents of a potential subcontract. Once the queries have been resolved and the negotiations concluded, the main contractor will be in a position to select the successful tenderer and move on to drafting the subcontract.

2.6 Post-tender changes

The requirements for the subcontract works may change after the tenderer has submitted its tender. For example, the employer might require changes to the design of the main contract works that affect the subcontract works, or the main contractor might require the subcontract works to be completed to a different timescale that that referred to in the ITT. In most cases, it is good practice for changes that may affect the design or the subcontractor's tender to be issued to all tenderers, and for revised tenders to be sought and assessed.

2.6.1 Value management (VM)/value engineering (VE)

The current edition of *Value management and value engineering*, RICS guidance note, introduces the concepts of VM and VE in relation to construction projects.

The requirements for the subcontract works may change as a result of VM or VE exercises. The general view is that the benefits of VM or VE decrease as the project progresses. The greatest benefit is derived during the early stages of the project. This can include the tender stage; for example, tenderers who are specialists in particular works might suggest some ideas for VM or VE with their tenders.

2.6.2 Incorporating post-tender changes, VM and VE into the subcontract

Ensure that post-tender changes, VM and VE are appropriately incorporated into the subcontract. The subcontract will need to substitute documents (e.g. drawings and specifications) that properly reflect the post-tender changes, VM or VE for some of the documents that formed part of the ITT. The compilation of such documents can be time consuming, but if the exercise is not carried out properly, the subcontract might contain discrepancies or ambiguities that may lead to technical and commercial difficulties.

2.7 Specific standard forms of subcontract

2.7.1 JCT Standard Building Sub-Contract 2016 (SBCSub)

SBCSub comprises two versions:

- Standard Building Sub-Contract 2016 (SBCSub)
- Standard Building Sub-Contract with sub-contractor's design 2016 (SBCSub/D).

SBCSub can be used:

- where the main contract is any of the three versions of the JCT Standard Building Contract 2016: Standard Building Contract With Quantities (SBC/Q), With Approximate Quantities (SBC/AQ) or Without Quantities (SBC/XQ)
- where the subcontract works are to be carried out on the basis of an adjusted subcontract sum (adjustment for variations, etc.) or by complete remeasurement
- where the main contract works and/or the subcontract works are to be carried out in sections
- where the subcontractor is not required to design any of the subcontract works.

SBCSub/D can be used:

- where the first three bullets regarding SBCSub apply
- where the subcontractor is required to design all or part of the subcontract works.

Each of the two subcontracts consists of two documents: the Sub-Contract Agreement and the Sub-Contract Conditions.

For SBCSub, the two documents are:

- Standard Building Sub-Contract Agreement (SBCSub/A)
- Standard Building Sub-Contract Conditions (SBCSub/C).

For SBCSub/D, the two documents are:

Standard Building Sub-Contract with subcontractor's design Agreement (SBCSub/D/A)

• Standard Building Sub-Contract with subcontractor's design Conditions (SBCSub/D/C).

SBCSub/C and SBCSub/D/C contain a step-down clause.

The other subcontract documents are incorporated into the agreement (SBCSub/A or SBCSub/D/A) by reference, including the conditions (SBCSub/C or SBCSub/D/C), so it is not necessary to include a copy of the conditions in the executed subcontract.

2.7.2 JCT Design and Build Sub-Contract 2016 (DBSub)

DBSub can be used:

- where the main contract is the JCT Design and Build Contract 2016 (DB 2016)
- where the subcontract works are to be carried out on the basis of an adjusted subcontract sum (adjustment for variations, etc.) or by complete remeasurement
- where the main contract works and/or the subcontract works are to be carried out in sections
- whether or not the subcontractor is required to design any of the subcontract works.

DBSub consists of two documents:

- Design and Build Sub-Contract Agreement (DBSub/A)
- Design and Build Sub-Contract Conditions (DBSub/C).

DBSub contains a step-down clause.

The other subcontract documents are incorporated into DBSub/A by reference. This includes DBSub/C, so it is not necessary to include a copy of DBSub/C in the executed subcontract.

DBSub is different from SBCSub/D. The former is only for use where the main contract is the JCT Design and Build Contract 2016, whereas the latter is only for use where the main contract is one of the three versions of the JCT Standard Building Contract 2016.

2.7.3 JCT Major Project Sub-Contract 2016 (MPSub)

MPSub can be used:

- where the main contract is the JCT Major Project Construction Contract 2016 (MP 2016)
- where the subcontract works are to be carried out on the basis of an adjusted subcontract sum (adjustment for variations, etc.) or by complete remeasurement
- where the main contract works are to be carried out in sections
- whether or not the subcontractor is required to design any of the subcontract works.

MPSub contains a step-down clause.

MP 2016 (and its previous versions) was prepared to meet the requirements of employers and main contractors who regularly carry out major construction work and have their own contractual procedures. MPSub reflects the approach of MP 2016 and proceeds on the basis that the subcontractor will be experienced in working on major construction works and is able to take greater risks than would arise under other JCT subcontracts. MPSub is shorter than other standard forms of subcontract. It does not contain a separate agreement; many users of MPSub prepare their own agreement to use in conjunction with the form.

2.7.4 JCT Intermediate Sub-Contract 2016 (ICSub)/JCT Intermediate Sub-Contract with subcontractor's design 2016 (ICSub/D)

ICSub can be used:

- where the main contract is the JCT Intermediate Building Contract 2016 (IC 2016)
- where the main contract is the JCT Intermediate Building Contract 2016 with contractor's design (ICD 2016)
- where the subcontract works are to be carried out on the basis of an adjusted subcontract sum (adjustment for variations, etc.) or by complete remeasurement
- where the main contract works and/or the subcontract works are to be carried out in sections
- where the subcontract is to be executed under hand or as deed
- where the subcontractor is not required to design any of the subcontract works
- where the subcontractor is not named in the main contract.

ICSub consists of two documents:

- Intermediate Sub-Contract Agreement (ICSub/A)
- Intermediate Sub-Contract Conditions (ICSub/C)

ICSub contains a step-down clause.

The other subcontract documents are incorporated into ICSub/A by reference. This includes ICSub/C, so it is not necessary to include a copy of ICSub/C in the executed subcontract.

ICSub/D is similar to ICSub but can be used where the subcontractor is required to design all or part of the subcontract works.

2.7.5 JCT Intermediate Named Sub-Contract 2016 (ICSub/NAM)

ICSub/NAM can be used:

- where the main contract is the JCT Intermediate Building Contract 2016 (IC 2016)
- where the main contract is the JCT Intermediate Building Contract 2016 with contractor's design (ICD 2016)
- where the subcontractor is named in the main contract to carry out subcontract works, whether or not they include design
- where the subcontract works are to be carried out on the basis of an adjusted subcontract sum (adjustment for variations, etc.) or by complete remeasurement
- where the main contract works and/or the subcontract works are to be carried out in sections.

ICSub/NAM cannot be used for any work that forms part of the Contractor's Designed Portion under the main contract (IC 2016 or ICD 2016). Under IC 2016 and ICD 2016, the main contractor is relieved of responsibility to the employer for defects in the named subcontractor's design of the subcontract works.

ICSub/NAM consists of four documents:

- Invitation to Tender (ICSub/NAM/IT)
- Tender (ICSub/NAM/T)
- Agreement (ICSub/NAM/A)

Intermediate Named Sub-Contract Conditions (ICSub/NAM/C)

The process by which ICSub/NAM is entered into is as follows:

- 1 The employer or the CA completes the Invitation to Tender (ICSub/NAM/IT) and sends it to the proposed named subcontractor.
- 2 The proposed named subcontractor submits its tender (ICSub/NAM/T) to the employer or the CA.
- 3 The main contractor is made aware of the proposed named subcontractor because its tender and the invitation to tender will be included in the tender documents issued to the main contractor for the main contract, in an instruction to expend a provisional sum under the main contract or to expend a provisional sum naming a replacement named subcontractor.
- 4 The main contract and the named subcontractor enter into ICSub/NAM.

ICSub/NAM contains a step-down clause.

The other subcontract documents are incorporated into ICSub/NAM/A by reference. This includes ICSub/NAM/C, so it is not necessary to include a copy of ICSub/NAM/C in the executed subcontract.

2.7.6 Other JCT subcontracts and related contracts

JCT publishes other forms of subcontract and related contracts. Although this guidance note does not consider those other forms in detail, practitioners should be aware of them. These forms include:

- JCT Minor Works Sub-Contract with subcontractor's design 2016 (MWSub/D)
- ICT Short Form of Sub-Contract 2016 (ShortSub)
- JCT Management Works Contract 2016 (MCWC)
- JCT Construction Management Trade Contract 2016 (CM/TC)
- JCT Sub-Sub-Contract 2016 (SubSub)
- ICT Pre-Construction Services Agreement (Specialist) 2016 (PCSA/SP)

2.7.7 CIP Short Form of Subcontract

This a very simple subcontract. It can be used with most main contracts (including JCT) where the subcontract works are straightforward and involve low risk. The subcontract works can include design, although if the subcontract works or their design are complex, another form of subcontract should be used. It should not be used where the subcontract is required to be fully back-to-back with the main contract. The subcontract comes in the form of a tear-off pad, which is available with either six or ten copies. The pad also contains a guidance note. The subcontract was published in 2014 and updated in 2020.

2.7.8 CIP Scaffolding Contract 2018

This was developed with the assistance of The Contractors Legal Group and the National Access and Scaffolding Confederation. It can be used for all types of scaffolding works.

In addition to the normal conditions of contract, the form contains a schedule of commonly encountered scaffolding items, which the parties can price at the outset to minimise any concerns about the cost of changes/variations that may be required to the scaffolding while the works proceed.

2.7.9 NEC4 Engineering and Construction Subcontract (NEC4 ECS)

NEC4 ECS is a member of the NEC4 family, the fourth edition of the Engineering and Construction Contract (ECC), and is consistent with other NEC contracts.

NEC4 ECS is current, but NEC3 ECS is still commonly used. Where this guidance note refers to a particular clause number in NEC4 ECS, the same clause number applies in NEC3 ECS, and so can provide guidance regarding NEC3 ECS. However, NEC4 ECS and NEC3 ECS are different in other respects (e.g. the use of defined terms), so take particular care to check the express provisions of NEC3 ECS every time it is used.

NEC4 ECS can be used:

- where the main contract is any of the main options of the ECC main contract (Options A to F)
- where the ECC main contract includes none, some or all of the ECC secondary options
- where the subcontract is to be executed under hand or as deed
- where the subcontractor is required to design none, part or all of the subcontract works
- where the main contract works and/or the subcontract works are to be carried out in sections
- where the subcontract works are to be carried out on the basis of any of the main Options A to E of the subcontract.

As with the ECC main contract, the starting point for NEC4 ECS is for the user to decide which of the main, dispute resolution and secondary options should apply. It is not necessary for the same options to apply in the subcontract as in the main contract.

NEC4 ECS consists of one document. It does not contain an agreement. The agreement is generally drafted by the main contractor, and it should incorporate the other subcontract documents by reference.

NEC4 ECS does not contain a step-down clause, but is drafted as a 'pass through' contract: the clauses are in most cases identical to the equivalent clauses in the ECC main contract, except for necessary changes to the terms used, such as using 'subcontractor' in place of 'contractor'. Step-down clauses have been included in subcontracts for many years, and main contractors have become familiar with them. Where the main contractor decides that a step-down clause is required in NEC4 ECS, it can be included in the subcontract by using Option Z (additional conditions of subcontract) and including suitable wording to deal with the step down.

2.7.10 NEC4 Engineering and Construction Short Subcontract (ECSS)

ECSS is a member of the NEC4 family and is consistent with other NEC contracts.

ECSS can be used:

- where the main contract is any of the main options of the ECC main contract (Options A to F)
- where the main contract is ECC and includes none, some or all of the ECC secondary options
- where the main contract is NEC4 Engineering and Construction Short Contract (ECSC)
- where the subcontract is to be executed under hand or as deed
- where the price to be paid is a lump sum, or adjustable if the quantity of work stated in the subcontract is different from the final quantity of work done
- where the subcontractor is required to design none, part or all of the subcontract works
- where the main contract works are to be carried out in sections

- where the subcontract works are not required to be carried out in sections
- where the subcontract works are to be carried out on the basis of any of the main Options A to E of the subcontract.

ECSS should be used with contracts that do not require sophisticated management techniques, consist of straightforward work and only impose low risks on both the contractor and the subcontractor.

2.7.11 CECA/ACE subcontracts

The CECA and ACE subcontracts for use with ICC include:

- CECA Form of Sub-Contract for use in conjunction with the Infrastructure Conditions of Contract Measurement Version August 2011
- CECA Form of Sub-Contract for use in conjunction with the Infrastructure Conditions of Contract Design and Construct Version August 2011
- ACE/CECA ICC Sub-Contract 2017 for use in conjunction with the Infrastructure Conditions of Contract With Quantities Version

2.7.12 ACA standard form of specialist contract for project partnering (SPC 2000)

ACA publishes a standard form of project partnering contract, PPC2000 (the current version is PPC2000 2013), a multi-party project partnering contract for use in a single project. The parties can include the employer, the main contractor (known as the 'constructor'), design consultants, specialist contractors and suppliers. It forms one integrated contract, under which the various parties rely on each other and should not seek to pass risk and problems up or down a contractual chain.

Under PPC2000 the specialist brings its skills to the project team but is considered to act at the same level as the other parties to the contract, rather than sitting at a lower tier of a contractual chain.

ACA also publishes SPC2000 (the current version is SPC 2000 2008), the first standard form of specialist contract for project partnering. It complements PPC2000 and can be used where:

- the specialist is a member of the partnering team and a party to PPC2000, but the entire legal relationship between the constructor and the specialist cannot be addressed in PPC2000 or
- the specialist is not a member of the partnering team.

Among other things, SPC2000 identifies whether the specialist is a member of the partnering team, and calls for the specialist to support the constructor and provide them with information and assistance.

2.7.13 FIDIC subcontracts

In December 2017, FIDIC published:

- Conditions of Contract for Construction, Second Edition, 2017 (Red Book, 2017)
- Conditions of Contract for Plant and Design-Build, Second Edition, 2017 (Yellow Book, 2017)
- Conditions of Contract for EPC/Turnkey Projects, Second Edition, 2017 (Silver Book, 2017)

The 2017 editions are the latest editions of the rainbow suite of contracts. Several FIDIC contracts were not updated.

In 2011, FIDIC published Conditions of Subcontract for Construction: for Building and Engineering Works Designed by the Employer, First Edition 2011 (Red Book subcontract). The Red Book subcontract can

be used where the main contract is the Red Book or the Pink Book. The Red Book subcontract was not updated in 2017.

In December 2019, FIDIC launched its Conditions of Subcontract for Plant and Design-Build, First Edition 2019 (Yellow Book subcontract). It is intended for use where the main contract is based on the FIDIC Conditions of Contract for Plant and Design-Build, First Edition 1999. The Yellow Book subcontract is based on the Red Book subcontract, with changes where necessary to reflect differences between the FIDIC Red and Yellow main contracts.

FIDIC subcontracts are drafted in a way that assumes all the obligations of the main contractor under the main contract are passed down to the subcontractor under the subcontract. The subcontractor is also expected to have full knowledge of the relevant provisions of the main contract. Under FIDIC subcontracts, the subcontractor takes on more risk than under other standard forms of subcontract. This reflects the philosophy of the FIDIC suite of main contracts.

2.8 Drafting the subcontract

This section highlights some of the key matters that should be considered when drafting the subcontract. Where applicable, an outline of the way in which such issues are addressed in two commonly used subcontracts (JCT DBSub 2016 and NEC4 ECS) is provided.

2.8.1 Choosing the form of subcontract

The starting point in drafting any subcontract is to choose from the range of subcontracts that are available. Several key factors should be taken into account:

- Identify the main contract and whether a particular form of subcontract is available for use with that main contract (see section 2.7). For example, if the main contract is JCT DB 2016, the associated JCT DBSub 2016 is available for use with that main contract. In many cases it will be appropriate to use the available form but if, for example, the subcontract works in a particular case are straightforward and low risk, the use of a sophisticated subcontract such as JCT DBSub 2016 may be unnecessary and a relatively simple form of subcontract could be used instead.
- Consider the relationship between the main contract and the subcontract (see section 2.8.3).
- Although there are often benefits in drafting the subcontract so that it is consistent with the main contract, it does not have to be. For example, where the main contract is NEC4 Option C, the subcontract could be NEC4 ECS but it would not necessarily follow that Option C should be used. Commercial considerations may result in, for instance, NEC4 ESC Option A being used instead.
- Where the main contract is bespoke, give special consideration to the form of subcontract. A bespoke form of subcontract that reflects the main contract where applicable may be appropriate.

2.8.2 Lump sum/adjustment versus remeasure

Consider whether the amount to be paid to the subcontractor should be based on a lump sum or a remeasure. Although such expressions are not precisely defined, they are understood by many practitioners.

Where lump sum/adjustment applies, the subcontract will contain a lump sum that will be paid to the subcontractor for the subcontract works (subject to adjustment in accordance with the conditions of the subcontract, e.g. for variations).

Alternatively, where remeasurement applies the amount to be paid to the subcontractor for the subcontract works is based on a complete remeasurement of the subcontract works, rather than adjustments to an initial lump sum.

Consider the merits of each option. For example, where a lump sum/adjustment basis applies, it will give a reasonable degree of certainty as to the final cost to the main contractor and the final value amount to be paid to the subcontractor. Where remeasurement applies, neither the main contractor nor the subcontractor will know with certainty the amount to be paid to the subcontractor until the subcontract works have been completed, remeasured and the value calculated. In addition, where remeasurement is used, the costs of administering the subcontract can be high because skilled resources from the main contractor and subcontractor must be allocated to prepare the remeasurement and agree it.

If the subcontract is entered into when the design of the subcontract works is not very developed, it will not be practical to accurately identify the quality and quantity of the subcontract works. Consequently, if the lump sum/adjustment basis is used, the subcontractor's lump sum for the work is likely to be very high because the subcontractor will (understandably) include a relatively high-risk allowance. In those circumstances it may be appropriate to enter into the subcontract based on the information available at the time, and then use the remeasurement basis to ensure that the final amount paid to the subcontractor is a fair amount for the actual work done.

JCT DBSub 2016 contains optional provisions to select either the lump sum/adjustment basis (Article 3A) or the remeasurement basis (Article 3B). Once the appropriate article is selected, the relevant conditions of subcontract apply so the amount to be paid to the subcontractor can be calculated in accordance with those conditions.

2.8.3 Relationship between the subcontract and the main contract

So that the main contractor is able to deliver the main contract works, it is important that the subcontract reflects the main contract where necessary. For example, if the main contract requires the main contractor to use a particular concrete mix in the piles, that requirement should also be imposed on the piling subcontractor in the subcontract. The relationship between the subcontract and the main contract is mainly dependent on the terms of the subcontract. For example, in circumstances where the main contract is a sophisticated standard form of main contract (e.g. JCT DB 2016) and the subcontract is a simple subcontract made on the subcontractor's standard terms, there may be no particular relationship between the subcontract and the main contract; the subcontract might not even mention the main contract.

However, in many cases the subcontract will be one of three common types, or a close variant. Various expressions are used to describe various types of subcontract, but there is no universally recognised vocabulary for the classification of subcontracts. Expressions such as 'back-to-back subcontract', 'standalone subcontract', 'step-down subcontract', 'flow-down subcontract' and 'pass-through subcontract' are often used without precise or consistent meanings. Therefore, when using those or similar expressions, it is important to clarify what is meant.

Under a back-to-back subcontract, the rights and obligations of the subcontractor under the subcontract are very similar (in some cases identical) to the rights and obligations of the main contractor under the main contract. This is commonly achieved by incorporating all the relevant conditions of the main contract into the subcontract by reference.

A back-to-back subcontract may be 'full' or 'partial'. A full back-to-back subcontract may be used where the main contractor is a vehicle for procuring the services or works of the subcontractor. For example, in some developing countries there may be a requirement that a government entity contracts with a local company registered in that country. The local company might then sublet all its main contract works to a company from another country under a full back-to-back subcontract.

A partial back-to-back subcontract may be used where the subcontractor is required to fulfil a large proportion, but not all, of the main contractor's obligations under the main contract. For instance, to continue the developing countries example, the main contract works may consist of the design, construction and fitting out of a large hospital. The local main contractor may sublet the whole of the main contract works, except the supply and installation of specialist medical equipment (e.g. X-ray machines and MRI scanners), to a foreign construction subcontractor by way of a partial back-to-back subcontract.

Although the use of a back-to-back subcontract appears to have advantages, there are also disadvantages:

- If the main contract is badly drafted, the back-to-back subcontract will be equally badly drafted.
- It may not be appropriate or even lawful for every obligation that is imposed on the main contractor under the main contract to be imposed on the subcontractor on the same terms. For example, the way in which the main contract deals with confidentiality, giving notice, payment, intellectual property, data protection and dispute resolution may not be suitable for use in the subcontract.
- On its own, a back-to-back subcontract will not include the main contractor's special requirements (see section 1.8.9).

Many subcontracts are described as being back-to-back, but in reality, few subcontracts truly are.

A standalone subcontract does not rely on all the terms of the main contract being incorporated by reference. However, a well-drafted standalone subcontract will incorporate those terms that are relevant to the subcontract and the subcontract works, redrafted so that they are suitable for use in the subcontract. In this way, the rights and obligations of the subcontractor under the subcontract are aligned with the rights and obligations of the main contractor under the main contract, without the disadvantages associated with a back-to-back subcontract. This is sometimes called a step-down, flow-down or pass-through subcontract.

A standalone subcontract will usually contain a clause under which the subcontractor indemnifies the main contractor against losses incurred by the main contractor as a result of a breach by the subcontractor that causes the main contractor to be in breach of the main contract. The main contractor's obligations that should be stepped down to the subcontractor will vary, depending on the nature of the main contract works and the subcontract works. However, examples of clauses in the main contract that would usually be stepped down to the subcontractor include those that deal with the standard of care in relation to design, quality of materials and workmanship, defects, duty to progress works, responsibility for discrepancies in documents, rectification of damaged works, valuation of variations, access to off-site premises and information security.

Standard form subcontracts (see section 2.7) often contain clauses that are consistent with the relevant main contract and/or step down relevant clauses of the main contract. For example, some standard form subcontracts contain a clause stating the subcontractor is obliged to observe, perform and comply with the main contractor's obligations under the main contract where they apply to the subcontract works.

Standard form main contracts are often amended to reflect the employer's and main contractor's particular requirements for the main contract works. In drafting a subcontract in such circumstances, the

main contractor may use the relevant standard form of subcontract as a basis, but should see that it is amended to reflect the relevant amendments made to the main contract. It is very unwise to attempt to take a shortcut and incorporate the amendments made to the main contract by reference; difficulties may arise that are similar to those associated with a back-to-back subcontract.

2.8.4 The subcontract agreement

There is no fixed form for a subcontract agreement but generally it will include:

- the date on which the subcontract agreement is entered into
- the name and address of the main contractor and the subcontractor
- a description of the subcontract works
- the recitals
- the articles and
- the attestation or execution of the subcontract, whether as a deed or under hand.

The subcontract agreement should record the date of the agreement. In many cases, wording along the following lines will be used:

'This subcontract agreement is made on [insert date (day, month and year)]'

The date of the subcontract agreement should be the final piece of information to be recorded in the subcontract, after all other parts of the subcontract have been completed and the main contractor and the subcontractor have signed or executed the subcontract. The date is generally inserted into the subcontract agreement by hand, in the space allocated to it.

The subcontract agreement will usually state the names and addresses of the main contractor and subcontractor. Ensure that the details are full and correct. For example, where the main contractor and the subcontractor are companies registered in the UK, the proper legal name of the company, the company number and its registered office address should be included. Such details can be obtained from Companies House as well as useful information regarding overseas companies that have a branch in the UK.

When completing the addresses of the parties, check the provisions under the subcontract that concern giving notices or other communications. In some cases, notice provisions will identify the address to which notices are to be sent, or they may refer to the address stated in the subcontract agreement. If the latter applies, this address becomes significant for subcontract administration, which may not reflect the intention of the parties.

The subcontract works may be identified in a short description set out in the recitals or articles forming part of the subcontract agreement. This is the position in JCT DBSub 2016. Alternatively, a short description could be included in another part of the subcontract; for example, in NEC4 ECS it is included in the data.

It is not essential for a subcontract to contain recitals. Where recitals are used, they should set out background facts. For example, the recitals may record that the main contractor has entered into the main contract for the main contract works, and go on to record that the main contractor wishes the subcontractor to execute the subcontract works as part of the main contract works.

The recitals may also record that the main contractor has provided the subcontractor with a copy of the main contract, and that the subcontractor has provided the main contractor with pricing documents, such as a priced schedule of activities.

The parts of the subcontract that follow the recitals are usually preceded by an expression such as 'Now it is hereby agreed as follows'. In most cases, this will include the articles of agreement.

The articles of agreement contain important elements of the subcontract. They often identify the documents that make up the subcontract and the price for the subcontract works. The articles may also record the fundamental obligations imposed on the subcontractor and the main contractor: the subcontractor must carry out and complete the subcontract works, and the main contractor must pay the subcontractor.

The subcontract conditions are often incorporated into the subcontract by reference. In many cases, such incorporation is dealt with by way of an article. For example, JCT DBSub 2016 incorporates the Design and Build Sub-Contract Conditions 2016 (DBSub/C) by reference to such subcontract conditions being made in Article 1.

2.8.5 Particulars/data specific to the subcontract works

The particulars for a subcontract may include:

- addresses for notices
- programme requirements:
 - subcontract works off site
 - subcontract works on site.
- attendances
- payment:
 - due dates for payment
 - retention percentage
 - payment for materials off site
 - rates for daywork or agreed percentages for fees, etc.
- levels of insurance required
- the date from which changes in law are assessed (sometimes known as the 'base date')
- information on the dispute resolution procedure (e.g. the name of the adjudicator, the name of the adjudicator nominating body, etc.).

2.8.6 Scope

The fundamental obligation imposed on the subcontractor under the subcontract will be to carry out and complete the subcontract works. The specific wording to express this varies; for example, under 'General obligations', clause 2.1.1 of JCT DBSub 2016 states 'The Sub-Contractor shall carry out and complete the Sub-Contract Works', whereas under the heading 'The Subcontractor's main responsibilities', clause 20.1 of NEC4 ECS states 'The Subcontractor Provides the Subcontract Works'.

Whatever form of wording is used, the subcontract should identify the subcontract works accurately, completely and clearly.

Drafting a scope for the subcontract works is a difficult task; the following guidance may help:

- Have a good understanding of the scope of the main contract works and its division into subcontract packages.
- Discuss the scope of the subcontract works with all relevant members of the project team, to ensure there is a consistent understanding of what needs to be included in the scope of particular subcontract works
- Pay attention to relevant drawings and specifications. A well-drafted specification will often contain a good description of the work to be done by the subcontractor.
- State that the scope of the subcontract works consists of carrying out and completing the construction and, where applicable, the design of all or part of the subcontract works.
- Where applicable, state that the scope of the subcontract works includes the provision of all necessary resources (e.g. management, staff, supervision, labour, plant, fabrication, materials, goods, off-loading and distribution, setting out, testing and commissioning).
- Identify the subcontract works with a general description and a comprehensive list of particular works (although the subcontract might be drafted so that the specific list does not limit the extent of the work included in the general description).
- Where applicable, identify the scope of temporary works involved (e.g. support, protection, access arrangements, safety netting, provision of mock-ups, samples, etc.).
- Consider whether the scope should include works that can be inferred from documents.
- Where appropriate, use marked-up drawings to identify the scope and consider whether this task can be made easier with the use of building information modelling (BIM).
- Avoid including in the scope other features that are relevant to the subcontract works (e.g. information on programme, price, attendances, etc.).

The importance of discussing the scope with the project team should not be underestimated. In some cases, the primary responsibility for drafting the subcontract will sit with commercial or procurement staff, but all relevant members of the project team should have a hand in drafting the scope. This includes technical staff (e.g. project engineers) who are likely to have a good understanding of the nature of the works, the construction techniques to be used and the performance specifications, quality and similar requirements.

The subcontract should be drafted so that the interface between the subcontract works and other parts of the main contract works is clear. The best way of doing this will vary depending on the circumstances, but will often involve marked-up drawings and/or well-drafted descriptions.

For example, where a particular detail forming part of the main contract works is complex and involves work from several subcontractors (e.g. a detail that shows the interface between the structure, cladding and fire stopping), a marked-up drawing identifying the particular works in the detail that are included in the subcontract works can be produced.

2.8.7 The subcontractor's design responsibility

The extent of the subcontractor's responsibility for the design of the subcontract works should be clear from the subcontract. In some cases, particularly where the subcontractor is responsible for the whole design, this may be through the subcontract conditions or a similar statement that allocates full design responsibility to the subcontractor.

However, carefully consider whether the subcontractor is only responsible for completing the design or is also required to adopt and assume responsibility for any existing design work. The latter arrangement is often imposed on the subcontractor, including where an equivalent arrangement is imposed on the main contractor under the main contract. In those circumstances, the subcontractor should take steps to ensure it is comfortable with the existing design even though it has been prepared by others (e.g. the employer's design consultants).

JCT DBSub 2016 sets out the extent of the subcontractor's design responsibility in the third recital. The recital needs to be completed by the parties whether the subcontract includes the design of none, some or all of the subcontract works. JCT DBSub 2016 also requires the subcontractor to comply with directions the main contractor gives for the integration of the subcontractor's design with the design for the main contract works as a whole

NEC4 ECS sets out the extent of the subcontractor's design responsibility in clause 21.1 and a cross-reference to the subcontract scope and assumes the parts of the subcontract works to be designed by the subcontractor are stated in the subcontract scope.

Where the subcontractor is designing part but not all of the subcontract works, that part should be described clearly. For example, it is not unusual for the subcontractor providing structural steelwork to design the steel-to-steel connections that form part of the structural steel frame. However, other connections may also be required, such as steel-to-concrete foundation connections or steel-to-concrete superstructure connections. Also, the main contractor may want the subcontractor to design gussets, bracing, stiffeners or trimmings for openings. Therefore, the description of works to be designed by the subcontractor should always be carefully considered, rather than simply relying on custom and practice.

Where a particular detail of the design requires input from a range of disciplines, consider using a design responsibility matrix, which sets out the particular area of responsibility for each discipline. The matrix is often used to identify the design input required from each discipline, which is then included in the subcontract. In cases where the matrix is clear and unambiguous, consider including the matrix in the subcontract, although in most cases this is not the preferred solution.

The standard of care that applies to the subcontractor's design should be set out in the conditions of the subcontract. The law will also imply terms into contracts for work and materials, such as a subcontract where the subcontractor is obliged to design and build the subcontract works. One of these implied terms is that, provided it is reasonable for the main contractor to rely on the subcontractor's skill and judgement, the subcontract works will be reasonably fit for its purpose.

It may be necessary to impose a fitness for purpose obligation on the subcontractor. However, this is often considered to be demanding on the subcontractor and it is unlikely that a subcontractor (or a main contractor) will accept a fitness for purpose obligation. Therefore, the subcontractor's responsibility for design is often limited to a particular standard of care. For example, clause 2.13.1 of JCT DBSub 2016 states that the subcontractor's liability for any inadequacy in its design is limited to the liability of an architect or other appropriate professional designer. NEC4 ESC adopts a similar approach in circumstances where its secondary Option X15 is used, but in other cases NEC4 ECS imposes a fitness for purpose obligation on the subcontractor, to the extent that the subcontractor is responsible for design and construction.

2.8.8 Attendances

Attendances are described in section 1.8.6. Some standard forms of subcontract address attendances – at least in part – whereas others leave it to the parties to address the matter. JCT DBSub 2016 deals

with attendances in clauses 3.16 to 3.18, any by reference to item 7 of the particulars included in the subcontract. These provisions create a standard framework within which the parties can operate, but also allows the parties to discuss and agree a suitable allocation of attendances provided by the main contractor to the subcontractor. NEC4 ECS contains clause 25.2, under which the parties are obliged to provide services and other things as stated in the subcontract scope. These provisions largely leave it to the parties to discuss and agree attendances on a case-by-case basis.

Attendances are an important part of the subcontract and the allocation of responsibility between the main contractor and the subcontractor for providing attendances is often overlooked or not well considered, which can lead to commercial difficulties on site. Therefore, time and effort invested in resolving the allocation of attendances before the subcontract is entered into is repaid many times over after the subcontractor commences work. Such allocation should have regard to whether the main contractor or subcontractor is in the best position to provide any particular attendance, although commercial considerations will also be a factor in agreeing the allocation.

It is sometimes thought that attendances can be addressed by a checklist, but in most cases this is insufficient and something more thorough – often a full and detailed schedule – is required.

2.8.9 Performance security

The purpose of performance security is to provide contractual rights and remedies, in favour of the main contractor, against a third party (such as a guarantor or a surety) if the subcontractor is in default under the subcontract.

Where robust procurement and selection procedures have been implemented, the requirement for performance security may be reduced. However, it is commercially advantageous for the main contractor to require the subcontractor to provide performance security, even if these procedures have been implemented. A commercial balance needs to be struck between the risk of the subcontractor failing to perform and the cost, if any, of performance security. Most subcontractors will incur a cost in providing a performance bond and will expect to pass that cost on to the main contractor.

The two types of performance security most commonly used are a parent company guarantee (PCG) and a performance bond. Other types of performance security are sometimes used, such as the standby letter of credit and the letter of comfort.

A PCG is a written undertaking provided by the parent company of the subcontractor stating that in the event of the subcontractor's default, breach or insolvency the parent company will assume the responsibilities, liabilities, etc. of the subcontractor under the subcontract, or pay for damages suffered by the main contractor. A PCG is often provided through a contract between the parent company and the main contractor, but other methods include:

- The parent company may enter into the subcontract jointly and severally with the subcontractor.
- The parent company may enter into the subcontract, but only to guarantee the performance of the subcontractor.

A performance bond is a written undertaking provided by a third party stating that in the event of the subcontractor's default, breach or insolvency, the third party will assume the liability for loss and damage of the subcontractor under the subcontract. The third party is sometimes known as the surety or guarantor, and is usually a bank or an insurance company.

Bear in mind that the subcontractor's insolvency does not automatically constitute a default or breach of the subcontract, although default or breach usually follow because the subcontractor is not in a position to proceed with the subcontract works. Some performance bonds may be drafted in such a way that they will not respond if the subcontractor becomes insolvent, but this is not always obvious. Therefore, ensure the performance bond is drafted so that it will respond in circumstances where the subcontractor is insolvent, such as through an express clause to that effect. Consider drafting the subcontract to expressly state that the insolvency of the subcontractor constitutes a default and/or breach of the subcontract.

There are two main types of performance bond:

- on-demand bond
- default bond.

An on-demand bond is an undertaking from the surety that it will pay a sum of money to the main contractor on demand. This is a primary liability as it may arise even where the subcontractor is not at fault under the subcontract.

A default bond is an undertaking by the surety to recompense the main contractor, up to a specified amount, in the event of a default by the subcontractor under the subcontract and is therefore a secondary liability.

Whether the subcontractor is obliged to provide an on-demand or default performance bond is a matter of commercial negotiation. On-demand performance bonds are common in international construction projects but less common in the UK. The cost incurred by the subcontractor in procuring a bond is a matter of commercial negotiation between the subcontractor and its surety and can vary a lot. In many cases the cost of an on-demand bond will be more than a default bond.

If the main contractor considers the cost of performance security to represent good value for money, it may consider 'the more, the better' and seek a PCG and a performance bond. However, the subcontractor may not be willing to provide both. If it is necessary for the main contractor to decide between a PCG and a performance bond, it should consider the terms of each, as well as the identity and the financial strength of the parent company or surety. See the current edition of *Construction security and performance documents*, RICS guidance note, for a commentary on the typical characteristics of PCGs and bonds, which can be considered when deciding between them. Such characteristics are summarised in Appendix C.1.

This guidance note does not provide guidance on drafting the PCG or performance bond. Security documents have special characteristics, so legal advice should be taken concerning their form and content.

The subcontract should make clear whether the subcontractor is to provide a PCG, a performance bond, both or that no performance security is required. NEC4 ECS deals with performance security through secondary Options X4 (parent company guarantee) and X13 (performance bond). JCT DBSub 2016 does not contain provisions that deal with performance security, but where performance security is required it can be addressed in amendments to the included conditions. Key issues with enabling provisions are set out in Appendix C.2.

A standby letter of credit is similar to an on-demand bond: it provides security for performance of the underlying obligation and is payable following a demand that complies with the standby letter of credit. Payment is conditional on a default or breach by the subcontractor, but the issuer (usually a bank) will not investigate. The issuer's obligation to make payment under a standby letter of credit is a primary obligation.

Note that a standby letter of credit differs from other letters of credit, which provide for payment by the issuer on behalf of the buyer to the seller following due performance of the contract, for example where materials or goods are delivered by a supplier to a contractor.

A letter of comfort is an assurance written to the main contractor affirming the subcontractor's ability and willingness to perform its obligations under the subcontract. The letter is often issued by the subcontractor's parent company or bank. However, in many cases a letter of comfort will have no legal effect so cannot act as performance security.

A letter of comfort may be used where the subcontractor is unable or unwilling to provide any other form of security. There may be several reasons for this, for example:

- Guarantees, on-demand bonds and standby letters of credit are required to be noted in a company's accounts as liabilities, whereas no such requirement exists in the case of a letter of comfort.
- The subcontractor's parent company may be prohibited by its own corporate governance or banking facilities from giving a PCG.
- The subcontractor may have exhausted or reached the limit of its bonding facility.

Where the main contractor requires legally binding performance security, it should require the subcontractor to provide a PCG, performance bond or letter of credit. The main contractor should not accept a letter of comfort as performance security.

2.8.10 Collateral warranties and third-party rights from the subcontractor as warrantor

The circumstances in which collateral warranties or third-party rights may be required are described in section 1.8.8.

Where the subcontractor is required to enter into collateral warranties as warrantor, the subcontract should contain a suitable enabling clause with a number of key features:

- a clear obligation on the subcontractor to execute and deliver collateral warranties to the main contractor
- a period within which the subcontractor must execute and deliver the collateral warranties (in many cases considering the period within which the main contractor must procure the warranty under the main contract)
- the identities/classes of the beneficiaries in whose favour the subcontractor is obliged to enter into collateral warranties
- the form of the collateral warranty
- where there is a requirement for the collateral warranty to be guaranteed by the subcontractor's parent company, for example, the clause should identify that requirement as well as the identity of the parent company, whether by its name or its class (e.g. the 'ultimate' parent company).

The key features of an enabling clause requiring the subcontractor to grant third-party rights under the *Contracts (Rights of Third Parties) Act* 1999 are:

- the identity of the parties in whose favour third-party rights are given (by name, as a member of a class or answering a particular description)
- the way in which the third-party rights are granted should be expressed (e.g. by written notice)

- a prescribed form of notice under which third-party rights are granted
- the rights that are being granted to the third party, by identifying such rights in the enabling clause or setting them out in another document that forms part of the subcontract.

JCT DB Sub 2016 contains clause 2.26, which is an enabling clause that applies to collateral warranties and third-party rights.

Detailed requirements are to be identified in the Sub-Contract Rights Particulars. This is a separate document, which the main contractor should prepare and include in the subcontract as a numbered document. A model form for the Sub-Contract Rights Particulars is available on the JCT website.

Where a third party is entitled to third-party rights, those rights are vested in that third party on the date that the subcontractor receives notice from the main contractor to that effect (JCT DB Sub 2016 clause 2.26.3). Where the main contractor requires the subcontractor to enter into a collateral warranty, it must notify the subcontractor, and the subcontractor must execute and deliver the warranty to the main contractor within 14 days of the main contractor's notice (clause 2.26.4).

JCT DBSub 2016 expects the forms of collateral warranty will be JCT's own forms (e.g. SCWa/E, SCWa/F and SCWa/P&T). The forms of third-party rights are included in Schedule 6 of JCT DBSub 2016 and are very similar to the terms included in the corresponding collateral warranty.

NEC4 ECS adopts a different approach. Collateral warranties are not dealt with at all, so the subcontractor is not obliged to provide them. Third-party rights are dealt with under secondary Option Y(UK)3, which is a short clause. Clause Y3.1 incorporates the *Contracts (Rights of Third Parties) Act* 1999 into the subcontract. For third-party rights to be granted, the third party must be identified in the Subcontract Data along with the terms they can enforce.

It may be desirable for the subcontractor to procure collateral warranties from some or all of its subsubcontractors and/or suppliers. The subcontractor may enter into sub-subcontracts with design consultants or specialists undertaking significant design or specialist construction work. In addition, the subcontractor may enter into supply contracts under which it purchases materials or goods. Where applicable, the subcontract should contain a suitable enabling clause with key features equivalent to those set out in this section. The form of warranty, which in many cases will be bespoke, should be identified. The form will often contain step-in rights in favour of the main contractor.

Neither JCT DBSub 2016 nor NEC4 ECS contain provisions to require the subcontractor to procure collateral warranties from sub-subcontractors or suppliers, so bespoke drafting is necessary to include such warranties.

2.8.11 Insurance

Construction insurance is a specialist area and practitioners should obtain the advice of specialist brokers on specific insurance arrangements for a project, particularly if the circumstances are unusual.

The types of insurance that will often be relevant to a subcontract are all risks insurance, public liability insurance, professional indemnity insurance and public liability insurance.

All risks insurance covers physical loss or damage to work and materials and goods on the site. It is usually on an 'events occurring' basis, maintained until completion of the relevant works and placed in an amount that covers the estimated reinstatement of the relevant works.

Public liability insurance covers liability arising from death or personal injury to third parties (but not employees, which is covered by employer's liability insurance) and damage to property belonging to third parties. More sophisticated policies may also cover liability for nuisance or trespass, and even infringement of the rights of third parties (e.g. rights of way).

Professional indemnity insurance provides cover against liability arising from breach of professional duty, which usually goes to professional negligence and includes a contractual liability that is equivalent to professional negligence. For example, where the subcontractor has a contractual obligation to exercise reasonable skill, care and diligence when carrying out its design of the subcontract works it would be appropriate for the subcontractor to have professional indemnity insurance.

Product liability insurance covers liability for injury to third parties or damage to their property, arising out of products supplied by the subcontractor. In most cases, it does not cover the cost of replacing defective products.

2.8.12 Intellectual property

Law and practice regarding intellectual property is complex and it is best to take legal advice on the topic, but when drafting the subcontract consider properly addressing intellectual property (e.g. copyright licences, patents, etc.), particularly in relation to the requirements of the main contract. JCT DBSub 2016 and NEC4 ECS contain relatively straightforward provisions regarding intellectual property.

2.8.13 Payment systems

The current edition of *Interim valuations and payment*, RICS guidance note, details the process of valuing work and making payments to the main contractor under a main contract. The principles generally apply to making payments to the subcontractor under the subcontract, so can be referred to for further guidance. There are, however, some issues that specifically apply to subcontractors.

Most projects operate a payment system based on monthly payments to both the main contractor and the subcontractor. Where the subcontractor is paid in periodic payments, the amount is based on the value of the work (including design work where applicable) completed by the subcontractor by the date on which the subcontract works are valued. In most cases, this arrangement is considered fair and reasonable as it gives adequate commercial protection to the main contractor by avoiding overpayment and generates a commercially sensible level of cash flow for the subcontractor.

Where the subcontractor is paid in stage payments, the subcontract should contain a number of priced work stages. The subcontractor is entitled to payment for a work stage when that stage is completed. Where stage payments are used, take care to see that the priced work stages are appropriate and capable of generating a commercially sensible level of cash flow for the subcontractor. If the work stages are drafted so that the time taken for the subcontractor to complete the work stages is excessive, the subcontractor might suffer from adverse cash flow – particularly if required to pay its labour and suppliers by way of periodic (e.g. weekly or monthly) payments.

JCT DBSub 2016 envisages the use of stage payments. The interim payment provisions included in clause 4.9 is stated as being subject to any agreement between the subcontractor and the contractor regarding stage payments.

NEC4 ECS envisages stage payments where Option A is used. In that case, the subcontract contains a priced activity schedule. Interim payments are calculated using the activity schedule, and the payment includes the price of both groups of and individual completed activities.

2.8.14 The payment period

This guidance note does not identify in detail the circumstances in which the Construction Act applies, other than to point out that it applies where the contract is a 'construction contract', i.e. an agreement with a person for any of:

- carrying out construction operations
- arranging for others to carry out construction operations, whether under subcontract or otherwise
- providing that person's own labour, or the labour of others, to carry out construction operations.

Most of the main contracts and subcontracts covered by this guidance note will be 'construction contracts' as defined by the Construction Act. However, there are some exceptions, such as the following:

- Under the Construction Act, construction operations do not include the assembly, installation or demolition of plant or machinery, or the erection or demolition of steelwork used to support or provide access to plant or machinery, on a site where the primary activity is power generation or water or effluent treatment. The Construction Act therefore does not apply to contracts for such works.
- The Construction Act does not apply to a construction contract with a residential occupier.

The main contract that applies to these works will therefore not be subject to the Construction Act. Importantly however, it is likely that subcontracts for such works will be subject to the Construction Act, so the statutory regimes that will apply to the main contract and the subcontracts in these examples are likely to be different.

Where the subcontract is subject to the Construction Act, the main contractor and the subcontractor are free to agree when payments become due and the length of the period between the date the payment becomes due and the final date for payment.

For interim payments, JCT DBSub 2016 fixes an interim valuation date, with the due date 12 days after the interim valuation date and the final date for payment 14 days after the due date (clauses 4.6.1 and 4.7.1). Therefore, the subcontractor is entitled to be paid 26 days after the date on which the subcontract works are valued.

NEC4 ECS fixes an assessment date (which is equivalent to an interim valuation date), with the due date 14 days after the assessment date and the final date for payment 14 days after the due date (clause Y2.2), meaning the subcontractor is entitled to be paid 28 days after the date on which the subcontract works are valued.

When deciding periods for payments to the subcontractor, consider both the period between the valuation and the due date, and the period between the due date and the final date for payment.

The periods for JCT DBSub 2016 and NEC4 ECS are related to the timescales for payment in JCT DB 2016 and NEC4 ECC respectively. These payment periods are designed to work in a way that enables cash to flow from the employer to the main contractor, and then to the subcontractor, in a commercially sensible way. However, where the main contract is amended to increase the payment periods, or where the main contractor wishes to increase the payment periods in its subcontracts for commercial reasons, the payment period in the subcontract becomes a matter of commercial negotiation.

2.8.15 The first due date for payment

It is common for the main contract works to commence on site almost immediately after the main contract is entered into. The first due date for payment under the main contract is often shortly afterwards,

generally within one month of the date of the main contract. The employer usually views this as an acceptable payment regime because it can see that work is progressing on site and can be valued and paid for with interim payments.

In some cases, the position with the subcontractor will be no different: it will make sense for the first due date to occur after the subcontractor has begun the subcontract works on site. However, in other cases the situation may be very different. For example, the subcontractor may be appointed by the main contractor shortly after the main contract is entered into, so that the subcontractor can prepare a design for the subcontract works to enable it to be integrated into the design for the main contract works as a whole. But the subcontractor might prepare the design a very long time before it is due to begin work on site. If the first due date for payment under the subcontract is fixed at a date that is after the subcontractor starts work on site, the subcontractor will not be entitled to be paid for design work until then. This may have adverse effects on the subcontractor; take this into account when deciding the first due date for payment under the subcontract.

JCT DBSub 2016 envisages the first interim valuation date being after the subcontract works have commenced on site, but it also contains provisions that allow the first interim valuation date to be earlier than the date the subcontract works begin on site, allowing for a sensible degree of flexibility.

NEC4 ECS envisages that the first assessment date will be fixed by the main contractor, but it will be linked to the starting date stated in the subcontract. The starting date does not need to be the date on which the subcontract works begin on site; it could be an earlier date. Therefore, NEC4 ECS also allows for a sensible degree of flexibility.

2.8.16 Advance payment

An advance payment is a payment that is made by the main contractor to the subcontractor before the subcontractor carries out any of the subcontract works. Advance payments are not a common feature of subcontracts, nor is it common for the main contractor to agree to make an advance payment to the subcontractor. However, an advance payment may be appropriate and may bring commercial benefits to the project where the subcontractor will incur high costs on entering into the subcontract, for example, by mobilising expensive plant or equipment (including purchasing it where necessary) or purchasing expensive materials for temporary works or reserving with an off-site manufacturing facility the period during which materials, goods or components for the subcontract works will be manufactured.

The provisions that govern advance payments are often dealt with through optional or new/amended clauses. These should deal with several issues that arise due to the unusual nature of advance payments. These are set out below.

The subcontract should identify the amount of the advance payment, which should take into account the subcontractor's costs that have made the advance payment necessary. The drafting should make it clear whether the advance payment is subject to retention. Also, consider whether the advance payment is liable for VAT.

The subcontract should identify when the advance payment will be made. This is to give certainty to the payment obligation. As an advance payment has commercial risks for the main contractor, the subcontract should identify any conditions that must be satisfied before the advance payment is made, for example, the provision of an advance payment bond, or proof that the subcontractor has completed certain desktop activities or placed an order for a major plant item if this is the reason for making the advance payment.

The subcontract should contain provisions for the subcontractor to reimburse the main contractor in instalments for the advance payment, and that the main contractor is entitled to deduct these instalments from amounts due to the subcontractor in interim and final payments.

The requirement to reimburse the advance payment in instalments is because in most cases the payment provisions in the subcontract will require that the amount due in any particular payment takes into account the amount previously paid.

If these provisions are applied when an advance payment has been made, it will defeat the intended purpose as the subcontractor will not be paid until the advance payment has been repaid in full.

Therefore, where an advance payment is made the subcontract should contain provisions for reimbursement in instalments. A good rule of thumb is to set the reimbursement profile so that the amount of the advance payment is reimbursed within the first half of the period for completion for the subcontract works on site. This gives the subcontractor the benefit of the advance payment and cash, while at the same time reducing the risk to the main contractor of making the advance payment.

Consider ensuring that the advance payment provisions deal with the position in which a large proportion of the subcontract works is omitted, the subcontract is terminated, or the subcontractor becomes insolvent. In most cases, it will be appropriate for the amount of the advance payment that has not been reimbursed on the date of the omission, termination or insolvency to become due for reimbursement immediately or shortly afterwards.

An advance payment bond is a bond that responds in circumstances where the subcontractor has not reimbursed the main contractor for an instalment of the advance payment in accordance with the subcontract. Traditionally, such bonds are on-demand bonds. When making a demand under the bond, difficulties can arise if the reimbursement provisions in the subcontract are not clear, or there is room for the subcontractor or surety to argue that the subcontractor has not failed to reimburse the main contractor in accordance with the subcontract. Provisions that include specific amounts to be reimbursed on specific dates are likely to give greater certainty than provisions that require the reimbursement to be a percentage of the amount due, so using the former provisions is likely to give greater certainty that the surety will respond and pay when a demand is made under the advance payment bond. The surety's liability under an advance payment bond generally reduces with time, provided the subcontractor reimburses the main contractor for instalments of the advance payment in accordance with the subcontract. This is usually addressed in the drafting of the bond – often by stating that the surety is required to pay the amount of a reimbursement instalment that has become due for payment under the subcontract but which has not been paid by the subcontractor.

JCT DBSub 2016 envisages that an advance payment will not be made to the subcontractor, so it does not contain provisions for advance payments. Therefore, any agreement between the main contractor and the subcontractor regarding an advance payment will need to be addressed through bespoke amendments to JCT DBSub 2016. In those circumstances, carefully consider the relationship between the bespoke advance payment provisions and the standard payment provisions included in JCT DBSub 2016.

NEC4 ECS includes advance payment provisions in secondary Option X14. However, consider whether X14 covers the relevant issues in specific circumstances. NEC does not provide a form of advance payment bond.

2.8.17 Retention

Retention is a sum of money deducted by the main contractor from payments to the subcontractor and held by the main contractor as security against defects in the subcontract works. Retention acts as motivation for the subcontractor to complete the subcontract works and make good any defects.

Where retention is deducted from payments made to the main contractor under the main contract, it is conventional for the main contractor to also deduct retention from payments to the subcontractor under the subcontract. However, what should happen if retention is not deducted from payments made to the main contractor? Should the subcontract still permit the deduction of retention from the payments to the subcontractor? On the face of it, the answer is no, on the basis that here the main contract and the subcontract should be back-to-back. But that approach is too narrow, and it ignores other important commercial factors. For example, retention might not be deducted under the main contract because the employer decided that retention was simply not necessary. Perhaps the employer had adequate security against the main contractor by other means – the main contractor's strong balance sheet, a parent company guarantee or a performance bond perhaps. But the position under the subcontract might be very different; the subcontractor might have a weak balance sheet, and it might be unable or unwilling to provide a parent company guarantee or a performance bond. In those circumstances, retention would be the main contractor's only form of security, so it would be understandable for the subcontract to ensure that retention can be deducted.

JCT DBSub 2016 (clause 4.12) and NEC4 ECS (clause X16) contain mechanisms for retention. However, the main contractor should consider when retention should be released. Where the subcontract is subject to the Construction Act, the subcontract cannot ensure that payment of retention to the subcontractor is linked to the release of payment under the main contract. Therefore, the main contractor and the subcontractor should agree, and the subcontract should state, when retention is to be released to the subcontractor. This will be a matter of negotiation.

2.8.18 Payment for materials and goods on site

Subcontracts often contain provisions entitling the subcontractor to payment for materials and goods on site. There are two main reasons for this:

- The provisions help the subcontractor's cash flow.
- Making payments for materials and goods can be a form of security when they become the property of the main contractor.

Paying for materials and goods on site can be advantageous, but it can cause risks for the main contractor such as: the materials and goods may never actually be used for the subcontract works or they may be lost, damaged or stolen, and if the subcontractor did not own them, they may be repossessed by their owner. Common arrangements to mitigate these risks include:

- The materials and goods must be on or adjacent to the site of the main contract works. In this context, 'adjacent' generally means at a property that is very near to the site and controlled by the main contractor or employer.
- They must be intended for incorporation into the subcontract works, and in accordance with the subcontract.
- They can be paid for only if they are reasonably, properly and not prematurely delivered to the site.
- They must be adequately protected against loss or damage, including certain risks such as weather and theft.

• They should not be paid for unless the subcontractor has provided proof to the main contractor's satisfaction that property in the materials and goods is vested in the subcontractor, and that property will pass to the main contractor in accordance with the subcontract.

JCT DBSub 2016 (clause 4.9.1.2) contains conditions for payment similar to these.

NEC4 ECS takes a different approach. For example, where Option A applies (a priced subcontract with an activity schedule), the subcontractor will be entitled to payment for materials on site if this is included in the activity schedule. However, NEC4 ECS does not contain the types of conditions for payment set out above, so consider including these in the subcontract; alternatively, the relevant activities in the activity schedule should be drafted to satisfy at least some of the conditions.

The subcontract should also state that materials and goods that are on or adjacent to the site must not be removed by the subcontractor without the main contractor's consent, and that the risk of loss or damage to the materials and goods remains with the subcontractor, even if they have been paid for and property has passed to the main contractor.

The subcontract should state when property in materials and goods passes to the main contractor. The main contractor may require this when materials and goods are delivered to or adjacent to the main contract works, whereas the subcontractor might argue this should only happen when the main contractor has paid for the materials and goods. However, the main contractor and the subcontractor may not be able to negotiate this in a vacuum; the main contract will almost certainly be relevant. For example, where the main contract is JCT DB 2016, property in materials and goods on site passes to the employer when their value has been included in an interim payment (clause 2.21). Clause 3.4.2.1.1 of JCT DB 2016 requires the main contractor to include in its subcontracts a clause stating that where the value of materials and goods has been included in an interim payment, and that interim payment has been paid by the employer to the main contractor, the materials and goods become the employer's property, and the subcontractor will not deny that they have become the employer's property. Clause 2.15.2 of DBSub 2016 contains provisions that meet the requirements of clause 3.4.2.1.1.

Where the main contractor pays the subcontractor for materials and goods on site before their value is included in an interim payment under the main contract, they should become the main contractor's property. However, the drafting of the subcontract might not give the main contractor adequate commercial protection in terms of passing property to it for materials and goods on site. The subcontractor might have purchased the materials and goods under supply contracts that stipulate the materials and goods remain the property of the supplier until paid for in full by the subcontractor, or even until all debts owed by the subcontractor to the supplier are settled in full. These are called 'retention of title' clauses. If the supplier has not been paid by the subcontractor for the materials and goods, the retention of title clause may override a claim that property in the materials and goods has passed to the main contractor under the subcontract.

In order to establish whether property has passed to the subcontractor, it is essential to investigate the contractual chain (sub-subcontracts and the various supply contracts) and the proprietary rights for the materials on site. In many cases this will not be a straightforward task, and even where the task is carried out properly and professionally, the legal position will not be certain. Therefore, take care when dealing with this and consider taking specialist advice.

2.8.19 Payment for materials and goods off site

Subcontracts sometimes contain provisions entitling the subcontractor to be paid for materials and goods off site. However, their use can be optional and/or the application of the provisions will apply only

to certain materials and goods identified in the subcontract for payment when off site (often called 'listed items').

The main contract will be relevant. Note that in many cases, particularly where the main contract works are low value, the employer may decide that, under the main contract, the main contractor will not be entitled to payment for materials and goods off site. This may be because payment for materials and goods off site exposes the employer to unacceptable commercial risk, or the cost of administering the contractual provisions associated with such payments is too expensive.

The main contract may contain a list of off-site materials and goods for which the employer will pay the main contractor. Commercial pressures may mean the main contractor will not agree to include a list in the subcontract, unless those materials and goods are also listed in the main contract. However, in some cases the subcontractor may say that payment for materials off site is vital to its business; for example, where the subcontractor is a medium-sized company and is purchasing materials from a large international company, the supplier may have used commercial leverage to secure a short payment period. In many cases, the main contractor will have greater commercial leverage, so the subcontractor may have to accept it will not be paid for materials and goods off site. In that case, the subcontractor may have to consider other approaches, such as altering its price for the subcontract works.

The commercial risks to the main contractor of agreeing to pay for certain materials and goods when they are off site are similar to the risks of paying for materials and goods on site. In addition, the main contractor does not have sight or possession of materials and goods that are off site; they are in effect beyond its control. Therefore, the risk to the main contractor of paying for materials and goods off site is greater than when they are on site.

The risk to the main contractor of off-site materials and goods can be greater than the risk to the employer of paying the main contractor for them because if problems arise after they have been paid for (e.g. they are stolen), the employer will simply look to the main contractor to procure replacements. The employer may have the benefit of security to sufficiently cover this risk, whereas the main contractor may have little or no security from the subcontractor.

Where the main contractor agrees to pay for certain materials and goods off site, in order to mitigate the risks, the subcontract should include conditions that deal with payments for materials off site and/or must be satisfied before the main contractor is obliged to pay. Common arrangements are set out below:

- The subcontractor must provide proof that the property in the materials and goods is vested in the subcontractor.
- They should be identified in the subcontract often uniquely (e.g. a particular air handling unit) rather than not (e.g. aggregates).
- The subcontract should identify the address where the materials and goods will be stored off site.
- The subcontractor must provide proof to the main contractor's satisfaction that the materials and goods off site are, and will remain, insured against loss or damage for their full value up to the date on which they are delivered to, or adjacent to, the main contract works. The policy should protect the interests of the employer, the main contractor and the subcontractor.
- There should be conditions that apply at the address where the materials and goods are stored, including that they must be:
 - identified as being held to the order of the main contractor (and/or the employer if appropriate)
 and destined for the main contract works

- set apart from other items
- clearly and visibly marked, individually or in a set, by letters or figures to a predetermined code
- protected against loss and damage.
- The subcontractor should warrant that:
 - the main contractor and employer may enter the premises where the materials and goods are stored to inspect or remove them
 - it will deliver the materials and goods to the site when instructed by the main contractor
 - it will not move the materials and goods from the storage address without the main contractor's consent.
- Where applicable, the subcontract should state that the subcontractor must provide a materials off-site bond, vesting certificate or vesting agreement in favour of the main contractor.

JCT DBSub 2016 (clause 4.11) contains similar conditions to some of these, but consider supplementing it with some or all of the above conditions that are not included.

NEC4 ECS takes a different approach. Where Option A (a priced subcontract with an activity schedule) applies, the subcontractor will be entitled to payment for materials off site if that is provided for in the activity schedule (clause 50.2) or the subcontract identifies them for payment (clause 71.1). How identification happens is not stated, but it is feasible that the activity schedule, subcontract scope or Subcontract Data could be used for that purpose. NEC4 ECS does not contain conditions precedent to payment of the type set out above but they could be inserted into the subcontract, for example, through a Z clause or suitable wording in the subcontract scope.

The subcontract should state that the risk of loss or damage to the materials and goods off site remains with the subcontractor, even if they have been paid for and property has passed to the main contractor.

There are further issues when the materials and goods are not in the same territory as the site of the subcontract works, manufactured from materials obtained from various territories and/or subject to contracts under different legal systems. This may make it difficult for the subcontractor to provide proof of ownership. It will also be almost impossible to establish the legal position that would apply if a particular supplier in the contractual chain becomes insolvent. Therefore, the main contractor may be reluctant to agree to pay for materials off site if they are stored in another territory.

A vesting certificate is a written confirmation from the subcontractor to the main contractor that the property in certain materials and goods will pass from the subcontractor to the main contractor when a specified event occurs (e.g. payment).

A vesting agreement between the subcontractor and main contractor deals with the passing of property in a similar way to a vesting certificate, but also contains terms that cover some or all of the issues that should appear in the materials and goods off site provisions included in the subcontract.

In most cases, a vesting agreement will be more useful than a vesting certificate because it can cover property as well as other issues important to the main contractor. However, in many cases it will be more difficult and take longer to procure a vesting agreement – particularly because a vesting certificate can be issued by the subcontractor in a fairly straightforward manner, whereas as vesting agreement needs to be negotiated, agreed and executed. The potential advantages of a vesting agreement should be weighed against this. As a vesting agreement is more sophisticated than a vesting certificate, the following paragraphs focus on the agreement.

Where the subcontract contains sophisticated provisions regarding the passing of property and payment for materials and goods off site, a vesting agreement will not be essential. For example, JCT DBSub 2016 contains detailed provisions that do not require a vesting agreement. However, if the subcontract contains no or inadequate provisions for this, a vesting agreement may be useful.

A vesting agreement can benefit the main contractor. For example, where the subcontractor is solvent but is progressing the subcontract works so poorly that the main contractor intends to terminate the subcontract, a vesting agreement that contains express rights for the main contractor to enter the storage address and remove materials and goods would be an advantage. Provided the vesting agreement is well-drafted, it is likely to be enforceable by the courts.

In some cases, a vesting agreement will not be effective. If the subcontractor's financial position is weak and there are signs that it will become insolvent, the materials and goods referred to in a vesting agreement may disappear from the off-site storage address (removed by an unpaid supplier or stolen).

A poorly drafted vesting agreement can be a problem for both main contractor and subcontractor. For example, where the terms of the vesting agreement are inconsistent with the terms of the subcontract, this could cause legal uncertainty.

Whether the subcontract should contain provisions that require a vesting agreement is a matter of commercial judgement based on the contents of the subcontract and the circumstances.

A materials off-site bond responds in circumstances where the subcontractor has been paid for materials or goods off site but the subcontractor has not delivered them to or adjacent to the main contract works. Traditionally, they are on-demand bonds.

JCT DBSub 2016 contains a form of materials off-site bond that has been agreed between JCT and the British Bankers' Association. NEC4 ECS does not contain a form of materials off site bond.

Paying for materials and goods off site involves complex contractual provisions and risks. Possible alternatives include:

- Where the market is busy and lead-in times for particular materials or goods are long, it may be commercially sensible for the main contractor to enter into a supply contract with a particular supplier so that the materials or goods are secured by the main contractor at a suitably early stage of the project. The supply contract can then be novated to the subcontractor later.
- If the payment is for procuring materials that will be worked on exclusively on the subcontractor's premises to form fabricated goods, there may be an advance payment. If so, advance payment provisions should be included in the subcontract and used instead of paying for materials and goods off site.

2.8.20 Entitlement to additional payment

The subcontract should contain provisions that set out the circumstances in which the subcontractor will be entitled to additional payment, and how the amount should be calculated. If the drafting of these provisions is not clear, it may cause later disputes.

These are the key issues to address in the subcontract regarding entitlement to additional payment:

- variations/changes
- loss, expense and/or damages
- provisional sums

- changes in law
- unforeseen physical conditions
- suspension of work
- restoration of lost or damaged work
- fluctuations
- acceleration
- preparation of quotations
- insurance premiums (e.g. when the subcontractor has taken out insurance because the main contractor is in breach of the subcontract by failing to do so)
- late payment and
- interest.

2.8.21 Notices and time bar clauses

Notice provisions assist the proper management of the subcontract and main contract works. For example, if an ongoing act or omission by the main contractor is causing, or is likely to cause, the subcontractor to incur loss and/or expense, and the subcontractor notifies the main contractor of this, the main contractor is given the opportunity to investigate and take steps to solve or mitigate the problem. This is good for all parties, particularly if the notice is given sooner rather than later.

A time bar exists where the relevant clause requiring the notice contains provisions that the subcontractor loses its right to additional payment if it does not give proper notice on time. The effect of a time bar could be considered unduly harsh on the subcontractor because a straightforward failure to give notice could cause the subcontractor to suffer financial loss. On the other hand, it may have the positive effect of motivating the subcontractor to sharpen up its administration of the subcontract works and ensure that it issues its notices on time, so that the project is better managed and controlled overall.

Whether the subcontract contains time bars will be a matter of negotiation between the main contractor and subcontractor. However, there are three circumstances in which the inclusion of time bars in the subcontract should not be controversial:

- Where the main contract contains a time bar, the subcontract should contain a similar time bar, although it makes sense for the period stated in the subcontract to be shorter. This allows time for the main contractor to pass on the instruction to the subcontractor, the subcontractor to give notice to the main contractor and the main contractor to give notice to the employer within the required period. This principle is recognised in the construction industry; for example, under clause 61.3 of NEC4 ECC (the main contract) the main contractor is obliged to give notice within 8 weeks, whereas in NEC4 ECS (the subcontract) the subcontractor is obliged to give notice within 7 weeks.
- Where the main contract works are subject to close financial control or the employer has budget constraints, the subcontract should contain time bars. This promotes a 'no surprises' policy and allows the main contractor to keep the employer informed of cost increases in a timely manner. This is in all parties' interests, including the subcontractor's. If the employer's budget is exceeded, the commercial reality is that the main contractor and subcontractor might have difficulty securing payment.
- Where the main contractor is employed under a lump sum design and build contract that allows the main contractor some flexibility in the way it completes the design, cost control at the main contractor

level will be important. In those circumstances, the inclusion of a time bar clause in the subcontract may be appropriate.

Where it is agreed that the subcontract will contain time bar clauses, the following should be considered for interpretation and drafting:

- time bar clauses:
 - are treated as limitation clauses (they limit the main contractor's liability)
 - are construed strictly and contra proferentum.
- time bar clauses should:
 - be clearly drafted
 - state the precise period within which the notice is to be served (the period should be reasonable and not unrealistically short)
 - make plain with express wording that unless the notice is given with the specified period, the subcontractor will lose its rights under the clause.

2.8.22 Programme information in subcontracts

Carefully consider the commencement, progress and completion of the subcontract works when drafting the subcontract so that they are consistent with the overall programme-related requirements for the main contract works. If the programme information in the subcontract is not appropriate, it can cause delays and disruption in the main contract works, and disputes as a result.

The subcontractor must complete the subcontract works in accordance with the subcontract (e.g. within an agreed period or by an agreed date), but the general rule is that unless otherwise dealt with in the conditions of the subcontract, the way in which the subcontractor carries out the subcontract works (e.g. sequence, rate of progress, etc.) is a matter for the subcontractor to decide. However, it is common for the subcontract to include express terms that impose specific obligations on the subcontractor regarding the progress of the subcontract works that override this. There are a number of ways in which this can be done.

First, consideration can be given to including an obligation on the subcontractor to progress the subcontract works in accordance with a specific programme included in the subcontract. However, this solution can lead to problems, for example:

- If the subcontractor is prevented from complying with the programme, the progress-related obligation might fall away and not be replaced.
- The main contractor might not be empowered to re-sequence or bring particular works forward if the progress of the main contract works is faster than originally planned.
- The solution can easily lead to differences between the main contractor and subcontractor, as each party might consider the existence and content of the programme to provide evidence for its views and claims

Second, the subcontract can impose an obligation on the subcontractor to carry out the subcontract works 'reasonably in accordance with the progress of the main contract works'. This is a fairly flexible solution and is found in some JCT subcontracts, such as DBSub 2016 (clause 2.3) and ICSub 2016 (clause 2.2). Properly construed, such an obligation is likely to include an obligation that the subcontractor must not unreasonably interfere with any other works that can conveniently be carried out at the same time.

Third, the subcontract can require the subcontractor to proceed 'regularly and diligently' (e.g. clause 20.2 of JCT MPSub 2016) or 'with due expedition and without delay' (e.g. clause 8.1 of FIDIC Sub-Contract 2011, the Red Book subcontract).

Fourth, the subcontract can impose obligations on the subcontractor to meet a particular requirement by a particular date or within a particular period. This is sometimes referred to as an obligation to meet a condition by a key date (see NEC4 ECS, for example). Where these provisions are used, it is important to consider the following:

- Drafting the condition to be met by the key date is not a straightforward task. If the description of the condition is not clear, ambiguity will make it difficult for the subcontractor to know what work has to be done and the purpose of the key date will be undermined.
- The key date may be stated as a date but is more likely to be a period. For example, it could be a period from the date on which the subcontractor is required to start the subcontract works on site.

Fifth, the subcontract may contain further details of the requirements for the progress of the subcontract works. For example, JCT DBSub 2016 uses this to deal with many progress requirements, such as the timing of the delivery of samples, materials or goods; early works; periods for specific aspects (e.g. built-in items or testing); the sequence of the subcontract works or operations forming part of the subcontract works; specific interfaces with other trades; the removal of temporary works (e.g. hoists and tower cranes); and requirements to leave parts of the subcontract works incomplete and associated return visits.

Sixth, the subcontract may contain an obligation on the subcontractor to carry out the subcontract works in accordance with any instructions that the main contractor may give.

2.8.23 Dividing the subcontract works into sections

Consider the merits of dividing the subcontract works into sections. Sections may reflect the division of the main contract works, but that is not essential.

Dividing the subcontract works into sections is not a straightforward task. Ensure that:

- the subcontract works in each section add up to the whole of the subcontract works
- the timing of the subcontract works in each section is compatible with every other section, particularly where work in one section relies on the progress or completion of work in another section
- each section includes any applicable testing and commissioning.

JCT DBSub 2016 expects that where the subcontract works are divided into sections, they will be the same as the sections of the main contract works. If not, the conditions should be amended.

NEC4 ECS allows the subcontract works to be divided into sections using secondary Option X5.

2.8.24 Subcontract works off site

In many cases, it will be appropriate for the subcontract to include a period for subcontract works carried out off site prior to commencing on site. This work will vary depending on the circumstances. Typically, however, such works may include:

- the subcontractor preparing design drawings or fabrication drawings
- obtaining relevant approvals for the subcontractor's drawings and designs
- procuring materials and goods

- carrying out fabrication works
- · constructing, inspecting, testing and approving test panels and samples off site

Carefully consider the duration of the off-site period and the work to be done. This necessarily includes coordinating the works with other works that need to have progressed or completed to enable the subcontractor's off-site works to proceed in accordance with the subcontract.

JCT DBSub 2016 deals with the programme for off-site works in items 5.1–5.3 of the Sub-Contract Particulars. In particular, it allows periods for:

- the subcontractor to prepare drawings prior to submission for comment
- the main contractor to provide initial comments on the submitted drawings
- the subcontractor to procure materials, fabricate and deliver materials to site.

NEC4 ECS (Subcontract Data – Part One) expects the subcontract to contain a date when the subcontractor will start its works (which may be off-site works), and the date when the works start on site. This produces an off-site period, and the work to be done in that period should be addressed in the subcontract.

2.8.25 Subcontract works on site

Regarding the commencement of the subcontract works on site, it is common for the subcontract to contain:

- a requirement for the main contractor to give the subcontractor notice of the date on which the subcontractor is required to commence work on site, with the notice period being stated in the subcontract
- the earliest and latest date on which the subcontract works will commence work on site often referred to as a 'commencement window'.

This arrangement reflects the fact that when the subcontract is entered into, it might not be practical to fix the precise date on which the subcontract works will commence on site.

The period of notice to commence will need to be agreed by the main contractor and the subcontractor. The main contractor might prefer a relatively short period (say one week), whereas the subcontractor might prefer a longer period (say two to four weeks). Clause 20.1 of JCT MPSub 2016 expects that the main contractor will give the subcontractor notice of the date on which access to the site will be given, stating the period of that notice in the Sub-Contract Particulars. If no period is stated, the default period is 7 days.

The commencement window will also need to be agreed, and its length will depend on the specific circumstances. Ensure that if delays prevent the subcontractor from commencing work on site until after the latest commencement date, this does not affect the subcontractor's obligation to carry out and complete the subcontract works once it is possible to commence.

The subcontract should contain a period for completion of the subcontract works on site, or at least provisions through which that date can be fixed. Clarify whether the period refers to calendar weeks or working weeks. The period should begin on the date the subcontractor is required to begin work on site. Where the subcontract works are divided into sections, a period should be given for each section.

JCT DBSub 2016 expects the period for completion to be stated in item 5 of the Sub-Contract Particulars.

NEC4 ECS expects a completion date to be stated in Subcontract Data – Part One. However, this can be converted to a period if the date of commencement of the subcontract works on site cannot be stated in the subcontract.

The subcontract should contain provisions that determine whether the subcontract works have been completed. JCT DBSub 2016 adopts the concept of 'practical completion' and does not expect completion criteria to be stated. However, the main contractor and the subcontractor can agree what is meant by practical completion, or at least identify key works that must be completed as a pre-condition to practical completion.

NEC4 ECS refers to 'Completion' and expects the main contractor and subcontractor to state in the subcontract scope all the work required for completion.

2.8.26 Defects

For the purpose of this section, a defect is something the subcontractor is responsible for that is not in accordance with the subcontract (e.g. in design, materials or workmanship) and is discovered after completion of the main contract works. Defects range from relatively minor (such as a poor cut to the edge of a carpet tile where it meets the skirting board) to extremely significant items (such as defective foundations, which may undermine the structural stability of the whole main contract works). Although the construction industry recognises that defects should be prevented, they do occur so the subcontract should contain provisions that deal with them.

The expressions 'patent defect' and 'latent defect' are used in the construction industry. Those expressions can cause confusion, and it is useful to be able distinguish between them. It is suggested that a 'patent defect' is one that is detectable, even if it is not detected by a particular individual when inspecting the work in question. A 'latent' defect, by contrast, is concealed or hidden. For a defect to be latent, it must be one that would not be discovered during the type of inspection that would reasonably be expected in the circumstances.

2.8.27 The obligation/entitlement to make good defects

A defect usually constitutes a breach of the subcontract, and the subcontractor will be liable for damages. However, the subcontractor will not necessarily be obliged to make good the defect because the obligation on the subcontractor usually ends on completion of the work. Similarly, the subcontractor will not usually have the right to insist on making good its defects. Therefore, if the main contractor expects the subcontractor to be required to make good defects, the subcontract must contain a clause to that effect. It is also sensible for the subcontract to give the subcontractor the ability to make good its defects because this allows the subcontractor to mitigate the effect of its breach.

Consider the period for which the subcontractor's obligation and entitlement to make good defects will apply. This is sometimes called the 'defects liability period' or the 'rectification period'. In many cases, the period is agreed to be 6, 12 or 24 months. The period is subject to agreement, but there may be other factors that influence it; for example, where the main contract works are subject to a separate standalone warranty scheme that is also relevant to defects, consider any periods that apply to that scheme when deciding the period under the subcontract. This can occur where the main contract works are residential and subject to a new homes warranty. In that case, the warranty may state that in the first 24 months after completion, the homeowner should contact the developer or contractor if they believe their home has not been constructed to the required standard. On this basis, it would be sensible for the defects liability period in the subcontract to be at least 24 months.

There may be circumstances where the subcontractor does not make good its defects, so the subcontract should ensure the main contractor is entitled to make good defects if the subcontractor fails to do so.

Not all defects are equally significant, and not all defects need to be made good as quickly as others. When drafting the subcontract, the best thing to do is classify defects based on significance and allocate suitable periods for making good based on this.

Consider the way in which the subcontract provides security to the main contractor regarding defects. The conventional form of security is retention. However, parent company guarantees and bonds may also provide security.

Although the subcontract should include provisions for managing and making good defects (and can include security provisions for defects), it is important that this does not prevent other remedies that the main contractor would otherwise have in relation to defects, e.g. a remedy in damages.

For example, the subcontract should not state that the main contractor's right to employ others to make good defects and recover the resulting costs from the subcontractor is the main contractor's only remedy. Similarly, the existence of the defects liability period should not impact on the limitation period under the subcontract.

JCT DBSub 2016 and NEC4 ECS contain sophisticated provisions for defects and making good. Although the two forms approach the issue in different ways, they are both effective.

2.8.28 Suspension of the subcontract works

The main contractor does not have an inherent right to suspend the subcontract works. However, there are three main circumstances in which the main contractor may want to do so:

- where there is an emergency
- for convenience
- if the main contract works have been suspended under the main contract.

The right of suspension can be addressed through an express clause that empowers the main contractor to issue an instruction requiring the subcontractor to suspend the subcontract works. The clause should also address:

- responsibility for protecting the subcontract works during the suspension
- the consequences of suspension in terms of the subcontractor's entitlement to additional time and money
- the way in which the suspension can come to an end (e.g. an instruction by the main contractor)
- the maximum period of suspension before a right of termination arises.

JCT DBSub 2016 focuses on three main suspension circumstances:

- Clauses 3.21 and 3.22 apply where the main contractor has suspended any of its obligations under the main contract. Under clause 3.22.1, the main contractor can direct the subcontractor to cease carrying out the subcontract works. Under clause 3.22.2, if the main contractor resumes work under the main contract, it can direct the subcontractor to resume the subcontract works.
- Under clause 3.10 of JCT DB 2016 the employer is entitled to issue instructions regarding the postponement of any work under the main contract, and clause 3.4 of JCT DBSub 2016 expects this instruction to be passed on to the subcontractor through a direction from the main contractor.

The subcontract provides for suspension if the subcontractor becomes insolvent (clause 7.5.3.1).
 Where the subcontractor is insolvent, the subcontractor's employment is not terminated automatically.
 Instead, the subcontractor's obligation to carry out the subcontract works is suspended, which allows the main contractor and the subcontractor (or its insolvency practitioner) an opportunity to make arrangements for the subcontract works to be completed through agreement or a continuation contract.

NEC4 ECS states (in clause 34.1) that the main contractor may instruct the subcontractor to stop or not start any work. This amounts to a right for the main contractor to suspend the subcontract works. Clause 34.1 also entitles the main contractor to instruct the subcontractor to re-start stopped work or start work that has not started.

The subcontractor does not have an inherent right to suspend the subcontract works. There are two main circumstances in which the subcontractor may want to do so:

- where the subcontractor has not been paid on time by the main contractor
- where the main contractor becomes insolvent.

Section 112 of the Construction Act entitles the subcontractor to suspend the performance of some or all of its obligations if the main contractor has failed to pay a sum by the final date for payment, and that failure has continued for at least 7 days after the subcontractor has given notice of its intention to suspend to the main contractor.

JCT DBSub 2016 deals with both circumstances through clause 4.8.1 (suspension for non-payment) and clause 7.10.2.2 (suspension on insolvency).

NEC4 ECS does not contain express provisions permitting the subcontractor to suspend performance for non-payment. Instead, it relies on the right under section 112 of the Construction Act.

2.9 Entering into the subcontract

2.9.1 Compiling the subcontract documents and executing the subcontract

Compile the subcontract with care and implement an appropriate checking regime. It is good practice for the subcontract prepared for execution to be checked by at least two people. This helps to avoid errors that could lead to expensive disputes.

The following are examples of good practice:

- Clearly identify each party to the subcontract. For example, where a party is a company, the subcontract should state the name of the company, its company number and its registered address.
- Ensure that the specific information included in the subcontract (e.g. subcontract particulars or subcontract data) is consistent with the conditions of the subcontract, especially where the conditions have been amended.
- Where the subcontract contains a schedule of amendments, this should be properly incorporated into the subcontract so that it is effective.
- Pre-contract correspondence (letters, emails, etc.) should not be included in the subcontract. These documents can cause discrepancies and ambiguities.
- Technical documents (e.g. the 'Numbered Documents' in JCT DBSub 2016 and the 'Subcontract Scope' in NEC4 ECS) can be bound into the subcontract as hard copies. However, if it is not practical to

incorporate hard copies of documents, they can be incorporated either by reference or as electronic copies. For example, very large documents may be written to a CD or DVD. In that case, the CD/DVD should be incorporated by reference, enclosed with the subcontract and signed by the main contractor and the subcontractor.

• Consider whether it is appropriate to execute the subcontract electronically, but bear in mind that this is a complex area – particularly where the subcontract is executed a deed – and specialist legal advice should be obtained in this regard.

Under English law, the subcontract can be executed under hand or as a deed. When considering these two options, remember the limitation period for actions brought under a contract executed under hand is six years from the date on which the cause of action accrued, whereas the limitation period is generally twelve years in the case of a deed. In most cases, it is better to ensure that the subcontract is executed as a deed. In addition, where the subcontractor is obliged to give third-party rights or enter into collateral warranties, the main contract will probably impose an obligation on the main contractor to see that the subcontract is executed as a deed.

3 Practical considerations (level 3 – doing/advising)

There are many practical considerations that can arise regarding subcontracting, particularly when advising on specific issues. This section cannot address all of them, but it provides specific guidance in relation to:

- e-tendering
- securing the subcontractor
- overseas subcontractors
- subcontract planning: specific issues
- dispute resolution
- subcontractor insolvency.

3.1 E-tendering

E-tendering involves issuing tender documentation, tracking information, and issuing and responding to tender queries, as well as receiving submitted of tenders, in an electronic format. The current edition of *E-tendering*, RICS guidance note, contains helpful information regarding the e-tendering process.

The key features of e-tendering are:

- electronic communications that support workflows
- centralised tracking of tenders and up-to-date reporting
- the ability to change the users involved in the tender.

The perceived benefits of e-tendering are:

- easier collaboration by the project team to collate the information required for the ITT
- time and cost savings, mainly due to a reduction in the time spent by procurement and commercial staff in administering the tender process
- environmental benefits: as the ITT is issued electronically, the tenderer can choose which documents to print
- better communication, which can reduce the duration of the tender process
- improved control over the ITT, including amendments and management of tender queries
- improved audit trail of all communications
- improved tender security: users have logins and unique tender submission areas.

3.2 Securing the subcontractor

The employer or main contractor may want to secure the subcontractor (its services, materials or plant) in advance of the main contract works commencing or the subcontract being entered into. For example,

where the subcontractor has particular expertise or access to special materials or plant with long lead-in periods, arrangements can be put in place at an early stage to secure it. Examples of these arrangements are set out in this section.

An informal way of securing the subcontractor is for the employer or main contractor to rely on good business relationships. For example, the employer might be a developer and owner of a large number of properties containing lifts, which are generally installed and maintained by the same lift contractor. The employer could then rely on this good relationship to ensure its preferred lift contractor will provide services or reserve materials at the early stages of a project, before the main contractor is appointed. While this arrangement can be beneficial, its lack of legal formality has obvious drawbacks.

A more formal arrangement is for the employer or main contractor to enter into a letter of intent with the subcontractor. This also has some drawbacks, but if the letter of intent is properly drafted (and, where possible, constitutes a contract) it can be useful, for example, in order for the subcontractor to carry out early design services in return for payment.

3.2.1 Advance orders for materials or plant

Where a specific material or item of plant that will be used in the main contract works is subject to a long lead-in period, the employer could place an advance order with a supplier. For example, if the employer knows that a particular type of barge will be required and is in short supply, it could place an advance order with the barge supplier and reserve the barge for future use. In those circumstances, the employer should ensure that it has the right to novate the order to others (e.g. the main contractor, or a subcontractor when appointed) when it is needed during the construction phase.

3.2.2 Framework agreement

Under a framework agreement the employer could, for example, agree with a particular cladding subcontractor that it will provide design services so the employer's design team can benefit from specialist cladding advice at an early stage of the design, including before the tender documents for the main contract works are prepared. If the employer is an organisation that has many projects, it may wish to call on the subcontractor to provide such advice under the framework agreement from time to time as its projects begin.

3.3 Overseas subcontractors

Subcontractors who are registered outside the UK can, and do, operate in the UK construction market. This raises a number of issues.

Where an overseas company is asked to submit a tender for works in the UK, it is usual for the ITT to specify that the currency of the subcontractor's tender, and the currency applicable to the subcontract, is pounds sterling (pounds). However, the subcontractor, whose general trading is likely to be conducted in the currency of the territory in which the subcontractor is registered, might be reluctant to submit a tender in pounds, especially if the subcontractor cannot fix a foreign exchange rate for the tender.

In these circumstances, the main contractor and subcontractor can consider implementing a process along the following lines (in this example, the currency of the subcontractor's territory is the euro):

1 The subcontractor's tender sum is stated in pounds, but expressed based on a notional, agreed exchange rate of X.

- 2 At an appropriate time prior to entering into the subcontract, the main contractor and the subcontractor agree that the subcontractor will purchase forward contracts to buy an agreed amount of euros for pounds at an actual, agreed exchange rate (which might be different from X call it Y).
- Where X is different from Y, the agreement to purchase forward contracts will result in an additional or reduced cost to the subcontractor. This additional or reduced cost can be added to or deducted from the tender sum, giving a revised tender sum.
- 4 If the subcontract is entered into, the revised tender sum is the subcontract sum.

The benefit of this process is that at an appropriate time the tender sum becomes fixed in pounds, giving the main contractor and subcontractor a degree of certainty.

The main contractor and subcontractor will need to discuss when the foreign exchange is made, and what will happen if the subcontract is not entered into.

As an alternative, the main contractor and subcontractor can agree different arrangements to deal with fluctuations in currency exchange rates. For example, one of them could simply take the risk of fluctuations against a pre-agreed baseline exchange rate, or they could each take a share of this risk. However, these arrangements are not popular because they do not give price certainty.

3.3.1 Governing law and jurisdiction

A governing law clause identifies the law that will apply to the interpretation of the subcontract, and its effect if a dispute arises. It does not state how disputes will be resolved (e.g. by arbitration or legal proceedings). A jurisdiction clause is, in effect, a dispute resolution clause: it identifies the tribunal or court a dispute must be referred to. The subcontract should contain clear governing law and jurisdiction clauses. The absence of such clauses can lead to disputes over which substantive law applies to determine the rights and obligations under the subcontract, and which tribunal should determine a dispute.

In many cases, the governing law and jurisdiction that apply to the subcontract will reflect the territory in which the subcontract works are carried out. Where the main contractor and the subcontractor agree to submit disputes to the courts of a particular jurisdiction (e.g. English courts), it is conventional (but not mandatory) to agree that the law of that jurisdiction will be the governing law of the subcontract. In deciding which governing law and jurisdiction should be used, it is usual to consider the following factors:

- Where the employer is registered. For example, the employer is a company registered in England, but the main contract works are in Scotland. The employer and main contractor could agree that the law of Scotland applies. However, due to its registration in England the employer could require the main contract to be governed by English law, so the subcontract might also be governed by English law even though the subcontract works will be carried out in Scotland.
- The location of the subcontract works, parties, likely legal advisers and potential witnesses. For example, a main contractor that is registered in England may, as a matter of convenience and familiarity, want to refer disputes to the English courts.
- The perception of the law and litigation system. The speed, cost and quality of the courts is important, and some systems are generally recognised as being preferable to others.
- The language of the law and courts.
- The enforceability of decisions made by the courts. The commercial value of a judgment in favour of the main contractor or subcontractor can depend on how easily it can be enforced.

It is also necessary to decide whether the jurisdiction clause should be exclusive or non-exclusive, and how it should apply to each party.

An exclusive jurisdiction clause limits disputes to the courts of one jurisdiction (e.g. English courts). This gives a high degree of certainty on where legal proceedings will be held.

A non-exclusive jurisdiction clause will state that disputes will be heard in a particular jurisdiction, but the main contractor or subcontractor (or both) may refer a dispute to a court of another jurisdiction if it is appropriate to do so. This has some degree of certainty (disputes will be heard in a specific jurisdiction referred to in the clause), but it also has some flexibility (disputes can be heard in another jurisdiction if need be). The key risk of this clause is that proceedings could be held at the same time in different jurisdictions, which has obvious drawbacks.

In some cases, a jurisdiction clause may be drafted so that one party is subject to non-exclusive jurisdiction, whereas the other party is subject to exclusive jurisdiction. This is relatively rare in subcontracts but can happen where one party has more bargaining power than the other.

The choice of jurisdiction clause will depend on the circumstances. For example, where the main contractor is registered in England and the subcontractor is registered in Spain (and the subcontractor has substantial assets in Spain), the main contractor could decide that a non-exclusive jurisdiction clause would be helpful because the clause could ensure that the English courts have jurisdiction (which would be convenient for the main contractor if it decided to commence legal proceedings against the subcontractor), but with the option to commence proceedings in Spain (which would be convenient if the main contractor required direct access to the subcontractor's assets there). Alternatively, the main contractor could decide that a jurisdiction clause in which the stated courts (e.g. the English courts) have exclusive jurisdiction, but with the right to enforce a judgment obtained there in any other jurisdiction (e.g. in Spain), would be adequate.

JCT DB Sub 2016 states that the governing law is the law of England (clause 1.10) and that the English courts have jurisdiction (article 6), although this jurisdiction is subject to any rights the parties may have to refer a dispute to adjudication or arbitration.

NEC4 ECS expects that the parties will agree the governing law and state it in Subcontract Data – Part One. Clause 12.2 gives effect to that statement. Jurisdiction is also dealt with in Subcontract Data – Part One: the parties should state the tribunal that applies (e.g. arbitration or litigation in the stated court). The dispute resolution clauses (W1 and W2) give effect to that statement.

The choice of governing law and jurisdiction can be a complicated issue, particularly where an overseas company is involved, so legal advice should be obtained.

3.3.2 Notices and methods of subcontract execution

If the main contractor is obliged to serve notices at the subcontractor's registered office overseas, it may be difficult to ensure the notice has been properly served. Consider drafting the subcontract so that the subcontractor appoints an agent who has an address in the territory that has jurisdiction and can receive notices for the subcontractor. Where English law applies and the subcontractor is an overseas company, special rules apply to their execution of the subcontract. Although it is not essential for an overseas company to execute the subcontract as a deed, it is preferable. The manner in which an overseas subcontractor can execute a deed is governed by The *Overseas Companies (Execution of Documents and Registration of Charges) Regulations* 2009 (often known as the OC Regulations).

Under Regulation 4, a subcontract can be validly executed as a deed by an overseas subcontractor under English law:

- by affixing its common seal
- in any manner permitted by the laws of the territory in which the overseas company is incorporated or
- by the signature of a person who, in accordance with the laws of the territory in which the overseas company is incorporated, is acting under the authority (express or implied) of the company, but in that case the subcontract must also be expressed (in whatever form of words) to be executed by the company.

The first two options can cause practical problems. Many overseas companies do not have a common seal, making the first option impossible. The second option depends on the laws of the territory in which the overseas company is incorporated, but the main contractor may not be familiar with them. In those circumstances legal advice should be obtained, which could be time consuming and costly.

Therefore, in many cases the third option would be preferred. It can be implemented using a suitable form of words (usually referred to as an 'execution block'). However, the third option can face its own difficulties: it is important to understand that whether a person who executes for the overseas subcontractor is acting under their authority, and whether execution for the subcontractor by one person or more than one person is required, is determined by the law of the subcontractor's territory. The governing law of the subcontract does not determine this authority. In some straightforward cases, a statement could be obtained from the subcontractor confirming that the person signing the subcontract has authority to do so, backed up with an extract from the subcontractor's delegated authority paperwork. That solution also has issues, however. For example, a statement from the overseas subcontractor may be insufficient because the subcontractor is not an expert in the law of the territory in which it is registered and so its statement may not be correct, or the overseas company's delegated authority paperwork might be in a language other than English, which means it will need to be translated and the translation verified. In many cases these issues are dealt with by a letter of legal opinion.

3.3.3 Legal opinion

Where the subcontractor is an overseas company, the main contractor should consider obtaining, or requiring the subcontractor to provide, a legal opinion in favour of the main contractor from lawyers who are qualified in the law of the territory in which the subcontractor is incorporated. The legal opinion should cover issues that are relevant to the transaction, for example:

- the subcontractor's capacity to enter into and be bound by the subcontract, in accordance with its terms
- the validity of the manner of execution used by the subcontractor under the laws of the territory in which the subcontractor is incorporated
- whether the agent signing the subcontract for the subcontractor has authority to bind the subcontractor under the laws of the territory in which the subcontractor is incorporated
- whether there are any specific formalities that must be followed under the laws of the territory in which the subcontractor is incorporated and are necessary to enforce the subcontract in that territory (e.g. notarisation or registration of the subcontract)
- the choice of law and the enforceability of decisions, awards and judgments relating to the subcontract.

Where the subcontractor is providing performance security (e.g. a parent company guarantee or performance bond) and the person acting as guarantor or surety is an overseas company, the main

contractor should consider obtaining a legal opinion in respect of that person. The opinion should cover issues that are relevant to the particular guarantor or surety, and the particular form of parent company guarantee or performance bond. In many cases there will be some similarity to the issues listed above in respect of the subcontract, but with appropriate focus on the status and standing of the guarantor or surety and the nature of the parent company guarantee or performance bond in question.

3.4 Subcontract planning: specific issues

Subcontracts usually contain provisions that deal with specific issues that may arise with the subcontract works. This section explores some examples, and the ways the subcontract could address them.

3.4.1 Failure by the subcontractor to perform

If the subcontractor does not complete the subcontract works in accordance with the subcontract, it will be in breach of the subcontract and will be liable to the main contractor for damages. However, in some cases damages might not be an adequate or commercially practical solution. For example, if the subcontractor is financially weak, the damages suffered by the main contractor as a result of the subcontractor's breach might exceed the amount that the main contractor could recover from the subcontractor.

The main contractor may be able to mitigate the effect of the subcontractor's breach and reduce the damages if it has the rights and can take mitigating action. For example, if the subcontractor is not constructing the subcontract works to the required quality, or is not proceeding with the subcontract works properly and is causing delays, the main contractor may wish to make alternative arrangements for the execution of the work. This section explores examples of these rights, but they should not be exercised without sufficient grounds.

A subcontract confers on the subcontractor not only an obligation to carry out the subcontract works but a corresponding right to be able to complete them. If the main contractor takes away or varies the subcontract works, this would be an infringement of that right and a breach of the subcontract. It may also constitute an act by which the main contractor makes it clear that it does not intend to be bound by the subcontract (a 'repudiation' on the part of the main contractor), which, if accepted by the subcontractor, would entitle the subcontractor to terminate the subcontract.

Therefore, most subcontracts contain a clause that enables the main contractor to omit work from the subcontractor and requires the subcontractor to carry out additional work or make alterations. However, if the main contractor requires a right to omit work and carry out the work itself, or employ others to do so, the subcontract should contain clear wording that confers this right on the main contractor. The commercial consequences of doing so should also be addressed in the subcontract. Neither JCT DBSub 2016 nor NEC4 ECS confers this right on the main contractor.

If the main contractor is dissatisfied with the subcontractor's performance, as part of its planning the subcontract could contain a clause that confers on the main contractor the right to supplement the subcontractor's resources (e.g. with additional management, labour, materials or plant). There is some overlap here with the right to omit works, so the subcontract should contain clear wording. This right also is not included in either JCT DBSub 2016 or NEC4 ECS.

Sophisticated subcontracts confer on the main contractor a right to terminate the subcontractor's employment if the subcontractor is in breach and this is covered by a clause or provisions. The provisions often require the main contractor to give the subcontractor notice of the breach and allow a period of time

to cure the breach. If the subcontractor does not do so in the specified period, the main contractor may exercise its right to terminate. Examples of issues covered by such clauses include the following:

JCT DBSub 2016:

- before practical completion of the subcontract works, the subcontractor:
 - wholly or substantially suspends the subcontract works without reasonable cause
 - fails to proceed regularly and diligently
 - refuses or neglects to remove defects, and this refusal or neglect materially affects the main contract works.

NEC4 ECS:

- the subcontractor:
 - has substantially failed to comply with its obligations
 - has not provided a required bond or guarantee
 - has appointed a sub-subcontractor for substantial work before the main contractor has accepted this
 - has substantially hindered the employer, contractor or others
 - has substantially broken a health and safety regulation.

Consider including the right for the main contractor to terminate the subcontractor's employment for convenience or at will. This can be exercised if the main contractor is dissatisfied with the subcontractor's performance, but the subcontractor's performance is not bad enough to permit the main contractor to terminate for breach. In such cases, a key issue for the main contractor and subcontractor to consider is the consequence of the termination, for example:

- the extent to which the main contractor is entitled to complete the subcontract works by other means
- the extent to which the subcontractor is entitled to payment
- the extent of the subcontractor's liabilities after termination.

3.4.2 Failure by the subcontractor to complete the subcontract works on time

If the subcontractor fails to complete the subcontract works on time, it will be liable to the main contractor for damages. The types of damages that the main contractor may suffer if the subcontractor fails to complete the subcontract works on time may include:

- time-related damages for which the main contractor is liable to the employer under the main contract (e.g. general damages or, perhaps more often, liquidated damages)
- damages for which the main contractor is liable to third parties (e.g. general damages for delay under third-party rights or collateral warranties)
- time-related site running/administration costs (e.g. preliminaries)
- loss and/or expense claims from other subcontractors who are affected by the delay
- increased costs due to inflation
- additional time-related costs of retention being withheld under the main contract
- time-related loss of contribution to overheads and profit
- interest costs.

Where the subcontract states that general damages apply, the subcontractor will usually be liable for these types of loss, subject to the normal rules that apply to the assessment of damages. The burden of proof will fall on the main contractor.

Where the subcontract states that liquidated damages – a fixed/pre-agreed sum per day or week of delay – apply, there are three key issues:

- In most cases, this will constitute the main contractor's only remedy for the subcontractor's failure to complete on time.
- A liquidated damages clause can have real benefits for the main contractor, as it will not be obliged to prove the loss it suffered as a result of the subcontractor's failure to complete on time. Instead, the main contractor can simply implement the liquidated damages provision through action or by deduction (subject to an express right to do so).
- Despite the convenience of a liquidated damages provision, in practice it is very difficult for the main contractor to calculate and pre-agree liquidated damages before entering into the subcontract. For example, where the subcontract works consist of suspended ceiling works in a 40-storey office block, the loss per day that the main contractor will suffer if the subcontractor fails to complete on time will vary enormously depending on the extent of the failure and the general circumstances associated with the delay. This is clear from two straightforward examples:
 - Example 1: if the subcontractor's failure to complete on time is extensive (e.g. the subcontractor
 has only completed ceilings for 10 floors rather than 40 floors), the loss per day suffered by
 the main contractor is likely to be very high, and will probably include all the types of damages
 mentioned previously.
 - Example 2: If the subcontractor's failure to complete on time is limited (e.g. the subcontractor has completed all the subcontract works on time, except for one small storage room on the 40th floor), the loss per day suffered by the main contractor is likely to be low. In some cases, none of the types of damages mentioned previously will apply, and the main contractor's loss might be low or even nothing at all.

The difficulty of accurately calculating liquidated damages in advance is one of the reasons why many subcontracts do not contain liquidated damages provisions:

- DOM/1 and DOM/2: no liquidated damages provision
- ICT subcontracts: no liquidated damages provision
- NEC4 ECS: no liquidated damages provision by default (although Option X7, which is a liquidated damages clause, can be used by agreement).

In all cases, carefully consider whether it is appropriate for the subcontract to contain a liquidated damages provision. In many cases it will not be appropriate, and it is of course subject to negotiation.

When drafting the subcontract, consider the risk that a delay in completion of the subcontract works might be extensive. For example, if the agreed period for the subcontract works is 52 weeks and, due to events for which the subcontractor is responsible, the works are only 50% complete after 78 weeks with little prospect of the subcontractor completing them soon, the main contractor might wish to exercise a right to terminate the subcontractor's employment. This would be best achieved through an express term included in the subcontract. In drafting the term, a so-called 'longstop date' or 'longstop period' would need to be agreed and stated, and the main contractor gains the right to terminate under the clause if the subcontractor fails to complete the subcontract works by this longstop date/period.

3.4.3 Specific subcontract works

The scope and type of the subcontract works will generally give rise to specific considerations that should be addressed in the subcontract. For example, where the main contract works include permanent lifts, they would usually be installed by a specialist subcontractor. There may be benefits in the main contractor being able to use the permanent lifts during the construction phase; this is often known as 'beneficial use'. Direct advantages of the beneficial use of permanent lifts may include:

- faster movement of people and goods often much faster than temporary external hoists
- no risk of adverse weather conditions
- potential improvements in safety
- potential reduction in energy costs (as the lifts may be more energy efficient than temporary external hoists)
- temporary external hoists (if they are also used) can be removed sooner, and cladding can be installed sooner.

However, a beneficial use agreement should be dealt with expressly in the subcontract through specific drafting, and should cover all relevant issues, such as the identification of the lifts that will be subject to beneficial use; commercial aspects (e.g. entitlement to payment, rates, frequency of beneficial use); and the practical arrangements that apply before beneficial use begins (e.g. completion of the lift and protection), during beneficial use (e.g. maintenance and risk of damage) and after beneficial use ends (e.g. inspection and commissioning).

3.5 Dispute resolution

Dispute resolution is a specialist area and practitioners should obtain advice on appropriate dispute resolution procedures for a project, particularly if the circumstances are unusual. This section only addresses specific questions concerning drafting the subcontract.

3.5.1 Adjudication

If an adjudicator is named in the main contract, should the same person also be named as the adjudicator in the subcontract? It is tempting to think that the answer is yes, on the basis that if the same adjudicator is named in the main contract and subcontract (and perhaps all the subcontracts in relation to the main contract works), that person may become familiar with the project and be in a better position to decide disputes that arise. However, in most cases that temptation should be resisted. If the adjudicator is named in the main contract and subcontract, bias can become an issue as the adjudicator may need to act in a dispute between the employer and main contractor, and also in a similar dispute between the main contractor and subcontractor. It is very important to avoid an adjudication being tainted by bias (whether perceived or real). Therefore, it is usually preferable for the same person not to be named as adjudicator in the main contract and subcontract.

3.5.2 Arbitration

Arbitration is not always incorporated into the subcontract. The parties must agree to refer a dispute to arbitration for resolution instead of through legal proceedings. In the absence of an agreement, there is no inherent right to refer disputes to arbitration.

JCT DBSub 2016 contains an arbitration agreement, but the agreement does not apply automatically. If the main contractor and subcontractor agree that arbitration will apply, item 2 of the Sub-Contract Particulars must be completed to state that Article 5 of the subcontract agreement applies. Article 5 states that disputes will be referred to arbitration. There are three exceptions:

- Disputes concerning the Construction Industry Scheme will not be referred to arbitration where legislation provides another resolution method.
- Disputes concerning VAT (again where legislation provides another resolution method).
- Disputes concerning the enforcement of an adjudicator's decision. Article 5 states that the arbitration will be conducted in accordance with the JCT 2016 edition of the Construction Industry Model Arbitration Rules (CIMAR).

NEC4 ECS also contains an arbitration agreement, but again it is not automatic. If the main contractor and the subcontractor agree that arbitration will apply, item 1 of Subcontract Data – Part One should be completed to state that the tribunal is arbitration.

Unless the subcontract contains an arbitration agreement that overrides the jurisdiction of the courts, the courts will have jurisdiction over disputes relating to this subcontract.

JCT DBSub 2016 states in Article 6 that the English courts have jurisdiction over disputes that arise out of, or in connection with, the subcontract. This is the default position.

NEC4 ECS requires the parties to choose the tribunal by completing the relevant entry in item 1 of Subcontract Data – Part One to identify the tribunal, for example arbitration or legal proceedings. If the entry is left blank, the courts will have jurisdiction.

3.5.3 Dispute resolution: frequently asked questions

Should the main contract and subcontract be subject to the same dispute resolution procedure?

There is no reason why the main contract and subcontract have to be subject to the same dispute resolution procedure. For example, if the main contractor has taken on sole responsibility for the design and construction of a private hospital, the employer may decide that the likelihood of having to bring claims against more than one party is low and agree with the main contractor that arbitration should apply in the main contract.

However, the situation in the supply chain could be more complex. The main contractor may wish to bring an action against its consultants and/or various subcontractors over the same issue (e.g. a defect). Where legal proceedings apply in the supply chain, the main contractor will have the right to initiate them. Whether arbitration or legal proceedings should apply in the subcontract should be weighed up in each case, but a sensible decision cannot be made by simply adopting the position that applies in the main contract.

Are mediation and/or a dispute resolution board (DRB) relevant to subcontracting?

The main contractor and subcontractor can agree that mediation and/or a DRB are relevant to their specific subcontract, either through express terms in the subcontract or other means.

Standard form subcontracts deal with mediation and DRB in different ways. For example, clause 8.1 of JCT DBSub 2016 requires the main contractor and subcontractor to give serious consideration to any request made by the other to refer a dispute to mediation, although it does not envisage the use of a DRB. NCE4 ECS does not envisage the use of mediation or a DRB. However, clause 20 of the FIDIC Subcontract (2011)

envisages disputes being referred to a 'dispute adjudication board' made up of one or three persons, which is equivalent to a DRB.

3.6 Subcontractor insolvency

Where the subcontractor becomes insolvent, the consequences for the main contractor can be very serious: delays and increased costs in completing the main contract works, financial losses and damage to reputation. Where the main contractor becomes insolvent, the employer may need to use the main contractor's subcontractors to continue the main contract works.

One of the difficulties in recognising the signs of potential subcontractor insolvency is that such signs could simply be commercial tactics or a matter of corporate management. In the end, no one sign can determine that there is a risk the subcontractor will become insolvent. Instead, consider the number of these signs in order to make an informed judgement as to the risk of the subcontractor becoming insolvent. See Appendix E for examples.

If the subcontractor does become insolvent, the issues to consider and the actions to take will depend on the circumstances. See the current edition of *Termination of contract, corporate recovery and insolvency*, RICS guidance note, for information on post-insolvency measures for main contractors, which can also be applied to subcontractors. Further guidance regarding subcontractors is set out in Appendix F.

The employer may want to ensure the contractual matrix provides the opportunity to use the main contractor's subcontractors to progress the main contract works if the main contractor becomes insolvent. There are five main options to achieve this.

First, the main contract could require an insolvent main contractor to assign the benefit of its subcontracts to the employer. This is a feature of JCT DB 2016 (clause 8.7.2.3) and NEC4 ECC (clause 92.2 P2). However, these provisions face two potential hurdles:

- The assignment provisions may not work where the main contractor is insolvent because the law of insolvency requires all creditors to be treated equally (see Appendix D and the reference to the *pari passu* rule).
- Any assignment of the benefit of the subcontract will be subject to the terms of the subcontract. If, for example, the subcontract prohibits the main contractor from assigning the benefit of the subcontract, any attempted assignment by the main contractor will be unlawful and have no effect.

The employer could deal with the latter by requiring the main contractor to include in its subcontracts the right to assign the benefit of the subcontract without the subcontractor's consent. JCT DBSub 2016 and NEC4 ECS achieve this because they do not expressly prohibit the main contractor from assigning the benefit of the subcontract.

Second, the main contract can confer on the employer the right to pay the subcontractors for materials or work executed if they have not already been paid for by the main contractor. However, even if the main contract conferred this right, the employer may face two difficulties because a direct payment by the employer to the subcontractor:

- would not necessarily discharge the employer's obligation to pay the main contractor for that work
- might fall foul of the pari passu rule (see Appendix D).

The employer can mitigate these risks by:

- including provisions in the main contract to the effect that if the employer pays a subcontractor directly, its liability to the main contractor is reduced by the corresponding amount
- taking effective assignment of the subcontractor's right to be paid by the main contractor under the subcontract
- including a clause in the main contract that entitles the employer to make direct payments to subcontractors at any time, not only in circumstances where the main contractor is insolvent.

The inclusion of these risk mitigation measures would be a matter of negotiation between the employer, the main contractor and, to an extent, the subcontractors. However, in most circumstances it is unlikely that all parties will accept these provisions, illustrated by the fact that it is not included in JCT DB 2016 or NEC4 ECC. Where it is included in the main contract, it would be appropriate for the subcontractor to acknowledge and give its express agreement to the provisions in the subcontract.

The first two options, therefore, have inherent difficulties that make them largely ineffectual if the main contractor is insolvent, which may be why they do not feature in JCT MP 2016.

The third option is for the employer to have the right to step into the subcontract in place of the main contractor, so that the subcontractor continues with the subcontract works for the employer. This is usually achieved with a collateral warranty given by the main contractor and subcontractor in favour of the employer, or through another direct agreement that grants step-in rights to the employer. In most cases, the collateral warranty or direct agreement states that the employer's right to step into the subcontract is activated when the main contractor's employment under the main contract is terminated (which would generally be the case if the main contractor had become insolvent, although this termination is not necessarily automatic). In order to secure step-in rights, in the main contract the employer can require the main contractor to:

- procure collateral warranties or direct agreements with step-in rights from its subcontractors in a prescribed form
- ensure that its subcontracts contain a term that requires the subcontractor to execute and deliver the collateral warranty or direct agreement in the prescribed form.

In such circumstances, the subcontract should be drafted in order to require the subcontractor to provide the collateral warranty or direct agreement in the prescribed form.

The fourth option involves the subcontract being novated from the main contractor and the subcontractor to the employer and the subcontractor. In effect, this results in the original subcontract coming to an end, and the employer and the subcontractor entering into a contract on the same terms as the subcontract.

In order to ensure that the subcontract is novated to the employer, the main contract can require the main contractor to:

- in the event of insolvency, ensure that the subcontractor enters into a novation agreement in a prescribed form
- ensure that its subcontracts contain a term that requires the subcontractor to enter into the novation agreement in the prescribed form.

A potential difficulty with this device is that it requires the employer, the main contractor and the subcontractor to enter into a novation agreement. However, it is possible that the main contractor's

insolvency practitioner, who will be in control of the main contractor's affairs at the time, will decide not to execute a novation agreement or exercise a right it may have to disclaim the novation agreement.

Neither JCT DB Sub 2016 nor NEC4 ECS include provisions that deal with novating the subcontract. However, these provisions can be included in the subcontract through relatively straightforward amendments.

The fifth option is really a variation on the theme of the third and fourth options: instead of the employer being granted step-in rights or the right to enter into a novation agreement, a replacement main contractor is given these rights. These provisions have some commercial reality to them: it is unlikely that the employer will act as main contractor and complete the main contract works itself. In most cases, the employer will appoint a replacement main contractor to complete the main contract works and the replacement main contractor may want to step into or novate existing subcontracts.

Where the fifth option is used, the subcontract and any relevant collateral documentation should be drafted to allow the employer or replacement main contractor to exercise the right to step or enter into a novation agreement.

The current edition of *Termination of contract, corporate recovery and insolvency*, RICS guidance note, provides helpful information on the main types of insolvency and insolvency risk mitigation measures. Further guidance on risk mitigation regarding subcontractors is set out in Appendix D.

Appendix A: Example contents of a procurement strategy

Ref	Heading	Example content
1	Executive summary	 high-level summary of procurement strategy
2	Introduction and purpose	• background
		 purpose and objectives of procurement strategy
3	Main contract	name of employer
		name of main contractor
		• site details: location, access, etc.
		appointment of main contractor
		• form of main contract (e.g. JCT, NEC, etc.)
4	Main contract works	description of main contract works
		 key features associated with main contract works (e.g. date of commencement, date for completion)
		 key persons involved (e.g. employer's consultants)
5	Subcontract packages	 division of main contract works into subcontract packages
		 allocation of a unique code number to each subcontract package (e.g. a four-digit number)
		approval and sign-off by main contractor's management
6	Financial planning	budget for each subcontract package
		approval and sign-off by main contractor's management

Ref	Heading	Example content
7	Subcontract package philosophy	• use of main contractor's in-house companies:
		 in-house design specialists
		 in-house specialist subcontractors (e.g. piling, concrete works, mechanical and electrical works, cladding)
		 use of main contractor's existing supply chain arrangements:
		 preferred subcontract agreements
		 preferred supplier agreements
		 business-to-business relationships
		strategic subcontract packages:
		 significant part of the main contract works
		high value
		 programme criticality
		 low number of potential subcontractors
		 transactional subcontract packages:
		 less significant than strategic subcontract packages
		 medium to low value
		 medium to high number of potential subcontractors
		approval and sign-off by main contractor's management
8	Procurement programme	procurement programme
		approval and sign-off by main contractor's management
9	Pre-qualification of tenderers	identification of potential tenderers
		confidentiality agreement (if applicable)
		 pre-qualification questionnaire (e.g. drafting and content)
		 audit/inspection visits to tenderer's premises
		assessment of responses to pre-qualification questionnaire
		credit checks
		selection of tenderers
		approval and sign-off by main contractor's management
10	Tendering procedures	 selecting the tendering procedure for each subcontract package
		approval and sign-off by main contractor's management
11	Tender security	tender bond

Ref	Heading	Example content
12	Invitation to tender (ITT)	• ITT
		required stage of design for each subcontract package
		drafting the ITT
		e-tendering (if applicable)
		 approval and sign-off by main contractor's management
13	Tender administration	 protocol for responding to queries from tenderers
		 mid-tender meetings and review
		 procedure for opening tenders
		 approval and sign-off by main contractor's management
14	Assessment of tenders	assessment criteria:
		 ethics, transparency and fairness
		 compliance with ITT/instructions to tenderers
		– price
		– programme
		– technical
		 health and safety
		• assessment input – role of main contractor's departments:
		procurement
		 management
		– commercial
		engineering
		– quality
		 health and safety
		– finance
		– legal
		• initial tender analysis/comparison
		• post-tender meetings
		reconcile tenders
		negotiation (if applicable)
		draft recommendation of preferred subcontractor
		evaluation of recommendation
		final recommendation of preferred subcontractor
		• selection of subcontractor
		 approval and sign-off by main contractor's management

Ref	Heading	Example content
15	Appointment of subcontractor	 preparation of the draft subcontract
		evaluation of the draft subcontract
		 preparation of the subcontract for execution
		approval and sign-off by main contractor's management
		execution of the subcontract
16	Corporate social responsibility	 main contractor's objectives
		 role of subcontractors
		health and safety
		 environment
		working practices/industrial relations

Appendix B: Example contents of a tender recommendation report

Ref	Heading	Example content
1	Executive summary	 high-level summary of report name of tenderer recommended to be employed as subcontractor
2	Introduction	backgroundnature of subcontract worksplanned date for appointment of subcontractor
3	Procurement strategy/tendering process	title and date of procurement strategy documentsummary of tendering procedurelist of tenderers
4	Basis of tender	 scope of subcontract works ITT: content date tenders received: name of tenderer date tender opening tender prices tender review: compliant and non-compliant tenders errors qualifications exclusions provisional sums post-tender meetings

Ref	Heading	Example content
5	Tender assessment/comparison	 tender assessment criteria stated in ITT application of tender assessment criteria programme input of main contractor's departments: procurement management commercial engineering quality health and safety finance legal
6	Recommendation	 name of tenderer recommended to be employed as subcontractor reasons risks and risk management
7	Financial matters	 budget for subcontract works anticipated extra costs financial effect of implementing recommendation up-to-date credit check on tenderer recommended to be employed as subcontractor

Appendix C: Performance security

C.1 Key characteristics of a parent company guarantee (PCG) and a default performance bond

Characteristic	PCG	Default performance bond
Guarantor's obligations	 Usually – to pay money to the main contractor. Often – as above, plus to perform the subcontractor's obligations under the subcontract. 	Usually – to pay money to the main contractor.
Guarantor's/surety's liability – <i>type</i>	 Usually - loss or damage suffered by the main contractor. Often - as above, plus debts, interest, legal costs, etc. 	Usually – loss or damage suffered by the main contractor.
Guarantor's/surety's liability – <i>amount</i>	Usually – no greater liability than the subcontractor has under the subcontract.	• Usually – 10% or 20% of the subcontract sum, and co-extensive with the subcontractor's liability under the subcontract.
Guarantor's/surety's liability – insolvency of the subcontractor	• Usually – covered.	 Depends on the wording of the bond (usually covered, but sometimes not covered).
Guarantor's/surety's liability - expiry	 Variable. Sometimes – on completion of the subcontract works or completion of making good defects in relation to the subcontract works. Often – on expiry of the subcontractor's liability under the subcontract. 	Usually – completion of the subcontract works or completion of making good defects in relation to the subcontract works.
Amendments to the subcontract	Usually – permitted without reducing the guarantor's obligations or liabilities.	 Usually – permitted without reducing the surety's obligations or liabilities. Sometimes – permitted but to a lesser extent than the position under a PCG.

Characteristic	PCG	Default performance bond
Assignment of benefits by the main contractor	 Usually – assignable (without consent) to any person to whom the subcontract is assigned. Sometimes – freely assignable. 	 Usually – assignable with the surety's consent. Sometimes – assignable (without consent) to any person to whom the subcontract is assigned.
Dispute resolution	Usually – litigation.Sometimes – as above, plus adjudication.	Usually – litigation.
Cost of security	 Usually – free of charge, or no significant cost. Sometimes – cost chargeable. 	 Usually – not free of charge: the surety will make a charge for the bond, which the subcontractor is likely to include in the subcontract sum.
Factors affecting the likelihood of the main contractor recovering amounts owed by guarantor/surety	 The express provisions of the PCG. Liquidity of the guarantor (a commercial risk). Dispute resolution procedure – usually litigation (and so legal costs might be high), but relatively easy if adjudication applies. Guarantor's attitude to the reputational issues of its subsidiary, i.e. it might settle a claim to avoid the dispute being referred to proceedings. 	• Liquidity of the surety (a commercial risk, but it might be a lower risk than with a PCG).

C.2 Key issues regarding enabling provisions

Issue	PCG	Performance bond
The type of the performance security	 The form should be included in the subcontract. Where JCT DBSub 2016 applies, the form can be in the numbered documents. Where NEC4 ECS applies, the form should be in the subcontract scope. 	• The same as the PCG.
The date on which the performance security should be provided by the subcontractor	 On the date the subcontract is entered into, or a date no more than four weeks afterwards NEC4 ECS (secondary Option X4) adopts this approach 	 The same as the PCG. NEC4 ECS (secondary Option X13) adopts this approach.
The main contractor's rights and remedies if the performance security is not provided by the subcontractor	 The main contractor should be entitled to: withhold payment until the PCG is provided and terminate the subcontract. This is without prejudice to the main contractor's other rights and remedies. 	• The same as the PCG.
The identity of the guarantor/ surety (name, company number, etc.)	This should be stated in the subcontract.	 This should be stated in the subcontract; if not, it should be subject to the main contractor's approval or acceptance. NEC4 ECS (secondary Option X13) states that the surety must be a bank or insurer that the main contractor has accepted, and gives a reason for not accepting the bank or insurer: its commercial position is not strong enough to carry the bond.

Issue	PCG	Performance bond
The procedure to be adopted if the performance security expires before completion of the subcontract works	In most cases, this is not required because the PCG will expire after completion (usually 12 years afterwards).	 In some cases, the bond will contain a longstop date, the latest date on which the bond expires. If the longstop date is reached before the subcontract works are completed, the subcontractor should be required to extend the expiry of the bond, or replace the bond with a new bond that has a later expiry date.

Appendix D: Subcontractor insolvency risk mitigation

Consider taking these steps in order to mitigate the risk of appointing a subcontractor who may become insolvent. Some of the steps require the agreement of the subcontractor and may be subject to commercial negotiation.

Prior to seeking tenders and prior to entering into the subcontract

Steps to take before seeking tenders from subcontractors and before entering into a subcontract with a specific subcontractor include:

- Carry out (or procure independent) due diligence on the financial strength of the subcontractor, including obtaining and assessing key information concerning the financial strength of the subcontractor, for example:
 - audited accounts
 - management accounts (including the profit and loss statement, balance sheet, cash position, cash flow forecast and liquidity position)
 - a letter from the subcontractor's bank setting out the subcontractor's cash and credit position
- Where applicable, carry out equivalent checks on the subcontractor's parent company and ultimate parent company.
- Where applicable, consider the subcontractor's group of companies, including legal domicile, structure, ownership of assets/property, etc.
- Check that the subcontractor is able to provide adequate performance security (e.g. a parent company guarantee, a performance bond or a letter of credit).
- Where applicable, check that the subcontractor is able to provide special forms of security (e.g. adequate bonds for any advance payment, retention or materials off site).
- Check that the sureties proposed by the subcontractor are of adequate financial strength.

Drafting the subcontract

In drafting the subcontract, consider including the following provisions:

- The subcontractor is required to provide performance security (e.g. parent company guarantee, performance bond or letter of credit).
- Provision of performance security is required before payment.
- Conditions of any unusual payments, for example:
 - advance payment: provision of an advance payment bond
 - materials off site
 - release of retention prior to completion: provision of a retention bond.
- Payment is only made for work that is properly carried out.

- The subcontractor grants to a director of the main contractor power of attorney to execute documents (e.g. collateral warranties or deeds of assignment).
- The subcontractor agrees not to remove materials and plant from site without the prior consent of the main contractor.
- The subcontractor is not permitted to assign the subcontract (including through debt factoring).
- The meaning of insolvency is wide.
- The main contractor may terminate the subcontract at will.
- The main contractor's obligation to make payments is suspended on termination.
- The subcontractor must provide collateral warranties from key members of its supply chain in favour of the main contractor, including step-in rights.
- The main contractor may make direct payments to the subcontractor's supply chain.
- If requested to do so after insolvency or termination, the subcontractor must assign or novate its subsubcontracts to the main contractor.
- The subcontractor must provide financial information (e.g. management accounts, cash position, cash flow statement) to the main contractor on a regular basis.

Other forms of security

Other forms of security that may be given by the subcontractor in favour of the main contractor include director's personal indemnity, a charge on the subcontractor's property and a lien. These forms of security are uncommon and can be complex, so specialist advice should be obtained if they are required.

During the course of the subcontract works

Where during the course of the subcontract works there are signs that the subcontractor might become insolvent, the main contractor should consider mitigating the risk by:

- supporting the subcontractor so that it is able to remain solvent and complete the subcontract works, for example by:
 - increasing the frequency of interim valuations (e.g. fortnightly instead of monthly)
 - bringing forward the final date for payment under the subcontract
 - making payments before the final date for payment
 - making payments for materials on site or off site
 - making an ex gratia payment
 - not exercising a right of set-off
 - omitting parts of the subcontract works to reduce the subcontractor's workload and financial stress (e.g. for works that require advance payments for materials), although this may require the subcontractor's agreement
- following the terms of the subcontract carefully
- valuing and paying for work properly, and ensuring that there is no accidental overpayment
- having a plan in place to quickly replace the subcontractor if it becomes insolvent
- making payments directly to sub-subcontractors (subject to the terms of the subcontract) but see the following commentary.

Making direct payments to a sub-subcontractor

The main contractor may perceive two key benefits in making direct payments to a sub-subcontractor:

- They might prevent the sub-subcontractor from exercising any right to suspend performance of any or all of its obligations, or terminate its employment, under the sub-subcontract for late payment or nonpayment. This would allow the sub-subcontractor to continue its work, which would allow the relevant parts of the main contract works to proceed.
- If the subcontractor's employment is terminated for insolvency, the sub-subcontractor should not claim, as a prerequisite to agreeing to continue its work, that the main contractor must pay any outstanding amounts for work done before the subcontractor became insolvent. Where direct payments are not made by the main contractor to the sub-subcontractor for work carried out, but the main contractor pays the subcontractor for that work, there can be no clear-cut guarantee that the sub-subcontractor will have been paid by the subcontractor before it became insolvent.

Although direct payments may have some potential benefits for the main contractor, they are not without risks. First, where the main contractor makes a direct payment to the sub-subcontractor for specific work, this will not necessarily discharge the main contractor's obligation to pay the subcontractor. The main contractor could end up paying for the same work twice. There are two ways that the main contractor can mitigate this risk:

- The main contractor can include provisions in the subcontract to the effect that if the main contractor pays a sub-subcontractor directly, its liability to the subcontractor is reduced by a corresponding amount.
- The main contractor takes effective assignment of the sub-subcontractor's right to be paid by the subcontractor under the sub-subcontract.

The second risk of direct payments comes from the *pari passu* rule. This rule prevents the insolvent subcontractor from favouring one unsecured creditor over another. If the main contractor makes a direct payment to the sub-subcontractor, there is a risk that the payment will be treated as a preferential payment. The insolvency practitioner might challenge the preferential payment and ask the court to set it aside. If the challenge is successful, the main contractor could be required to pay the subcontractor (or the insolvency practitioner) for the work. The main contractor can mitigate this risk by including a clause in the subcontract that entitles the main contractor to make direct payments to sub-subcontractors at any time, not just in circumstances where the subcontractor is insolvent.

Appendix E: Signs of potential subcontractor insolvency

Signs during the tender stage/prior to entering into the subcontract

Si	gn	Observation	
•	Subcontractor requests an extension to the tender period.	 Subcontractor's staff is aware of the risk of insolvency, and resignations have occurred. Subcontractor's supply chain is aware of the rist of insolvency and has refused to provide tender prices on time or has provided inflated tender prices. 	er
•	Subcontractor refuses or neglects to provide financial or management accounts.	 Subcontractor might not wish to disclose that suffering from a weak financial position. 	it is
•	Subcontractor requests that any eventual subcontract provides for an advance payment.	 The advance payment would help to mitigate t subcontractor's distressed cash position. 	he
•	Subcontractor requests that any eventual subcontract provides for an unusually short payment period.	 The short payment period would help to mitigather the subcontractor's distressed cash position. 	ate
•	Subcontractor refuses to agree to procure bonds under any eventual subcontract.	• If the subcontractor is in financial distress, its sureties might refuse to provide bonds.	
•	Subcontractor agrees to procure bonds, but includes in its price an usually high financial allowance for the bonds.	 If the subcontractor is in financial distress, its sureties might charge unusually high premium for the bonds with a consequent effect on the tender price. 	
•	Rumours regarding the subcontractor's financial stability.	 Market intelligence might be aware that the subcontractor is tendering for the work, but the market might also know or suspect that th subcontractor is in a weak financial position. 	е

Signs during the design or construction phase of the subcontract works Subcontractor's performance on site

Sign	Observation
 Subcontractor fails to administer the subcontract properly (e.g. subcontractor does not respond to correspondence swiftly or at all). 	 Subcontractor's staff might be too busy 'firefighting' elsewhere (e.g. other projects, preparing submissions to lenders, etc.). Subcontractor's staff might have resigned.
 Subcontractor suffers from an unusually high turnover of staff. 	Subcontractor's staff resign due to lack of confidence in the subcontractor.
	 Subcontractor's staff are dismissed due to problems on the project.
 Subcontractor lacks skilled labour or replaces skilled labour with unskilled labour. 	 Subcontractor's skilled labour might have chosen to leave the project due to late payment or non- payment.
 Subcontractor suffers from a relatively high turnover of labour. 	 Subcontractor's skilled labour might have chosen to leave the project due to late payment or non- payment.
Unusually high volume of defects.	High turnover of staff and shortage of skilled labour can give rise to defects.
Rumours about the subcontractor's financial stability.	 Market intelligence might be aware that the subcontractor is working on site, but the market might also know or suspect that the subcontractor is in a weak financial position.

Subcontractor's commercial behaviours

Sign		Observation	
•	Subcontractor inflates its applications for payment, claims, etc.	•	An attempt by the subcontractor to improve a distressed cash position.
•	Subcontractor seeks payment for materials that: - are on the site but delivered prematurely - are on the site, but not intended for incorporation into the subcontract works - are not on the site.	•	An attempt by the subcontractor to improve a distressed cash position.
•	Subcontractor requests payments which are not envisaged by the subcontract, e.g. - advance payment - payment for materials off site - early release of retention.	•	An attempt by the subcontractor to improve a distressed cash position. Subcontractor has reached the limit of its credit facilities with suppliers.
•	Subcontractor issues unfounded threats to suspend or terminate.	•	An attempt by the subcontractor to improve a distressed cash position.
•	Subcontractor seeks interim settlement agreement, and early release of payment.	•	An attempt by the subcontractor to improve a distressed cash position.
•	Subcontractor constantly chases payment, even before the final date for payment.	•	An attempt by the subcontractor to improve a distressed cash position.
•	Subcontractor states that materials (especially materials off site) have been lost, stolen or damaged.	•	Subcontractor might not have had the financial strength to procure the materials in the first place. Subcontractor might have been required to return the materials to the supplier due to non-payment.
•	Subcontractor refuses to comply with an adjudicator's decision which requires it to make payment.	•	Subcontractor is short of cash.
•	Subcontractor attempts or requests to factor debts to third parties (e.g. banks) or to assign the right to be paid under the subcontract.	•	Subcontractor is seeking to raise cash from third parties by factoring or assigning its right to payment.
•	Subcontractor makes an unusually high number of insurance claims.	•	Subcontractor might be attempting to improve a weak cash position.

Subcontractor's supply chain

Sign		Ok	Observation	
•	Subcontractor changes material suppliers	•	Subcontractor's credit limits have been reached.	
	frequently.	•	Subcontractor's suppliers have suspended delivery of materials due to late or non-payment.	
•	Shortage of materials on site that would normally be readily available from suppliers.	•	Subcontractor's credit limits have been reached.	
		•	Subcontractor's suppliers have suspended delivery of materials due to late or non-payment	
•	Subcontractor's material suppliers try to remove/repossess materials from site.	•	Subcontractor's material suppliers have not been paid and are enforcing retention of title clauses.	
•	Subcontractor's plant suppliers remove plant from site.	•	Subcontractor's plant suppliers have not been paid and are enforcing their right to repossess plant.	
•	Subcontractor changes sub-subcontractors frequently.	•	Sub-subcontractors have suspended performance or terminated due to late or non-payment.	
•	Subcontractor is passing onto the main contractor claims from sub-subcontractors that do not arise from acts or omissions of the main contractor.	•	Sub-subcontractors might seek to recover losses due to the subcontractor's poor performance or late payment.	
•	Subcontractor pays its supply chain late or not at all.	•	Subcontractor is short of cash.	
•	Subcontractor's supply chain requests direct payment from the main contractor.	•	Subcontractor is short of cash with the result that the subcontractor is not paying its supply chain on time or at all.	
•	Rumours that the subcontractor is threatening supply chain with defamation claims.	•	Supply chain might be spreading rumours as to the subcontractor's insolvency or weak cash position.	
•	Subcontractor is subject to adjudication proceedings commenced by subsubcontractors.	•	Supply chain might be spreading rumours as to the subcontractor's insolvency or weak cash position.	
•	Subcontractor is subject to recent/new County Court judgments against it.	•	Subcontractor is short of cash and not paying its supply chain.	
•	Subcontractor is the subject of a winding-up petition.	•	Subcontractor is short of cash and not paying its supply chain	

Subcontractor's corporate management and administration

Sign		Observation		
•	Subcontractor does not file documents at Companies House on time or at all (e.g. statutory accounts, annual returns).	 Subcontractor's corporate management might be too busy 'firefighting' elsewhere (e.g. preparing submissions to lenders, etc.). 		
		 Subcontractor might not wish to disclose that it is suffering from a weak financial position. 		
•	Subcontractor takes out new mortgages or creates new charges over its assets.	 Subcontractor might be raising cash by way of borrowing. 		
•	Subcontractor's credit reference worsens.	Subcontractor is short of cash.		
•	Subcontractor's associated company (e.g. a company within the same group of companies) becomes insolvent.	Subcontractor's group is short of cash.		
•	A significant customer of the subcontractor becomes insolvent.	• Subcontractor is likely to suffer non-payment and perhaps a shortage of cash.		
•	Subcontractor's directors form a new company.	 Subcontractor's directors might suspect the subcontractor will become insolvent, and the new company might be in a position to take over the subcontractor's contracts. 		

Appendix F: Key considerations when a subcontractor becomes insolvent

This is general guidance to consider in each specific case.

Evidence of insolvency

- Obtain formal evidence that the subcontractor is insolvent, such as:
 - notice given by the insolvency practitioner
 - notice given in the Gazette
 - documents available from Companies House.

The subcontract

- Check the terms of the subcontract to determine:
 - the right to terminate
 - the consequences of termination
 - whether the main contractor is entitled to secure materials and plant
 - whether the main contractor can require the subcontractor to assign the benefit of subsubcontracts
 - the right to use design, intellectual property, etc.
 - the right to make direct payments to sub-subcontractors
 - rights of set-off (under the subcontract, cross-contract set-off, etc.).

Termination of the subcontractor's employment following insolvency

- Check whether termination of the subcontractor's employment due to insolvency is automatic (this is unlikely).
- Consider the pros and cons of termination.
- Prior to termination, the main contractor should:
 - check whether the approval of a third party (e.g. the employer) is required for termination
 - check the subcontract works on site are secure
 - check the main contractor can take possession of the subcontractor's materials on site
 - check the main contractor can take possession of the subcontractor's materials off site (e.g. pursuant to the terms of the subcontract or a vesting agreement)
 - check the subcontractor has provided all guarantees and bonds
 - check the subcontractor has provided all collateral warranties required in favour of third parties

- check the subcontractor has provided all collateral warranties required in favour of the main contractor (e.g. warranties from sub-subcontractors)
- check the subcontractor has provided copies of sub-subcontracts.

Practical measures

- Make records of the progress of the subcontractor's works, and the materials and plant on site.
- Where it is lawful to do so, secure the subcontractor's materials (on site and off site) and plant.
- Where applicable, notify the subcontractor that it is required to assign the benefit of its subsubcontracts to the main contractor.
- Assess the risk of claims from sub-subcontractors regarding retention of title and conversion.

Security

Consider the main contractor's rights and remedies under:

- a parent company guarantee (including whether the guarantor is obliged to complete the subcontract works or simply pay damages arising from insolvency)
- performance bond
- advance payment bond
- retention bond
- materials off site bond
- letter of credit
- project bank account
- any collateral warranties (e.g. a right to step into sub-subcontracts)
- director's guarantee or indemnity
- insurance policies.

Financial matters

- Perform a valuation of the subcontract works, materials on site and off site, etc.
- Record the effect of the insolvency on the progress of the main contract works.
- Record the losses suffered by the main contractor as a result of the insolvency.
- Prepare an account in accordance with the subcontract.
- Check whether any monies are held in trust or in escrow.

The insolvency practitioner

- Attend creditors' meetings.
- Liaise with the insolvency practitioner to establish:
 - whether it intends to try to rescue the business or sell it as a going concern
 - its intentions regarding the subcontract
 - whether sufficient money will be available to pay creditors.

Completing the subcontract works

Consider the commercial advantages and disadvantages of ensuring the completion of the subcontract works by:

- novating the subcontract to a replacement subcontractor
- appointing a replacement subcontractor under a new subcontract
- using the main contractor's own resources.

Delivering confidence

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