

# National Construction Contracts and Law Survey 2013

|   |    |
|---|----|
| Introduction  | 03 |
| Richard Waterhouse  |    |
| PPC: The natural home for BIM<br>and collaborative working          | 04 |
| Professor David Mosey   |    |
| Does the Duty of Good Faith have<br>any place in English contracts? | 06 |
| Victoria Peckett  |    |
| National construction contracts<br>and law survey 2013              | 08 |
| Adrian Malleson   |    |
| The CIOB Complex Projects<br>Contract 2013                          | 22 |
| Keith Pickavance  |    |
| Using Dispute Boards<br>in construction projects                    | 26 |
| Ben Beaumont  |    |
| Improving collaborative<br>construction contracts                   | 28 |
| Koko Udom   |    |

We would like to thank the following organisations for their support by circulating the survey to their members. The support of these organisations has provided us with a broad response base, therefore ensuring that the findings and results are truly industry-wide.



RIBA Enterprises Ltd © 2013 All rights reserved.  
No part of this report may be reproduced or shared in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage or retrieval system, without permission in writing from the copyright holder.

The content of articles contributed by external authors and published in this report are the views of those authors and do not represent the position of RIBA Enterprises Ltd, NBS or its affiliated companies.

“Emergence from recession is typically a time for great change. It’s a time when those who prosper most are those who are quickest to adapt to new ways of working.”




---

## Introduction

### Richard Waterhouse

### Chief Executive, RIBA Enterprises

This second annual NBS National Construction Contracts and Law Survey is being published as the UK’s construction sector finally begins to emerge from its deepest post-war recession. As the pace of recovery increases, we can see both a wider adoption of Building Information Modelling (BIM), driven in part by the UK Government’s construction strategy, and associated collaborative working. Collaboration is fundamental to the need for greater productivity and efficiency. In the right legal framework, this collaboration is facilitated by BIM and standardization.

Our survey finds the legal side of the profession embracing collaboration in principle, with respondents agreeing that our core purpose (the delivery of clients’ objectives) is better achieved through collaborative working. Collaboration is also practised: most were involved in a collaborative project in 2012. However, we are not yet at the point where collaboration is the norm for the UK construction industry. A number of factors impede its wider adoption – top of which is, somewhat paradoxically, clients not wanting collaboration. Clearly, consultants and contractors have a role in making the benefits of collaboration clear.

Unfortunately, the survey suggests that we are failing to reduce the number of disputes. This year more respondents were in dispute, with many telling us that they feel the number of disputes is increasing. While disputes appear to be increasing, use of industry standard contract forms is not. Bespoke contracts and appointment arrangements remain prevalent. The survey gives us no evidence to support the view that bespoke contracts are a way of avoiding dispute. Many would argue that the opposite is true.

Clients, contractors and consultants are each likely to see different issues as the cause of disputes. The potential source of dispute is most often where another party has primary control (and it is outside one party’s own primary control). Knowing the areas where others may find disputes can help teams frame a project correctly, in both letter and spirit. Clearly describing, documenting, and taking account of the needs and difficulties of each party has to be the right way to start.

At NBS, we remain committed to making standardization and collaboration more easily achievable. theNBS.com provides help and guidance in the key issue areas our industry faces, not only in Contracts and Law, but also in BIM, Design and Specification, Regulations and Standards, Practice Management, and Sustainability. We’re also pleased that in winning both the ‘Construction News BIM Initiative’ award for the NBS National BIM Library, and the ‘Digital Built Britain’ award for NBS Create, we have demonstrated our delivery of high quality, standardized information to support collaborative working.

Emergence from recession is typically a time for great change. It’s a time when those who prosper most are those who are quickest to adapt to new ways of working. It is also true that the most revolutionary changes in innovative ways of thinking and delivery come from teams who work in a spirit of collaboration, towards a shared aim. Despite the difficulties the survey uncovered, the UK delivered some of the most globally recognized buildings of 2012, through collaborative working. Let’s see how we develop our position of leadership here in 2013 and beyond.

# PPC: The natural home for BIM and collaborative working

Professor David Mosey  
Director,  
King's College London  
Centre of Construction  
Law and Dispute Resolution



Partnering, both on single and multiple projects, has delivered exceptional results, but it requires planning and depends on changes in behaviour that many people find challenging. Collaborative forms of contract have developed to provide a clearer path for partnering and have become the norm for increasing numbers of clients and project teams. But what is the impact of BIM on partnering, and is the digital integration of design comparable to the integration of working relationships?

In his recent Construction Industry Council report 'Growth through BIM', Richard Saxon CBE made some important observations about the relationship between BIM, partnering and collaborative forms of contract. He suggested that "What partnering needed to succeed was BIM" and that collaborative forms of contract, namely JCT Constructing Excellence, NEC3 and PPC2000, "are seen as the vanguard of the contracts of tomorrow", particularly to support BIM Level 3. Richard Saxon perceives a future in which integrated design through BIM is matched by integrated "self-checking documentation" that would "remove the source of a lot of disputes".

As a champion of partnering, I am excited to explore the ways in which BIM will secure its future, particularly in view of the fact that in the experience of many public and private sector clients and teams, systematic partnering (even without BIM) creates the best means of achieving excellent projects. In this context, it is significant that in an economic downturn the Government Construction Strategy in 2011 made a clear connection between partnering on the one hand and savings on the other. The Government did not recommend that we respond to financial constraints by reverting to lowest price single stage tendering under risk-dumping traditional forms of contract, but instead built its recommendations around the opposite - namely, a more detailed build-up of risk and the cost of risk under the collaborative processes of "early contractor involvement". For the avoidance of doubt, the Government Construction Strategy expressly recommended JCT Constructing Excellence, NEC3 and PPC2000 as the contracts through which to achieve these objectives and embarked on a Trial Project programme to gather objective evidence of whether its recommendations worked in practice.

Professor David Mosey

Professor David Mosey is Director of the King's College London Centre of Construction Law and Dispute Resolution and former Head of Projects and Construction at Trowers & Hamlin solicitors.

David has over 30 years' experience advising clients, contractors, consultants and project teams across a range of building and infrastructure projects, primarily in the UK and the Middle East. He has particular expertise in procurement strategies, risk analysis, standard and bespoke contracts and professional appointments. David is described in the Chambers Guide to the Legal Profession as a "partnering guru" who "gives something to the industry", and is principal author of the PPC2000 and TPC2005 partnering contract forms. David and the Projects and Construction team at Trowers & Hamlin won the Builder and Engineer 'Construction Law Firm of the Year' 2011 and David won the Constructing Excellence 'Achievers Award' 2009.

David jointly led the UK Government 'National Change Agent' team from 2005 to 2011 and is currently deputy chair of the Cabinet Office/Infrastructure UK Trial Project Support Group implementing aspects of the Industrial Strategy for Construction.

### Relevant survey statistics →

We found that nearly a half of respondents did not adopt any collaborative techniques in 2012, and only 10% did so for all projects. That said, both 58% of clients and contractors described themselves as adopting collaborative techniques for some or all of their projects.

The first four Trial Project reports were produced for the July 2013 Government Construction Summit, and of these the Ministry of Justice Cookham Wood Young Offenders Institution is particularly relevant to the links between BIM and collaborative working. The Cookham Wood project was the first Government project to adopt BIM, and MoJ developed a BIM model for use in its team selection, throughout all stages of design development and user consultation, and also to inform its post-completion operational requirements.

Cookham Wood adopted early contractor involvement through 'Two Stage Open Book' under the PPC2000 form of contract, which provides for a multi-party team to sign a single contractual hub. This enabled all of the BIM contributors (architects, engineers, main contractor and sub-consultants) to understand how their work fitted in with that of the other parties. They worked under the same terms of appointment, all signing one multi-party contract, and followed a fully integrated programme of key dates for development and implementation of their design contributions.

Most critically, the two-stage structure of PPC2000 ensured that Interserve (the appointed main contractor) and its key specialist subcontractors such as SSC (precast volumetric cell provider) and EMCOR (mechanical and electrical specialist) were formally appointed months in advance of start on site, with a clear set of BIM-led design stages and other activities that led up to authority for them to commence work on site.

The practical benefits of this approach appear in the Trial Project case study and include:

- Financial and time savings achieved through the precast volumetric cell solution proposed by SSC.
- Additional cost savings achieved through alternative lighting and service duct/cell riser proposals submitted by EMCOR.
- Improved design coordination and better liaison with the Cookham Wood Governor who praised the benefits of a "walk through of the buildings highlighting views into and out of areas that normally I couldn't do until completion".

The combination of Two Stage Open Book and BIM under PPC2000 led to an independent Constructing Excellence report that MoJ has achieved 20% savings. These savings were directly attributable to efficient joint working by all levels of the supply chain, particularly during the period of their early contractual appointment in advance of start on site.

In recent years, it might be argued that partnering has suffered from a failure to define its own terms of reference, making it vulnerable as a 'wish list' for dispute avoidance rather than a methodical basis for procurement, contracting and project management. It is clear from Cookham Wood and from 'Growth through BIM' that we are entering a new era where partnering, supported by a clear set of controlled systems, can generate undeniable benefits:

- if new relationships for key supply chain members are created early enough through Two Stage Open Book;
- if team appointments are set out in a two-stage collaborative contract such as PPC2000; and
- especially if the creation of an integrated team is combined with a system for developing integrated design contributions through BIM.

In order to understand BIM and partnering better, it is important to place them squarely in a procurement and contracting context. MoJ have done this successfully and have reaped the rewards of financial savings, innovation and improved user satisfaction. ●

"I am excited to explore the ways in which BIM will secure its future, particularly in view of the fact that in the experience of many public and private sector clients and teams, systematic partnering (even without BIM) creates the best means of achieving excellent projects."

# Does the Duty of Good Faith have any place in English contracts?

Victoria Peckett  
Head of Construction Team,  
CMS Cameron McKenna LLP



Victoria Peckett

Victoria Peckett has 18 years' experience advising clients on all aspects of construction. She advises a wide variety of employer clients and contractors on the drafting and negotiation of contracts for a broad range of projects both international and domestic. She has extensive experience of all the major forms of standard contract (e.g. FIDIC, NEC and JCT) and on preparing bespoke forms of contract when appropriate. She also has extensive experience of assisting clients with the resolution of disputes (both before and after the commencement of proceedings), including through adjudication, arbitration and mediation. She chairs the drafting committee for the JCT, is a member of the British Council of Offices Environmental Sustainability Working Group and of the City of London Law Society's Construction Law Committee, is on the Consultant Editorial Board for Lexis PSL Construction, and lectures as part of the King's College London MSc in Construction.

Victoria is regularly recommended in directories such as Chambers and Legal 500, with client comments such as: "she is fantastic at rendering legal concepts into business strategies" and "she is highly approachable and technically outstanding".

Most English lawyers learned 'at their mother's knee' that English law - in contrast to many other legal systems - has no overarching principle of good faith and that (generally) no duty to act in good faith will be implied into contracts.

More recently, however, there has been a spate of cases considering both the extent to which, and circumstances in which, good faith obligations might be implied into contracts, and also the issue of how express terms requiring good faith should be interpreted.

Is the traditional view of English lawyers under threat?

## Implied duties of good faith

In *SNCB Holding v UBS AG* the court was asked to consider the implication of a duty of good faith arising under complicated banking arrangements. Put simply, the agreement conferred a power on UBS to manage a certain part of the arrangements and it had sought to do so for its own financial benefit and against the interests of SNCB, but still in accordance with the parties' express contractual terms. SNCB argued that UBS was required, by an implied term, to exercise its discretion in good faith and in accordance with the aims of the parties' agreement.

The court first reiterated the traditional position under English law, that:

'Unlike some bodies of foreign law, commercial contracts are not subject to general duties of good faith and fair dealing and it is trite law that a party does not have to exercise his contractual rights, once properly ascertained, reasonably. If he has rights, the law will not concern itself with the motivation or rationale lying behind his exercise of them...'

The court accepted that this principle was subject to the usual rules regarding the implication of terms, such that a term, including one of good faith, could only be implied if it were necessary to make the contract work and not otherwise inconsistent with any express terms. No such implied terms were found to apply to UBS, and aside from a requirement to act honestly, UBS was entitled to act in its own interests to the exclusion of SNCB's.

So far, so good. All is as anticipated.

However, a different approach was taken by the judge in *Jacobs UK Ltd v Skidmore Owings & Merrill LLP* where a duty of good faith was found to satisfy the test for implication of terms. Jacobs had sued Skidmore for the recovery of

unpaid fees. The parties agreed to settle the proceedings for the payment of a certain amount together with a promise by Skidmore, over the next two years, to 'award Jacobs... one or more contracts for the provision of not less than 33500 hours of construction, design and engineering services'. In the absence of such additional work, Skidmore was to pay a further amount to Jacobs.

Skidmore argued that literal effect should not be given to the word 'award', in the sense of contracts actually entered into, as that would allow Jacobs to refuse to accept contracts which Skidmore offered it and thereby trigger the additional payment. Skidmore therefore argued for an obligation requiring it merely to offer contracts to Jacobs. The court disagreed, and found that word 'award' could be given literal effect, if supported by an implied term of good faith:

"I consider that there were general obligations of good faith on both sides in order to make this agreement work... [Skidmore] had to consider awarding contracts and Jacobs had to consider accepting such awards, both in good faith. Only when an agreement was reached in good faith could there be an award of a contract. Beyond that, on this interpretation, I can see no need for implied terms to achieve mutuality."

Does this decision run counter to the English lawyer's traditional position? Arguably not - or at least, if it does, only to a limited extent. Good faith was only implied because without it the parties' agreement as to the 'award' of contracts would have been unworkable. This very much accords with the traditional English law approach to implied duties of good faith, which views them as a measure of last resort.

A much more liberal approach, however, was suggested in February 2013 in *Yam Seng PTE Ltd v International Trade Corporation Ltd*:

"Under English law a duty of good faith is implied by law as an incident of certain categories of contract, for example contracts of employment and contracts between partners or others whose relationship is characterised as a fiduciary one. I doubt that English law has reached the stage, however, where it is ready to recognise a requirement of good faith as a duty implied by law, even as a default rule, into all commercial contracts. Nevertheless, there seems to me to be no difficulty, following the established methodology of English law for the implication of terms in fact, in implying such a duty in any

### Relevant survey statistics →

We found that the most common was a contract that includes an ethos of ‘mutual trust and co-operation’ (61%). Whether the inclusion of an ‘ethos’ in a contract is sufficient to maintain (or even enforce) collaboration through the life of a project is a different question.

ordinary commercial contract based on the presumed intention of the parties... I respectfully suggest that the traditional English hostility towards a doctrine of good faith in the performance of contracts, to the extent that it still persists, is misplaced.”

The judge’s point in *Yam Seng* appears to be that while English law does not imply a duty of good faith as a default rule in all contracts, the approach taken in each individual case should be more liberal and that such an implication should, generally speaking, be made ‘in any ordinary commercial contract’. Essentially, a default rule by the back door.

Would that open the floodgates to a torrent of cases seeking to rely on this back door to argue for good faith obligations in most cases?

Following the Court of Appeal’s decision in *Mid Essex Hospital Services NHS Trust v Compass Group UK and Ireland Ltd*, this is unlikely. Commenting generally, the court reminded itself that:

“...there is no general doctrine of ‘good faith’ in English contract law, although a duty of good faith is implied by law as an incident of certain categories of contract [i.e. such as in employment contracts and partnership deeds]... If the parties wish to impose such a duty they must do so expressly.”

*Mid Essex* concerned a long-term catering contract for a hospital. The contract provided for service failings to be recorded and for certain deductions to be made from payments due to the contractor based upon these failings. The contract gave the hospital discretion as to whether to make these deductions, i.e. they were not automatic. The hospital’s position was therefore similar to that of an employer under a construction contract enabling the deduction of liquidated damages for delay. The contractor contended that the hospital’s right to make these deductions was subject to an implied term that deductions would not be made in an arbitrary, capricious or irrational manner.

The Court of Appeal rejected the proposed implied term, finding that it was not necessary to make the contract workable. Once service failings had been duly recorded, the hospital was entitled to make the deductions provided for by the contract for whatever reasons it wished. The hospital’s discretion applied merely to the exercise of its own contractual rights and there was no need for any implied term in favour of the contractor.

Perhaps, after this recent flurry of activity, the English lawyer can settle back safe in the assumption that his original position – that there is no general doctrine of good faith – still holds good.

### Express duties of good faith

Increasingly, however, parties are including express obligations as to good faith (or similar) within their contracts. For example, the obligation on the parties within the NEC suite of contracts to act ‘in a spirit of mutual trust and co-operation’ is generally assumed to require the parties to act in good faith (although this has not yet been confirmed in case law). A body of law is beginning to emerge concerning how these obligations ought to be interpreted under English law. Key cases include:

- *Berkeley Community Villages Ltd v Pullen*: a clause requiring the parties to “act with the utmost good faith towards one another” in the context of a contract for land development was found to impose a duty requiring the observance of reasonable commercial standards of fair dealing, faithfulness to the agreed common purpose and consistency with the justified expectations of the other party.
- *Gold Group Properties Ltd v BDW Trading Ltd*: a clause requiring each party to “at all times act in good faith toward the other” in the context of a development agreement was found to impose a requirement that the parties act in a way that allowed both of them to enjoy the anticipated benefits of the contract but did not require either to give up a freely negotiated financial advantage clearly embedded in the contract.
- *CPC Group Ltd v Qatari Diar Real Estate Investment Company*: a clause requiring the parties to act “in the utmost good faith towards each other” in the context of a proposed development project was found to impose a requirement that the parties adhere to the spirit of their contract, which was held to include the seeking of planning consent for the maximum developable area in the shortest possible time, the observance of reasonable commercial standards of fair dealing, faithfulness to the common purpose and consistency with the other’s justified expectations.

The clause in *Mid Essex* required the parties to “co-operate with each other in good faith and... take all reasonable action as is necessary for the efficient transmission of information and

“There has been a spate of cases considering [how] good faith obligations might be implied into contracts... Is the traditional view of English lawyers under threat? ”

instructions and to enable the [hospital] to derive the full benefit of the Contract.” The question before the court was whether the clause should be interpreted broadly so that the requirement to co-operate in good faith applied to the whole of the contract, or narrowly, confining it only to the transmission of information and matters required for the hospital’s benefit.

The judge in the first instance gave the clause a broad interpretation, emphasising the long-term nature of the contract and the importance of co-operation between the parties. The Court of Appeal reversed this decision, however, finding that the judge had not given proper consideration to the other more detailed provisions of the contract. In the Court of Appeal’s opinion, express good faith provisions in large commercial contracts should be read subject to the more detailed provisions of the contract. Lord Justice Beatson noted that:

“The contract in the present case is a detailed one which makes specific provision for a number of particular eventualities... In a situation where a contract makes such specific provision, in my judgment care must be taken not to construe a general and potentially open-ended obligation such as an obligation to ‘co-operate’ or ‘to act in good faith’ as covering the same ground as other, more specific, provisions, lest it cut across those more specific provisions and any limitations in them.”

### Conclusion

For the time being, the Court of Appeal’s decision in *Mid Essex* would appear to have affirmed the traditional approach, restricting implied terms to those which are necessary to make a contract workable. Parties may however continue to try to ‘nibble away’ at the edges and argue that an implied term is appropriate in their case. We can also expect to see the series of cases concerning the interpretation of express good faith obligations continue as parties seek further clarification both as to the scope of such obligations and their precise effect on their particular circumstances. ●

# National construction contracts and law survey 2013

Adrian Malleson  
Head of Research,  
Analysis and Forecasting,  
NBS



## Introduction

Following the success of the 2012 Contracts and Legal issues survey, we ran our second survey in this area. We ran the survey from June to July 2013. It is important to us that this survey is independent of any particular group, so we are grateful for the support of the various institutes and organisations who promoted the survey to their members.

We are also grateful to the people who gave their time to complete the survey and share their professional expertise and knowledge with us. We are pleased to say that over a thousand people responded to the survey.

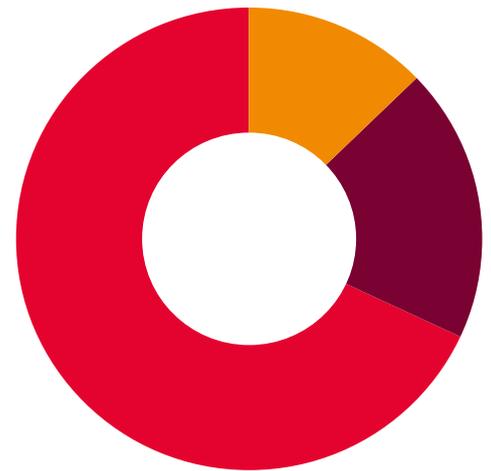
When we carried out the survey, we wanted to get, and then share, an understanding of:

- Current procurement methods
- Which contracts people use and how they use them
- The legal issues people face
- The nature and effects of disputes and how people seek resolution
- The adoption of collaborative working, what hinders and what helps, and where does Building Information Modelling (BIM) fit with it

“We are in interesting times. Led by the Government, BIM is becoming more widespread. There are early signs too that we are emerging from the worst post-war recession. Change is afoot.”

This is the first time we have been able to track changes in this area and those changes give us clues as to how the industry will develop over the coming years. We are in interesting times. Led by the Government, BIM is becoming more widespread. There are early signs too that we are emerging from the worst post-war recession. Change is afoot.

We hope you enjoy reading the findings from the survey and that this report adds something to our understanding of the legal and contractual issues the industry faces. Perhaps seeing each others' view here may help us work better together to deliver enhanced value to our clients, other project team members, and ourselves.



How would you best describe your role / the role of your organisation in the construction industry?

|            |     |
|------------|-----|
| Client     | 13% |
| Contractor | 19% |
| Consultant | 68% |

## Respondents

We structured the survey to allow the views of contractors, clients, and consultants (such as architects or surveyors) to emerge separately. Consultants made up the largest group, but contractors and clients also responded in sufficient numbers to make the findings indicative. This year we had slightly more clients responding, but the overall make-up of participants is very similar to last year, so we can make meaningful comparisons.

There were some respondents who did not fall into any of the three categories. These have been included in any overall analysis, but excluded, for simplicity, from analysis by respondent type.

Participants came from a range of company sizes, occupations, associations and institutes, as well as being from both the public and private sectors. A full range of professions took part, including Legal Professionals, Architects, Quantity Surveyors, Civil Engineers, Architectural Technologists, Building Surveyors, Chartered Surveyors, Landscape Architects and Facilities Managers.

### Procurement methods and tendering

The procurement method the client selects for a project can shape its contractual framework. Eighty-three per cent most frequently use either 'traditional' or 'design and build' procurement methods (55% and 28% respectively). So like last year, these two methods dominate the industry.

Other procurement methods (including management contracting, construction management, measured term, cost-plus, private finance initiative / public-private partnerships) were each used 'most frequently' by fewer than 5% of people. The most popular of the others is 'partnering / alliancing', with just over 4.5% using it most frequently.

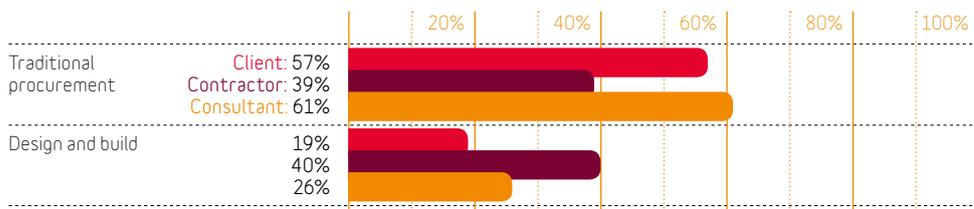
There was some difference between the groups though. Looking at just 'traditional' and 'design and build' we can see that contractors are very much more likely to use mostly 'design and build', whereas clients and consultants are more likely to use 'traditional' procurement.

When we look back at last year's results, we can see that there has been some change. 'Traditional' procurement has declined from 72% to 61% for consultants; for clients it's from 59% to 57%. On the other hand, we've seen an overall, but slight, rise in the number telling us that 'design and build' is most frequently used.

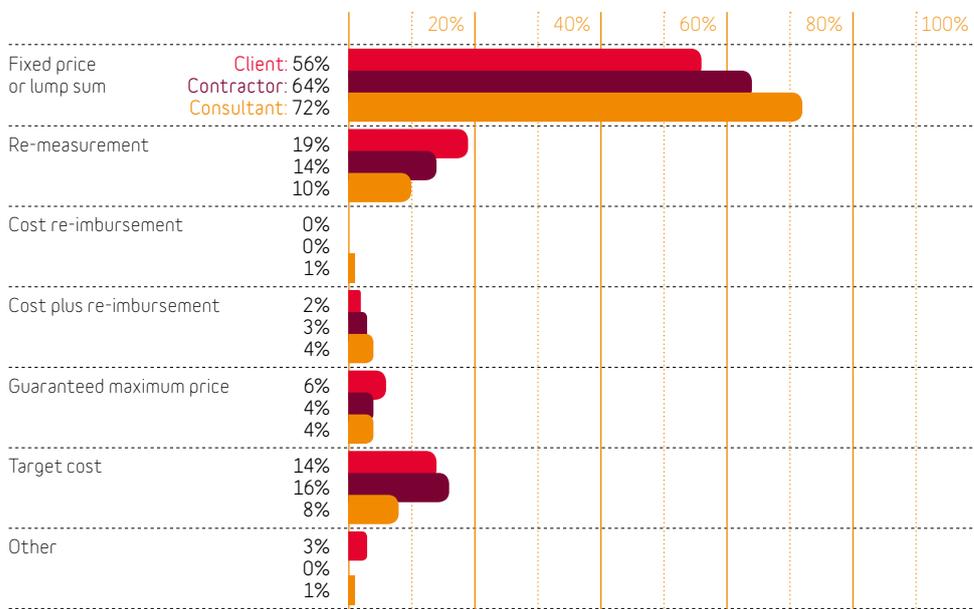
We also looked at the pricing mechanism that people employ during the procurement process. The 'fixed price or lump sum' mechanism remains the most widely used, with 'target cost' and 're-measurement' each being used 'most often' by over 10% of people overall. The use of the 'fixed price or lump sum' as well as 're-measurement' fits with the use of 'traditional' procurement methods.

“When we look back at last year's results, we can see that there has been some change. 'Traditional' procurement has declined... On the other hand, we've seen an overall, but slight, rise in the number telling us that 'design and build' is most frequently used.”

### Which procurement method was most frequently used in projects you were involved in?



### Which pricing mechanism was most often used for your contracts?

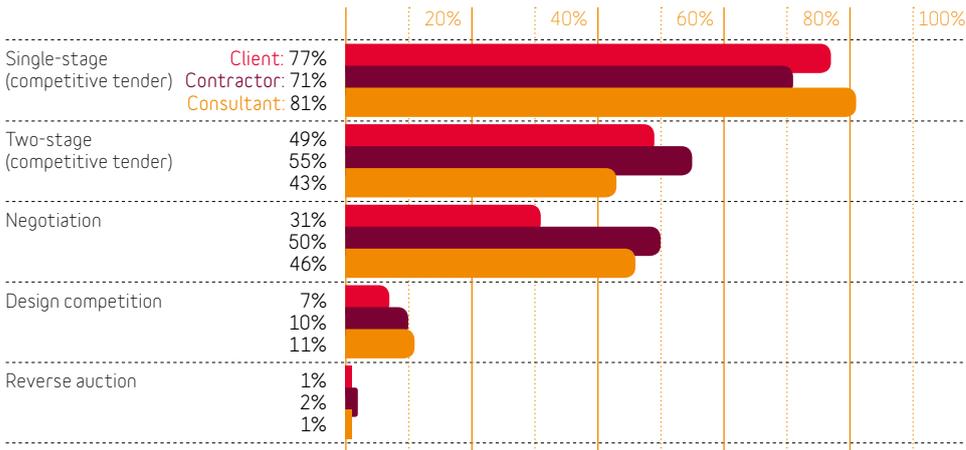


Moving on to the tendering process, over 70% tell us that they have been involved in a single-stage competitive tender. This fits with the on-going dominance of 'traditional' procurement. But other tendering processes are widely used; more than 42% have been involved in a two-stage competitive tender, and 41%, overall, in negotiation. Design competitions and reverse auctions are less prevalent though, with only 10% being involved in competitions and a mere 1% in reverse auctions.

There is some variance by clients, contractors and consultants. As we found last year, contractors are more likely to be involved in two-stage tendering and in negotiation. What's striking is the increase in the percentage of clients (from 39% to 49%) and consultants (from 31% to 43%) using a two-stage competitive tender process.

During the tendering process, we can see that electronic tendering is widespread, but not universal. Overall 14% of people use electronic tendering always (though this differs by respondent, as you can see overleaf). Most (58% overall) use a combination of electronic and paper, whilst a quarter do not use electronic tendering at all.

Which of these tendering methods were used during 2012?



“The construction industry is moving (and being moved) towards greater collaboration between all parties... This move is facilitated by the appropriate procurement and tendering methods and driven by BIM”

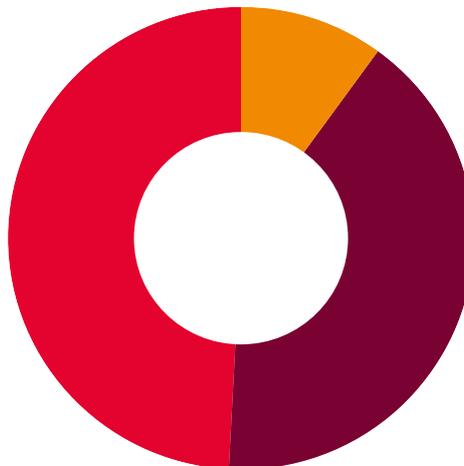
For the projects you were involved in, was electronic tendering used?



**Collaboration**

The construction industry is moving (and being moved) towards greater collaboration between all parties during the design, construction and handover phases of a project. This move is facilitated by the appropriate procurement and tendering methods and driven by BIM, the Government’s construction strategy and industry leaders.

We wanted to find out whether people in the industry were, in fact, using collaboration techniques. We found that nearly a half of respondents did not adopt any collaborative techniques in 2012, and only 10% did so for all projects.

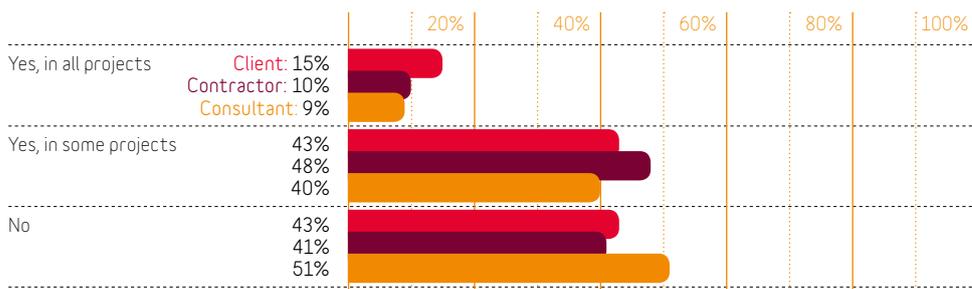


That said, both 58% of clients and contractors described themselves as adopting collaborative techniques for some or all of their projects. A majority of consultants told us they hadn’t used collaborative techniques for any project in 2012. We confirmed that collaborative techniques were more likely to be adopted on higher value projects.

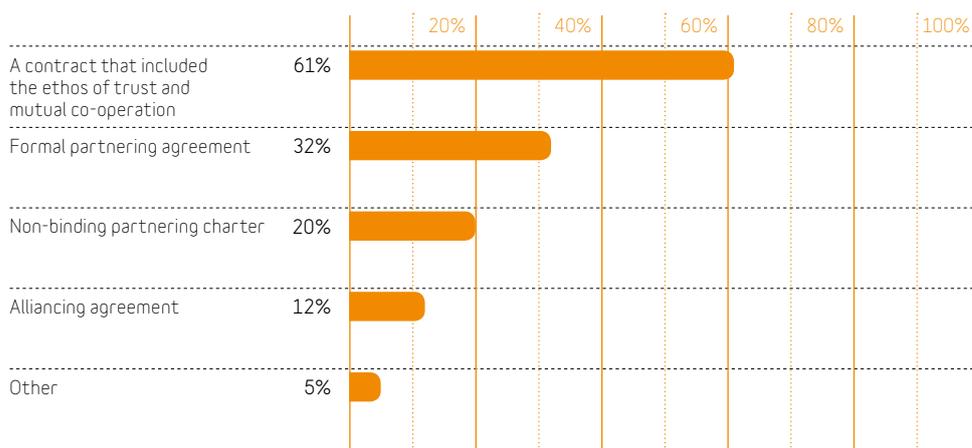
Did you adopt any collaboration techniques in projects that started in 2012?



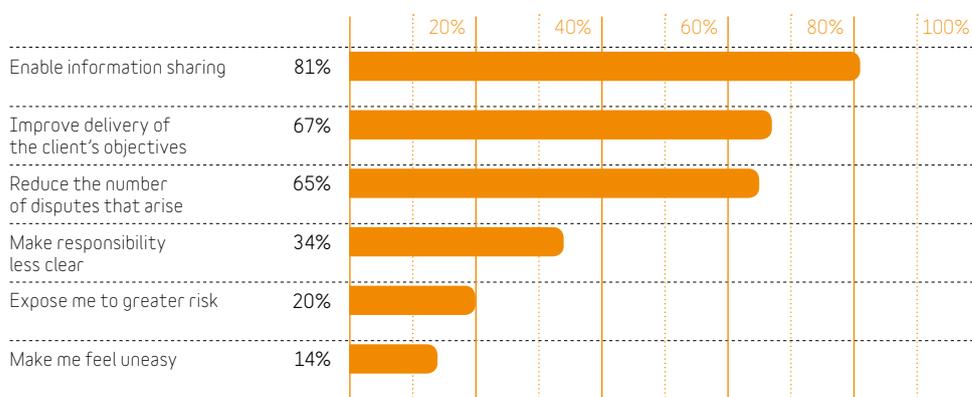
### Did you adopt any collaboration techniques in projects that started in 2012?



### What form did your collaboration take?



### Collaborative projects...



Of those who told us they had used collaboration, we explored what forms the collaboration took. We found that most common was a contract that included an ethos of 'mutual trust and co-operation' (61%). Whether the inclusion of an 'ethos' in a contract is sufficient to maintain (or even enforce) collaboration through the life of a project is a different question. A third had adopted a more structured approach, adopting a 'formal partnering agreement' (32%).

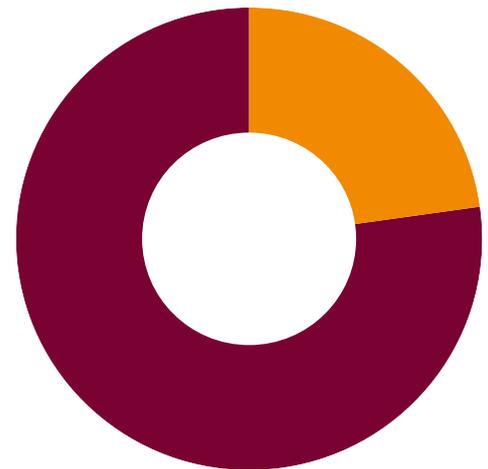
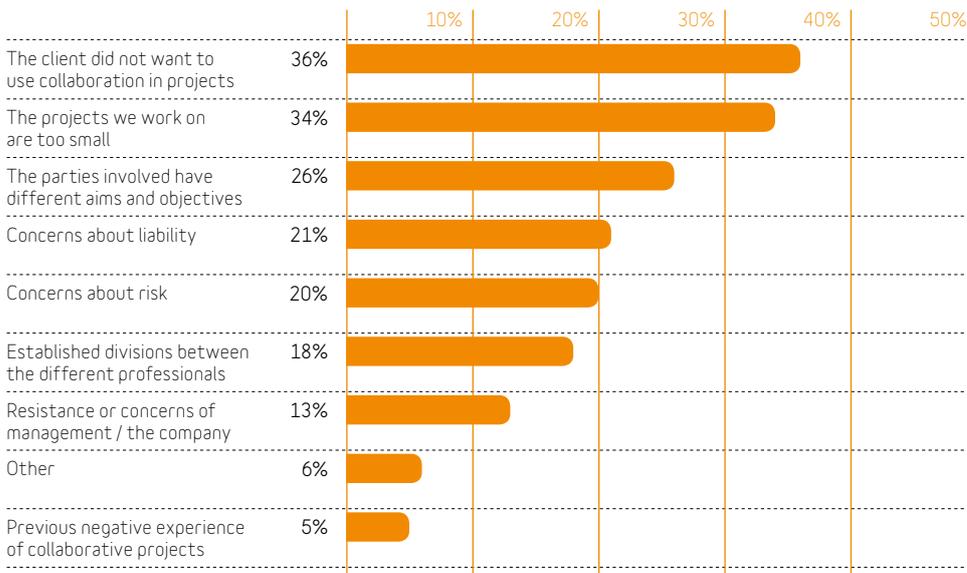
Given the on-going drive towards collaboration, what's standing in the way? For the first time we asked some general questions about peoples' attitudes to collaboration. We found that whilst collaborative projects are not yet the norm, people are broadly positive towards collaborating. Eighty-one per cent agree that collaborative projects enable information sharing. More interestingly, over two thirds agree that they improve the delivery of the client's objectives. A similar number feel they reduce the number of disputes that arise.

Aligned to this, it's only a minority who agree with more negative statements: only a third agree that collaboration makes responsibility less clear, a fifth that it exposes them to greater risk, and one in seven that collaborative projects 'make them feel uneasy'.

So there's no hostility to collaboration, yet only a minority routinely work on collaborative projects. Why is this? Well, the top two reasons people give are the size of the project and the client's wishes. It's striking that only 18% feel that established divisions between professions stand in the way of collaborative working. Construction professionals are willing to work together as projects require. Only 5% cite previous negative experience; the experience of collaborating in the past is, for almost all, no barrier to collaborating in the future.

*"Whether the inclusion of an 'ethos' in a contract is sufficient to maintain (or even enforce) collaboration through the life of a project is a different question. A third had adopted a more structured approach."*

What prevented you from becoming involved in, or using (more) collaboration in projects during 2012?



Do you reference BIM in your contracts?



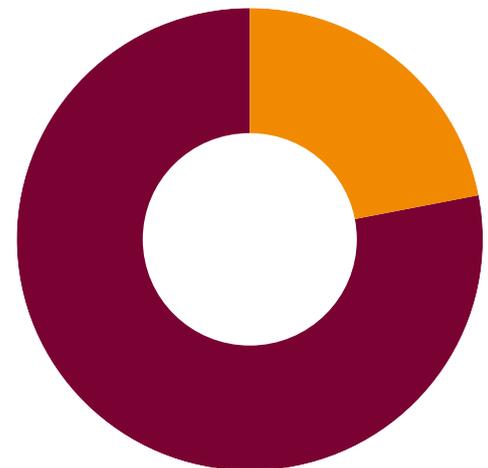
### Collaboration and BIM

The Government Construction Strategy includes the intention to require all central government projects to use collaborative 3D BIM by 2016. BIM is a tool for collaborative design, construction and operation of a building. So we wanted to explore the relationship between BIM and collaboration.

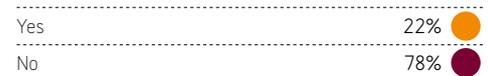
We found that almost half of people felt that collaboration was helped by the adoption of BIM (only 6% didn't), and 40% felt that when they use BIM, they need to do so within a collaborative project (suggesting that a significant number of people feel that if it's not collaborative, it's not BIM).

But it isn't the norm for BIM to be referenced in contracts, with fewer than a quarter agreeing that they reference BIM, or have adopted BIM, in their contracts.

“Forty per cent felt that when they use BIM, they need to do so within a collaborative project (suggesting that a significant number of people feel that if it's not collaborative, it's not BIM)”



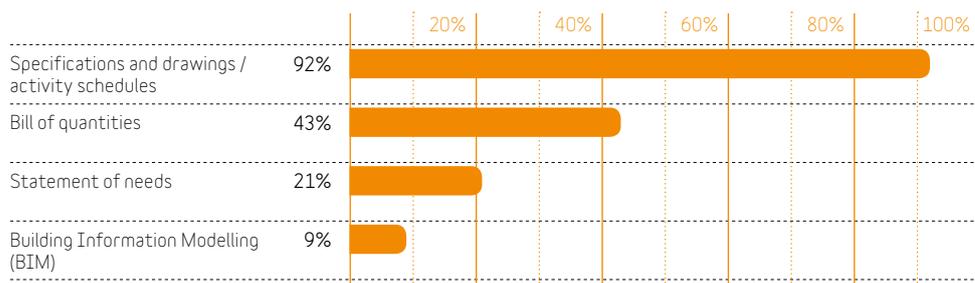
Have you adopted BIM in your contracts?



Collaborative projects...



What information do you normally provide / receive about the project?



BIM helps information sharing, but it isn't a necessity for it. Only 9% of people either provide or receive a BIM, but 92% gave or received specification / activity schedule information and 43% a bill of quantities.

#### Contracts and forms of appointment

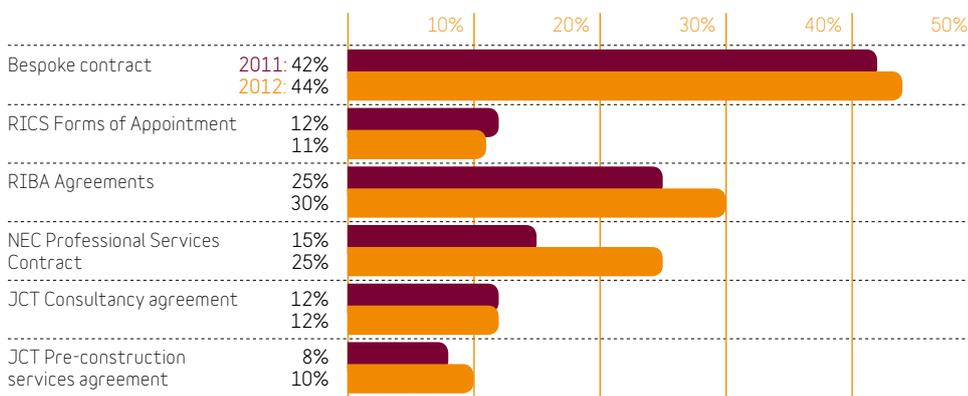
As we've run the survey twice now, we are able to look at changes to the forms of appointment and contracts people use.

The forms of appointment that people use has remained more or less static, though there have been some differences in the use of particular forms. People are using a wider range of forms than last year. Bespoke contracts remain the most popular (44% of people having used them in the last year). RIBA Agreements remain the most commonly selected standard form of appointment. Some standard forms of appointment have seen an increase in usage, with 10% more using the NEC Professional Services Contract and 5% more using the RIBA Agreements.

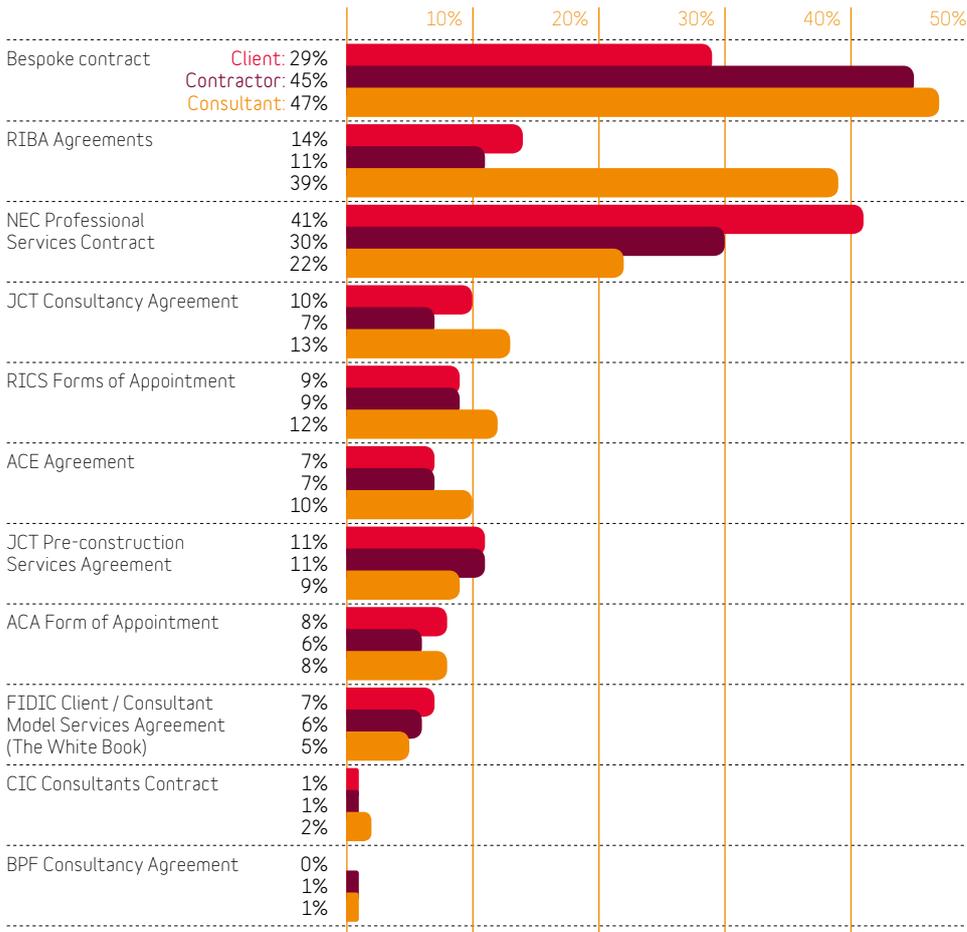
It's worth noting though that there are significant differences between clients, contractors and consultants. For example, 39% of consultants used RIBA Agreements. Clients are most likely to select the NEC Professional Services Contract, with 41% telling us they had done so, compared to just over 20% last year.

“As we've run the survey twice now, we are able to look at changes to the forms of appointment and contracts people use... there are significant differences between clients, contractors and consultants.”

Which forms of professional appointment were used in your projects?



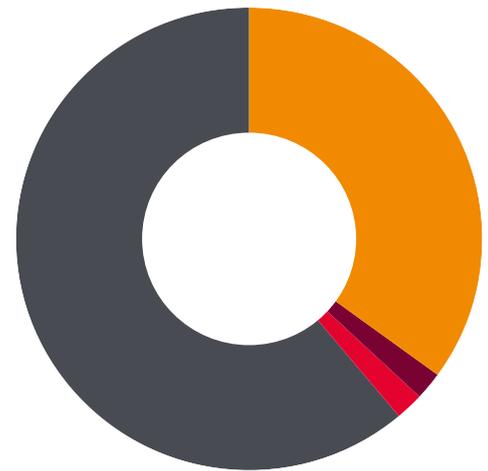
Which form of professional appointment were used in your projects?



Last year we found that fewer than two thirds of people signed the construction contract before work had started. What's more, 4% either never signed a contract or did so only after completion. We suggested that this lateness of signing might be a cause for concern, and were keen to see if practice has changed at all in 2012.

Well, as it turns out, things are getting a little better with more people telling us that they typically sign contracts before construction commences. There are still 3% leaving it to post completion, or not signing at all though.

“Last year we found that fewer than two thirds of people signed the construction contract before work had started. What's more, 4% either never signed a contract or did so only after completion. We suggested that this lateness of signing might be a cause for concern, and were keen to see if practice has changed at all in 2012.”



What is the most typical stage at which most of your contracts are signed? 2011



2012

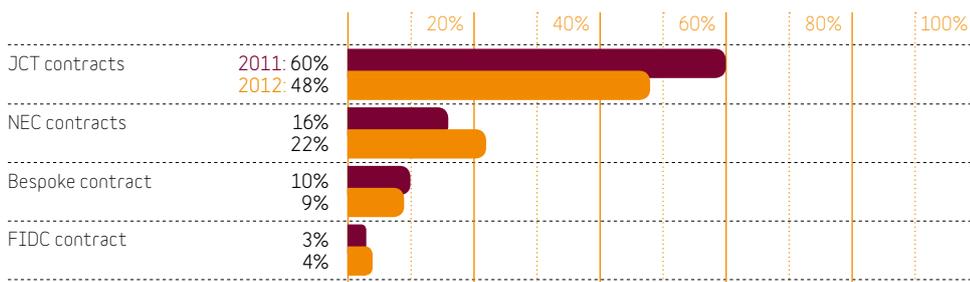


Turning to the choice of contract, the JCT suite of contracts keep their position as the most commonly used, followed by NEC contracts. Sixty per cent of people had used JCT contracts at some point ('used at all') in 2012 and nearly a half, 48%, described JCT contracts as the suite they most frequently used.

Since last year there have, though, been some changes in the contracts used, with an increase in the use of NEC contracts.

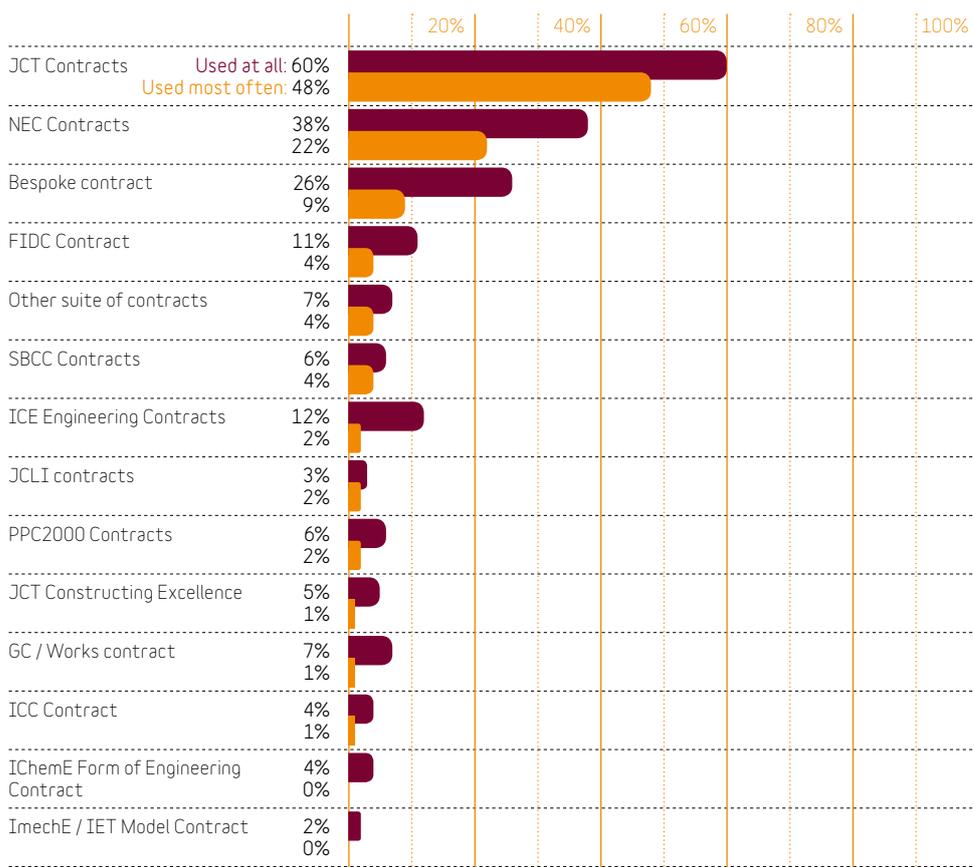
Last year we spoke about collaborative standard form contracts and how the Latham Report suggested they, unlike bespoke contracts, would help to resolve 'adversarial problems' in the industry. The survey shows us that the use of bespoke contracts remains very consistent. Last year 29% of people had used a bespoke contract in the previous year, this time its 26%. Last year 10% told us it was their most commonly used form of contract, this year it's 9%. Bespoke contracts remain the third most prevalent choice of contract.

Which suite of contracts have you / your organisation used most often?



“Last year we spoke about collaborative standard form contracts and how the Latham Report suggested they would help to resolve ‘adversarial problems’ in the industry. The survey shows us that the use of bespoke contracts remains very consistent..”

Contracts used: at all / most often



The reasons people give for their choice of contract vary, but tend to be about clarity, familiarity, and it being appropriate to project:

“It suits the scale of projects I work on and I am familiar with it.”

Many mentioned that the client will stipulate the choice of contract:

“They were not our preference. They were the Client's preference.”

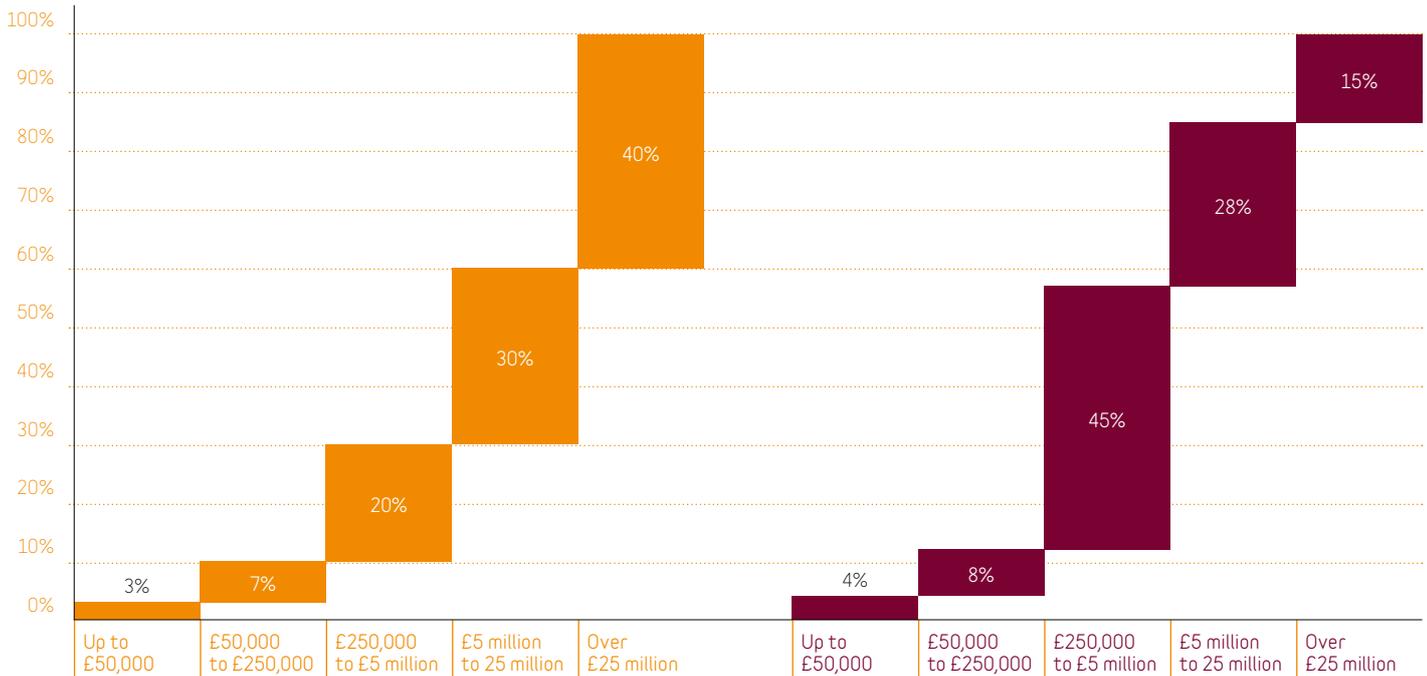
Several people had kind words for the contract they most often used. People see JCT contracts as familiar, dependable and understood throughout the industry:

“JCT contracts have been well evolved over many years.”

Users of NEC contracts often described them as better for collaboration and effective project management, and often required by public sector clients.

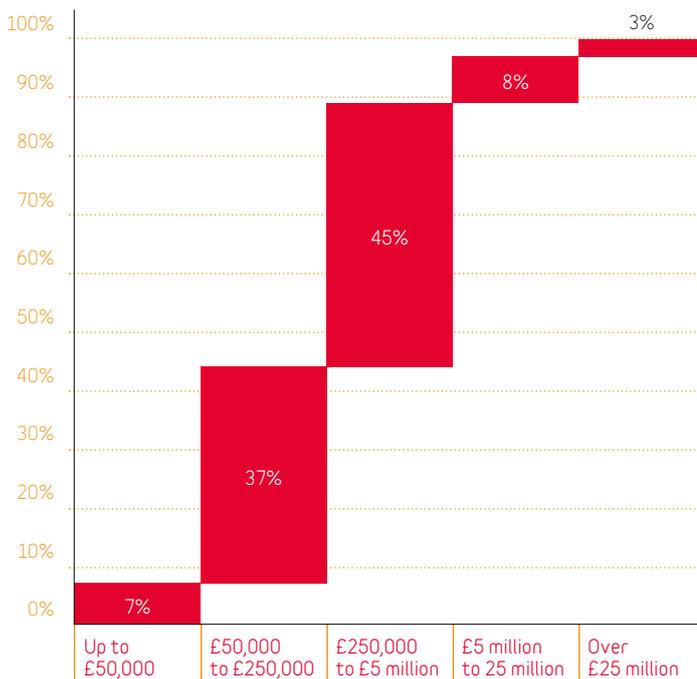
“NEC is clearer and more flexible than all others and more directly facilitates collaboration and project management.”

What is the average value of the projects that you use that type of contract for?



FIDIC contracts

NEC contracts

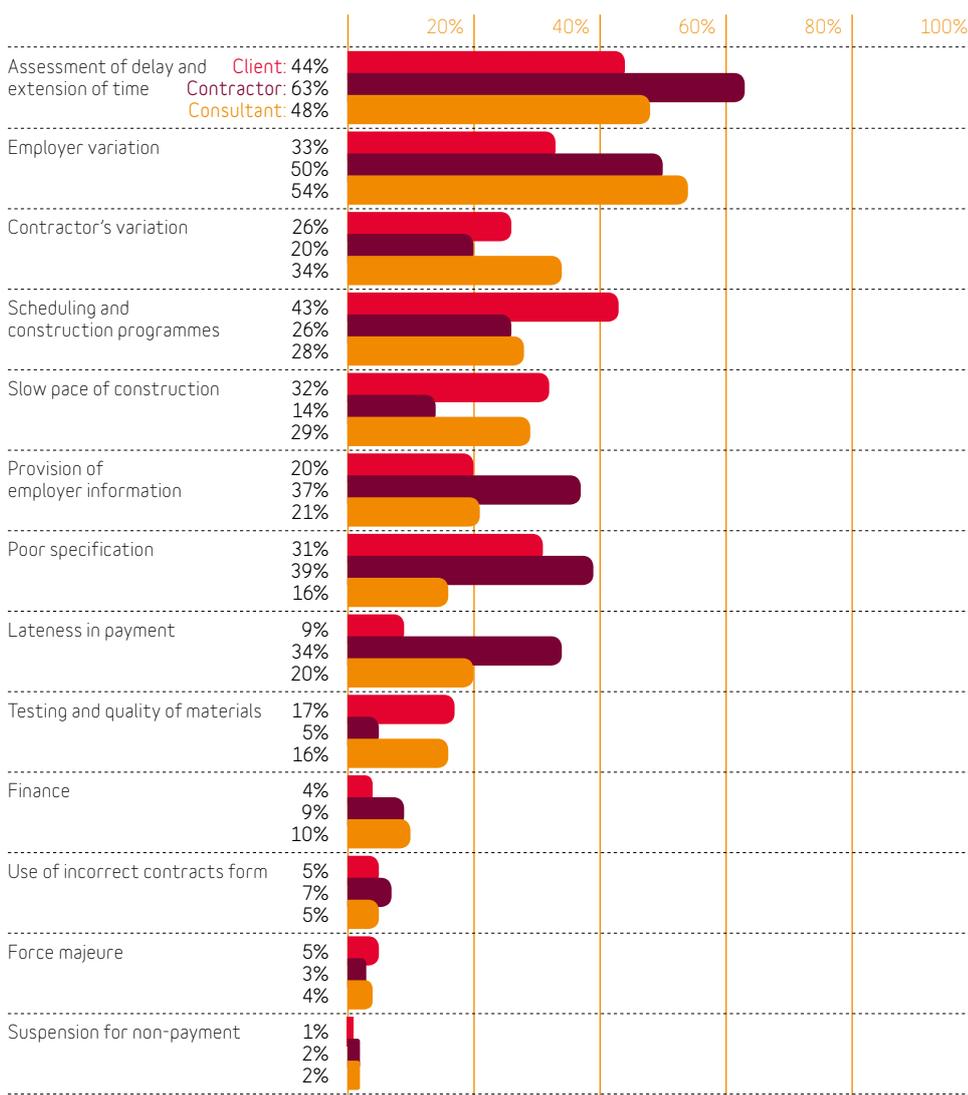


JCT contracts

“We wanted to expand our understanding beyond simply the kind of contracts and forms of appointment people are using, to a more general understanding of the legal issues people face. Legal issues are not just contractual.”

When we look at contract type and value, we see a relationship. Very broadly, JCT contracts are selected for smaller projects, NEC for medium to large projects and FIDIC, for very large projects. Project value is less than £250,000 for 44% of the projects using JCT. For NEC it's only 12%. When we look at FIDIC contracts, over 70% of their use is in projects with a value of over £5 million.

During the construction phase of the project, which of the following matters did you find to be the most difficult or recurrent in 2012?



### Legal issues

When we ran the survey, we wanted to expand our understanding beyond simply the kind of contracts and forms of appointment people are using, to a more general understanding of the legal issues people face. Legal issues are not just contractual.

The issues people found 'challenging' include: 'dispute resolution process' (23%), 'rules governing insurance and liability for risks' (22%), 'regulatory compliance' (18%), and 'rules governing procurement' (18%).

We also asked about the 'most difficult or recurrent issues' and you can see the results for that above. The top three are the same as last year. They are: 'assessment of delay and extension of time' (51%), 'employer variation' (50%), and 'contractor's variation' (30%).

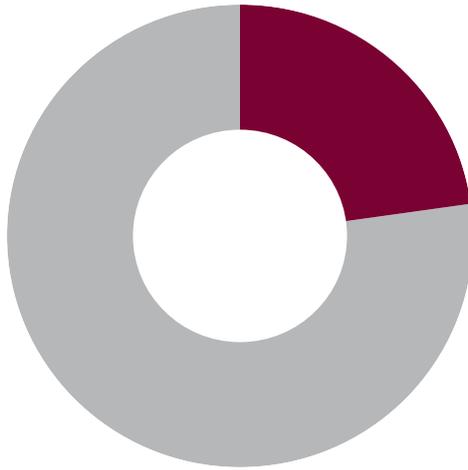
**"People are less likely to identify an issue as difficult or recurrent when they have primary responsibility for it."**

As we might expect though, the assessment of what is 'most difficult or recurrent' varies significantly by client, contractor or consultant. People are less likely to identify an issue as difficult or recurrent when they have primary responsibility for it. Clients are least likely to mention employer variation or lateness of payment, consultants are the least likely to mention specification, and contractors the least likely to mention contractor's variation or testing and quality of materials.



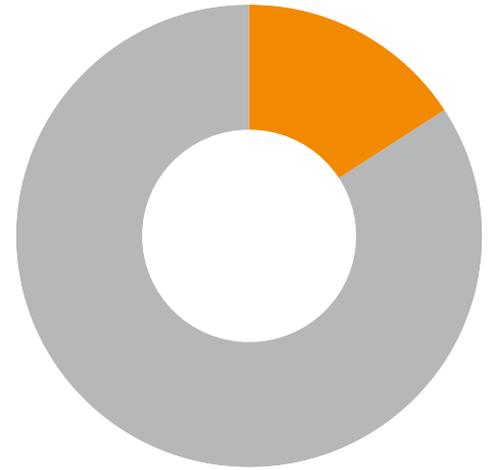
Did any of your UK-managed contracts involve international projects (projects outside the UK) in 2012?  
Client

|     |     |
|-----|-----|
| Yes | 8%  |
| No  | 92% |



Contractor

|     |     |
|-----|-----|
| Yes | 23% |
| No  | 77% |



Consultant

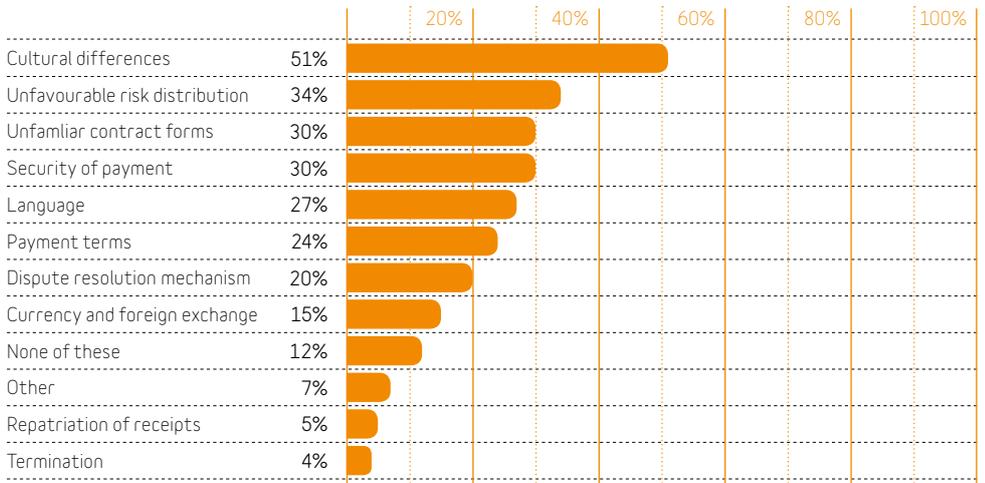
|     |     |
|-----|-----|
| Yes | 16% |
| No  | 84% |

### International projects

Given the importance of international work to the UK construction industry, and our status as a world leader in building design, we wanted to look at the particular issues this brings. We found that, overall, 17% were involved in at least one international project that had UK managed contracts. Nearly a quarter of contractors were involved in a UK contractually managed international project.

Involvement in this type of work brought its own issues though; top of the list came cultural differences. Risk distribution, unfamiliar contract forms, security of payment and language were challenging issues for at least a quarter of those involved in international contracts.

What did you find to be the most challenging legal issues in completing these international contracts?



“Given the importance of international work to the UK construction industry, and our status as a world leader in building design, we wanted to look at the particular issues this brings.”

Would you say that disputes in the sector have...



### Disputes

People are much more likely to say that the number of disputes is increasing than decreasing. Compared to 2011, more people (nearly a half now) say the number of disputes have increased.

Since the current recession started in 2007, it's the construction sector that has been the worst hit. It's from within this context of economic contraction that people understand the number of disputes:

**"The economic climate forces the parties to be more adversarial and therefore the likelihood of disputes increase."**

We can see that adversarial spirit in many of the explanations people gave for their feeling for the number of disputes being on the rise. Many are short of money and finding it difficult to carry out profitable work. The tendency is to look at others in the construction team and attribute the rise in disputes to them; clients, consultants and contractors are each likely to see the other parties as the primary cause of disputes.

The economic conditions have led to very tight margins for the contractors, fees being withheld for consultants, and clients being forced to choose the cheapest tender (even where it doesn't offer best value).

Unprofitable bids are made with the intention to derive profit through disputes around cost:

**"Below cost tendering to win a contract at any price by contractor, leading to claw backs in variation claims as a result of a forensic legal analysis of the specification for errors, clarifications and omissions."**

Consultants describe the difficulty they have maintaining, or even receiving fee income:

**"Over the past few years the number of non-paying clients, and clients going bankrupt, has dramatically increased"**

Contractors also see non-payment as an issue:

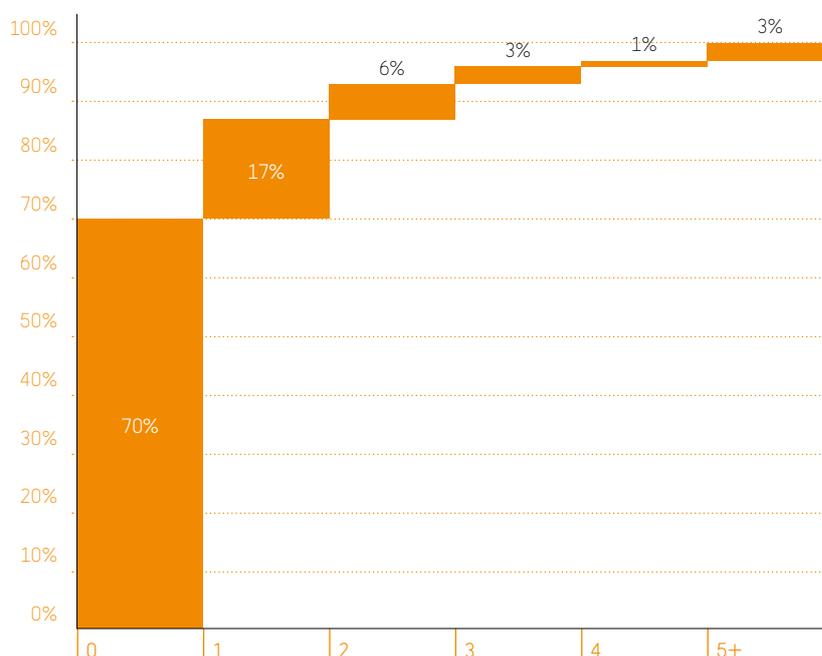
**"Disputes start because of non-payment by employers [so] contractors have cut back their staff and workmanship has suffered."**

Whilst almost half tell us the number of disputes in the industry is increasing, 70% had none in 2012. But we can describe it the other way; almost 30% of people had at least one contract going into dispute in 2012, a rise of around 5% from 2011. Seven per cent have been involved in three or more disputes.

Disputes most commonly arose between the client and main contractor. Eighty-one per cent of those who had at least one dispute in 2012 were involved in this kind of dispute. The next two most frequent parties to a dispute were between the main contractor and domestic subcontractor (24%) and then the client and consultant (19%).

There was a wide range of reasons for these disputes arising, but most common is extension of time, followed by valuation of final account and then valuation of variations.

Thinking about the contracts you were involved in, approximately how many of these went into dispute in 2012?

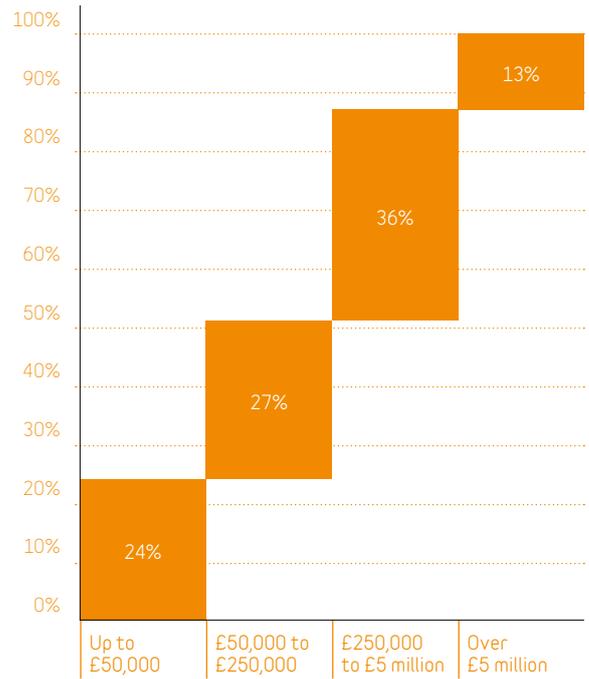


In the survey, we asked a series of questions to understand the value and effects of disputes. It's clear that many disputes involve large sums of money and have a significant effect on the construction process. Half of the disputes people told us about had a value greater than a quarter of a million pounds, whilst 13% had a value greater than £5 million. Seventy per cent of disputes occurred during the construction process, the remainder happening after practical completion. Seventeen per cent of disputes resulted in work being stopped or suspended. Forty five per cent of those who entered into dispute in 2012 had at least one on-going at the time they completed the survey (June and July 2013).

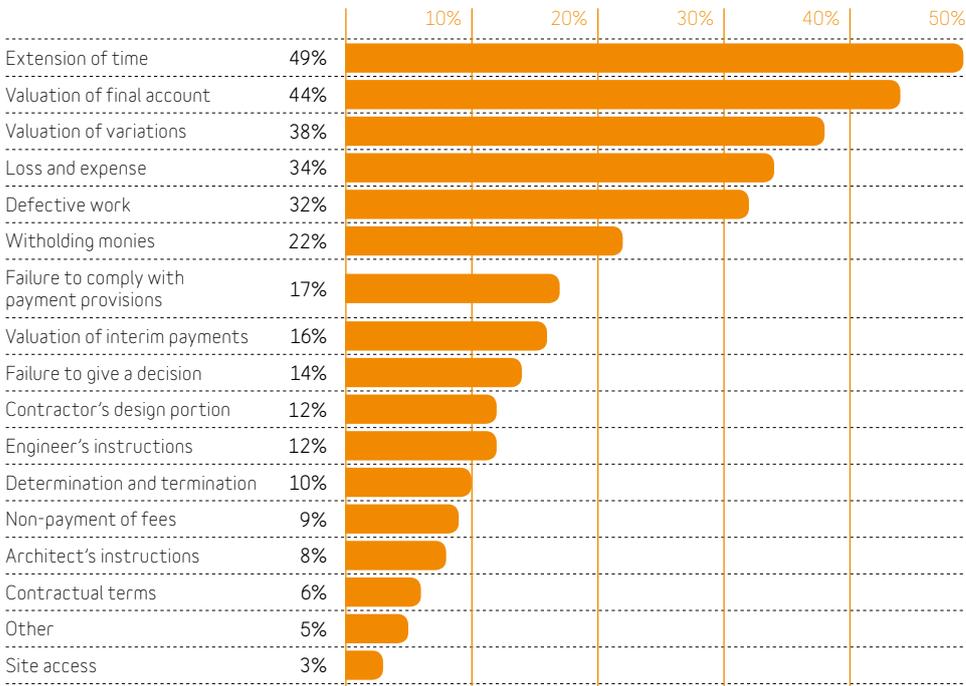
Disputes: expensive, disruptive and long lasting.

“It's clear that many disputes involve large sums of money and have a significant effect on the construction process... Disputes: expensive, disruptive and long lasting.”

Approximate value of disputes that started in 2012



What were the main issues in dispute during 2012?



“Our second survey has begun to show some trends... The comments people made when completing the survey underline just how tough and competitive the construction industry now is. ”

### Dispute resolution

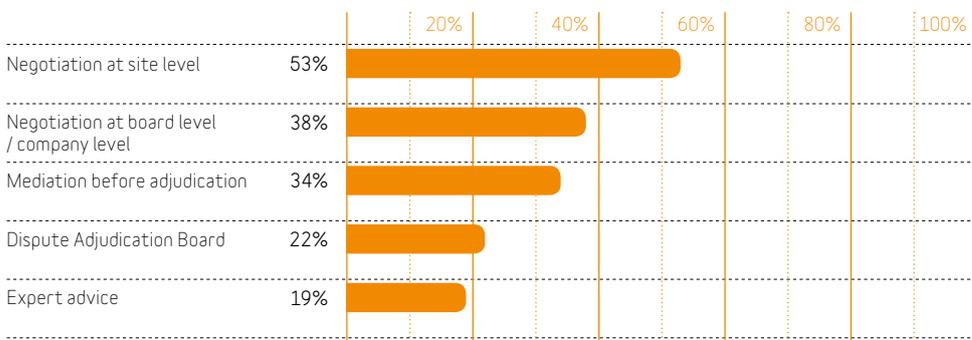
Disputes will occur, so contracts frequently include dispute avoidance procedures. We asked which procedures were included and found that the majority included negotiation at site level. But contracts are not restricted to one procedure, and we saw a range, shown below.

When a dispute hasn't been avoided, there are three main processes for appointing the adjudicator. They are:

- Nominated body (37%)
- By agreement of the parties (35%)
- Named in the contract (26%).

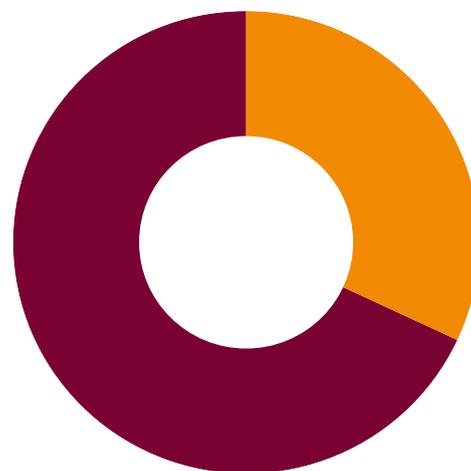
Only 1% do anything other than one of these three.

### Dispute avoidance procedures included in contracts



“Disputes will occur, so contracts frequently include dispute avoidance procedures. We asked which procedures were included... and we saw a range”

When the dispute resolution procedures fail, the final tribunal of choice is the court for a third, and two thirds use arbitration. This is a very slight decrease in arbitration when we compare to last year, but the change is too small to draw any firm conclusions.



What was the final tribunal of choice in most cases?



### Closing remarks

Our second survey has begun to show some trends. The drive towards collaboration continues, though perhaps more in spirit than on the ground. We have seen that people are positive towards the idea of collaboration but often collaborative contracts just can't be used, perhaps because the client doesn't want them, perhaps because the project itself is too small to warrant a collaborative approach. But overall, the use of collaborative techniques has increased (if only slightly) since last year.

The comments people made when completing the survey underline just how tough and competitive the construction industry now is. It's often seen that this environment is inimical to collaboration, setting members of the

construction team against one another in a struggle for solvency. There are other voices though: those suggesting that it is only through collaborative working and risk sharing that efficiency can come and profitability return.

“The only way it works is if all parties see the benefits of collaboration and there is a spirit of mutual trust between them.”

The Government's strategy is for BIM to be adopted as a tool for managing a project's life-cycle. It might not be contract choice, or procurement method, that brings collaboration, but BIM. And we are seeing the first signs of BIM embedded in the contracts we use.

There are real signs that the construction industry is returning to growth. In future years we'll see whether this growth, twinned with the rise of BIM, translates to increased collaboration and fewer disputes. It is often coming out of recession when innovation most occurs. There is real opportunity.

When growth has returned, let's see whether we're still in an industry of bespoke contracts, frequent disputes, and collaborative techniques eschewed by many. ●

# The CIOB Complex Projects Contract 2013

Keith Pickavance  
Executive Consultant,  
Hill International



Keith Pickavance

Keith Pickavance is a chartered architect with a legal education. He is an Executive Consultant at Hill International and a Past President of the Chartered Institute of Building. He is a co-author of the Complex Projects Contract 2013 and has led the CIOB's time management initiative since 2007. He is also the author of *Delay and Disruption in Construction Contracts* (4th ed., 2010, Sweet and Maxwell), contributing editor of *Guide to Good Practice in the Management of Time in Complex Projects* (2010, Wiley-Blackwell) and *Construction Law and Management* (2007, Informa Professional) and has made numerous other contributions to legal and technical journals.

## Introduction

The CIOB's Complex Projects Contract 2013 (CPC2013) permits employers to manage their own risks in projects which, by their nature, are sufficiently complicated that they cannot be managed effectively by intuition alone. It is intended for use by Government Agencies and companies in a variety of procurement methods (including build only, design and build and turnkey), and envisages the use of bespoke Special Conditions for each job. We explore some of the distinguishing features of CPC2013 here.

## Communications

CPC2013 requires most communications to be digital, although in some cases communication by the traditional methods is permitted (by mail, or by hand). Security of electronic exchange is managed by a Data Security Manager. Management data is 'published'. This requires the Contractor to transfer the information digitally in native file format not only to the Employer and Contract Administrator but also to the Listed Persons, using an electronic data transfer process. The exchange is achieved by a File Transfer Protocol (which governs how electronic files are uploaded and downloaded) through a Common Data Environment (which permits users to access electronic data held remotely on a server), or by email. The benefit of publication is its transparency: the published data can be easily interrogated, sorted, filtered, checked and compared with other data by the recipients, who can decide for themselves which reports they need to see.

## Listed Persons

CPC2013 takes the approach that all those who have a continuing design, administrative, or supervisory role need to have access to the same information. This is achieved by defining those persons as Listed Persons. The listed persons will usually include the design team, Project Time Manager, Valuer, and those concerned with quality control, commissioning, project management and data security.

## Contractor Design and BIM

CPC2013 provides for Contractor Design of parts (to be defined in the Special Conditions) or the whole of the Works, and provides for design using either Drawings and Specification and/ or a Bill of Quantities, or by use of Building Information Modelling to Level 2 compatible with the recommendations of the UK Government BIM Task Force. CPC2013 is the first standard form of contract to embody the terms necessary for the proper control of design development using BIM.

## Information flow

CPC2013 takes a much more transparent and proactive approach to requests for (and the supply of) information, documents, etc. than other standard form contracts. It deals with the matter in four ways:

- It defines what the Contractor may request.
- It states that anything the Employer is to provide under the Contract is to be indicated on a critical path network, either by reference to the calendar date specified or to the logical date according to the specific sequence in which the activity falls.
- Anything that cannot be programmed in advance must be requested at least ten Business Days before it is required.
- Irrespective of when a request is made, the Contractor may only receive relief or compensation where the operative cause of any delay is the Contract Administrator failing to respond (at the latest) by the date on which the item is actually needed.

## Time Risk Management

Most contracts contain little or no means of managing time other than intuition. Underpinning CPC2013's more practical and effective approach to time management is the requirement of a dynamic, critical path network time model (or 'Working Schedule', as it is called). This is published together with a Planning Method Statement which sets out the rationale underpinning the Working Schedule, the assumptions on which it is based and the calculations used in its preparation.

Rarely do Contractors voluntarily embody the effects of their short-term planning in their master programmes, and the consequences of this failure are evident in virtually every dispute over delays. CPC2013 addresses this by requiring the Working Schedule to be in three densities. Low density is for work not expected to be

"The CIOB's Complex Projects Contract 2013 (CPC2013) permits employers to manage their own risks in projects which, by their nature, are sufficiently complicated that they cannot be managed effectively by intuition alone."

### Relevant survey statistics →

The reasons people give for their choice of contract vary, but tend to be about clarity, familiarity, and it being appropriate to project.

carried out for nine months or more after the data date. In many cases, the long-term work will not have been fully designed and subcontractors not engaged, and accordingly long-term planning must usually be estimated, often on the basis of experience. Medium density is for work intended to be carried out between four and nine months in the future. In this period the work will usually be designed in detail, and subcontractors may be engaged but the resources they intend to make available may not be committed. High density is for work planned to be executed in the next three months. At this density of planning, the design detail must have been completed, the resources made available and the expected productivity must be known, and therefore the duration of the planned activities in this period can be calculated instead of estimated.

Any critical path network that is wrapped up in date or float constraints, negative lag, open ends and other logic-destroying techniques cannot be used for time management, and unless the standard to which it is to be prepared is specified, compliance with the contract cannot effectively be controlled. Accordingly, a default specification for the design, production and maintenance of the Working Schedule is included in the Contract Appendices, and the Working Schedule must also conform to the standards in the CIOB's Guide to Good Practice in the Management of Time in Complex Projects ('the Guide'). On submission, it needs to be checked for compliance by the Project Time Manager and also independently audited from time to time. Within ten Business Days of submittal, it is deemed accepted unless it is rejected or conditionally accepted during that period.

To summarise, CPC2013 has approached the problem of encouraging compliance with the contract provisions for programming by providing a detailed default specification of performance and quality, compliance with which can be independently ascertained. If used correctly in accordance with the Contract, it provides the Contractor with a management tool of unrivalled quality that will reduce their own risk and improve their cash-flow. In the event of non-compliance, the Employer has an alternative means of controlling their risk, and various unwelcome consequences are likely to follow for the Contractor.

### Progress Records

Amazingly, no other standard form currently available requires the Contractor to keep anything except records in support of a claim

(if requested), and some do not even require that. On this point, CPC2013 is prescriptive: Progress Records must be prepared in a database conforming to the detailed specification (a default for which is provided in the Contract Appendices) and the recommendations of the Guide. The database will be regularly published for acceptance. The Progress Records also need to be checked by the Project Time Manager for compliance, and independently audited from time to time.

### Progress update and revision

Apart from not requiring any progress records to be kept, most other standard forms of contract assume the programme will be nothing more than a target against which progress (or lack of it) can be monitored and do not require the programme to be revised or updated to reflect the progress actually achieved. Uniquely, CPC2013 requires the Working Schedule to be regularly updated from the Progress Records and regularly revised and republished with each publication made independently from any impacted schedule; this calculates the effect of progress made in relation to that planned. It also facilitates an auditable trail of cause and effect for the purposes of risk management.

### Cost Risk Management

CPC2013 differs from all other currently available standard forms by using the Working Schedule for the project not only for time management but also as a tool to manage costs. Under CPC2013, the Contractor is required to price the Working Schedule so that the values indicated in the Contractor's Pricing Document (and those of any appointed subcontractors) are fairly represented on an activity-by-activity basis in the Working Schedule. Time-related costs such as Preliminaries and Overheads and Profit also have to be priced in levels of effort and logically linked to the activities to which they relate so that the Working Schedule can calculate the financial effect of changes in the duration of the Works (or parts of them).

### Predicted out-turn cost

All currently available standard forms leave the management of out-turn cost out of the construction contract, as a matter solely for the Employer and their advisors. In contrast, under CPC2013, when the work is actually carried out, the priced programme is updated with progress data gleaned from quality-controlled progress records (including the effects of change). The benefit of this is that

at every update the schedule automatically calculates the construction end date and the predicted out-turn cost of the Works. The predicted out-turn cost is calculated as the total cost indicated against all the activities and levels of effort in the latest accepted Working Schedule, adjusted to take account of anything which the Employer is not required to pay for in the Working Schedule.

### Interim valuation

Under other standard forms, valuation has little to do with progress achieved or the cost of intervening events and nothing at all to do with the programme, which is generally only intended as a time target. Valuation is then managed either by the Contractor presenting their own demand for payment for someone else to check, or an independent valuation is made by the Employer's cost advisor, which the Contractor has limited power to dispute. The primary basis of interim valuation under CPC2013 is the Contractor's updated Working Schedule, indicating, from one update to the other, the quantity and value of work done in the interim period, including the value of variations and the cost of any suspensions of work, as identified in the progress records. This value is set out in the Valuer's statement of Current Value at the intervals indicated in the Appendix.

The current value, at any time, is calculated as the current Predicted Cost of the whole of the Works minus the work not yet done, work done badly, or work and materials which the Employer is not otherwise liable to pay for at that time.

### Employer's risks

CPC2013 adopts a clearer, more easily understood and flexible approach to the definition of the Employer's risks than is available under other standard forms. The Appendix contains a table in three parts defining the identified risks and, in relation to each, whether the risk relates to time, cost or both.

The first 15 Events are identified as being under the Employer's control and are the Employer's risk relating to both time and cost. The second part contains descriptions of seven occurrences which are not normally within either party's control, the time and/ or cost risks of which can be allocated to either party. The third part provides space for a further 11 project-specific risks to be described by the user, the time and/ or cost risks of which can also be allocated to either party according to the commercial risk the

Employer and Contractor are prepared to take. Bad weather, for example, referred to in the contract as weather in excess of the 'Predicted Climatic Conditions', can be commercially varied by defining, for the particular project, which climatic conditions are predicted and whether particular conditions in excess of those specified are an Employer's time risk, cost risk or both.

#### Float and time contingencies

Most other standard forms of contract do not refer to either float or time contingencies. Uniquely, CPC2013 distinguishes between free float and total float (which are defined and which neither party owns) and requires both parties to allow specific time contingencies in the Working Schedule for their own risks. If, by improving progress, either party is able to reduce the time needed for future work, instead of leaving that additional time as float, they may (if they wish) keep that additional time as their own time contingency, to be used in managing their own future risks.

There is no provision in CPC2013 by which the Employer can refuse to accept the completed Works merely because they are completed earlier than the Substantial Completion Date. Thus, if either party does not use the time contingencies that fall on the critical path then, all other things being equal, there will be a reduction in the duration of the Works, an earlier Substantial Completion Date and therefore reduced cost.

To summarise, where the occurrence of a risk would otherwise delay the achievement of a completion date for the extent of the Employer's time contingencies, they avoid the obligation to award an extension of time, and/ or to pay prolongation costs. Where the ultimate aggregate duration of delay to a completion date is greater than the aggregate Employer's time contingency period included on the critical path to the completion date then the Contractor becomes entitled to an extension of time, and where the delay is caused by an Employer's cost risk, payment of disruption and/or prolongation costs.

#### Early Warning

Most other standard forms of contract make no provision for adequate management of risks which have not yet matured and which may be the subject of an early warning. CPC2013 requires that the parties, Listed Persons and the Contract Administrator are all responsible for issuing early warnings of risks that may

occur in the future. Uniquely, under CPC2013, once a risk has been identified, the Contractor has to produce a risk description, an impacted programme and attend a risk management meeting so that the risk, the party responsible and the predicted consequences are properly identified and dealt with transparently and collaboratively before the risk occurs and disrupts the project.

#### Recovery and Acceleration

Generally, standard forms of contract require the Contractor to mitigate their own delays, but if they don't, they provide nothing by way of sanction other than liquidated damages for delayed completion. Where acceleration is concerned, most contracts that provide for it do so by making it the subject of a collateral contract, without any consequences for failure.

In contrast, in addition to contingency management, CPC2013 provides a number of other powers to overcome or avoid the consequences of a risk event. If the Contractor fails to competently manage their own risks, or if, notwithstanding the absorption of the contingencies, an Employer's risk is still predicted to be likely to cause a delay to completion, the Project Time Manager has to consult with the Contractor and advise the Contract Administrator of which instructions may reasonably be given to the Contractor to:

- reschedule one or more specific activities;
- change the resources; and/or
- take any other action necessary.

The cost of recovery is always the Contractor's risk but the cost of acceleration must be paid for. In effect, once contingencies have expired, the Employer has the further choice of having a delayed completion or paying the price of acceleration to bring the project back on time, or advancing the completion date.

If the Contractor disagrees with the Project Time Manager's opinion of what can reasonably be done to recover or accelerate a project, the Contractor has the right to appeal to Expert Determination within a limited period after the instruction is given. On the other hand, if the Contractor simply fails to follow instructions properly given, CPC2013 also provides the Employer with a variety of alternative ways of protecting their interests.

#### Extensions of time and compensation

Under CPC2013, there is no scope for an intuitive guess of what constitutes a 'fair and reasonable'

extension of time or an 'equitable adjustment'. The time effect of an event is calculated using what is colloquially known as 'time impact analysis' based upon the facts of any delay to progress that has actually occurred. The Contractor's entitlement to time extensions is then calculated using the Working Schedule by reference to the completion date before the addition of the event and that after its addition, the effect of the event being the difference between the two. If the effects are calculated from estimated facts arising out of an early warning then CPC2013 makes provision for any extension of time, granted on the basis of that estimate, to be adjusted later in the light of what actually transpired when the facts are known. Otherwise, extensions of time and disruption are calculated according to the facts of what actually occurred to disturb progress at the time.

Because the high density part of the Working Schedule is calculated by reference to the resources and productivity expected and each activity is priced, where disruption occurs and interferes with productivity, the effect is also calculated from the updated and impacted Working Schedule. And where the completion of a sequence or critical path is linked to Levels of Effort, the effect of any change in the Working Schedule caused by an event will also calculate the difference in site-related costs (Preliminaries), or overheads and profit for the purposes of compensation, to be included in the next statement of Predicted Cost, Current Value and payment notice.

Accordingly, under CPC2013, the Contractor is only entitled to an extension of time if, in all circumstances, that extension is actually needed to relieve the Contractor from the effects of an Employer's time risk event, and they are only entitled to compensation for a loss or expense they have actually suffered as a result of an Employer's cost risk event.

#### Concurrency

Concurrency is not even mentioned in most standard forms of contract; in CPC2013, Concurrency is defined as occurring in two cases. The first is when a delay to a single activity is caused by two or more causative events, at least one of which is the Contractor's liability and at least one of which is the Employer's. In the second, Concurrency is defined as occurring when a delay to a single activity is caused by one or more causative events at the risk of the Contractor and, over the same period of delay to progress,

in whole or in part, a delay to progress is caused to another activity by one or more of the Employer's risk events.

When, at the date upon which the delay to progress occurs, the event is both an Employer's (and Contractor's) time and cost risk and the delayed activity is (or both delayed activities are) on a critical path to a completion date, the predicted delay to completion so caused is deemed to be a case in which the Contractor is entitled to an extension of time, but not compensation.

Where any part of a delay to progress is caused by an Employer's cost risk event so that only entitlement to compensation is a relevant consideration, it is important that the costs which the Contractor wishes to recover are caused by, and are traceable back to, the effect of that Employer's cost risk event. Otherwise, the Contractor is not entitled to compensation.

### Termination

All standard forms of contract contain processes and procedures for default termination by the parties. CPC2013 is no different in that regard, although under this contract when a notice is given, the defaulting party is entitled to make an offer to rectify the situation before the notice takes effect. There is no provision in CPC2013 for termination on the contentious ground of a failure to proceed 'regularly and diligently'. However, the contract does provide the option to terminate for:

- the Contractor failing to complete the works after a stated limit of culpable delay (for which the Contractor is not otherwise entitled to an extension of time);
- impossibility, illegality or a prolonged suspension of the work (for which the Contractor is otherwise entitled to an extension of time); or
- the convenience of the Employer (in which case the works cannot be recommenced inside 300 Business Days without paying the Contractor their lost profits on the incomplete part).

### Dispute Resolution

CPC2013 takes the view that differences of opinion arising during the Contract stage should not remain unresolved until it is too late to do anything about them other than compensate the injured party, but should be brought to the fore immediately and resolved privately, if possible. Where this concerns the rejection

or conditional acceptance of a submittal, or the power to issue particular instructions or certificates, the issue must be resolved immediately, or must be submitted for Issue Resolution within five Business Days. If not submitted in this manner, these particular issues are deemed to be agreed and can then no longer form the basis of a dispute. Within five Business Days' notice of an Issue Referral, the Employer's Representative and Contractor's Representative must formally attempt to agree the matter if at all possible. If they have not done so within a further five Business Days (ten Business Days from the notice), the matter is automatically referred to the Principal Expert for Determination.

For any particular issue, the Principal Expert may call on other experts named in the Contract. Where it is necessary to consult another expert not identified, either because they are not available at that time or because none is identified in the appropriate discipline, the Principal Expert may appoint another person if they consider it necessary.

For every issue referred to Issue Resolution, the Principal Expert is required to determine:

- whether the Contractor's submittal properly complies with the Contract, and if not, which term of the Contract has been breached;
- whether the rejection of the submittal, valuation, or measurement, if any, was proper in the circumstances;
- whether the conditions applied to acceptance, if any, would properly have rendered the submittal, valuation, or measurement not in conformance with the Contract;
- whether any conditions applied to acceptance amount to a Variation of the Contract, and if so, what other conditions should reasonably be applied to acceptance; and

“CPC2013 has approached the problem of encouraging compliance with the contract provisions... If used correctly, it provides the Contractor with a management tool of unrivalled quality that will reduce their own risk and improve their cash-flow.”

- whether there are any other questions identified or required by the parties regarding the nature of the Issue.

A Determination becomes legally binding for the parties within 20 Business Days of its issue unless either party gives notice of adjudication or arbitration. If not challenged within the set timescale, a Determination will be enforceable in any subsequent adjudication or arbitration.

Also the Principal Expert and/ or any other expert who has contributed to the Determination may be called as a witness, by either party, or the tribunal.

Under CPC2013, unless the parties agree otherwise, any Adjudicator's Decision and/or the Arbitrator's Award is a public document. The purpose of this is three-fold:

- the drafters will be able to correct anything that does not operate as it should more quickly;
- the parties will see how others have interpreted particular issues and may learn from that interpretation instead of repeating the fault; and
- adjudicators and arbitrators will be encouraged to make better decisions and awards.

Final dispute resolution is by Arbitration according to the rules identified in the Appendix, or if no rules are identified then in accordance with the Arbitration Rules of the London Court of International Arbitration.

### Obtaining the Contract

The Agreement and General Index are available in electronic format from [www.ciob.org.uk/cpc](http://www.ciob.org.uk/cpc) The Conditions, Appendices and User Notes (which contain a model timeline and 12 flow charts) are available in hard copy from [www.ciobstore.com](http://www.ciobstore.com) ●

# Using Dispute Boards in construction projects

**Ben Beaumont**  
Barrister, Chartered Arbitrator,  
Author and Speaker



Ben Beaumont

Barrister, Chartered Arbitrator and Fellow of the Chartered Institute of Arbitrators, Trained Mediator - CEDR, Non-executive Director RIBA Enterprises; Fellow of the Royal Institute of Chartered Surveyors, Adjudicator and Dispute Board Panelist of TECBAR, Adjudicator Dispute Board Federation (Geneva), FIDIC listed Adjudicator, Chairman of Arbitration Club, Panel Member WIPO, Chair of the Adjudication Society.

He is an author and co-author of various books on dispute resolution. He is a speaker on all aspects of Dispute resolution.

He is the Founding Chairman of FICACIC [www.ficacic.com], an international alternative dispute resolution body, an Observer at UNCITRAL since 2002. Co-drafter of various standard form contracts for the International Trade Centre since 2001. He was a Trustee of the Chartered Institute of Arbitrators 1982-1998. He was an original Member of Arthur Marriott Working Group leading to the creation of Arbitration Act 1996.

## Introduction

The hallmark of effective construction dispute management is preventing disagreements and claims on construction sites from becoming full blown disputes and by ensuring that in the few circumstances that disputes do occur, they are determined effectively. The enormous costs of disputes cannot be overstated; one statistic suggests that in almost 10% of projects, legal costs amount to between 8% and 10% of the total project cost. This does not take into account associated hidden costs of disputes such as damage to both reputation and commercial relationships, the cost of time spent by executive personnel on disputes, delays, wastage and missed opportunities for innovation and collaboration.

The major advantage of Dispute Boards over other methods of dispute avoidance and alternative dispute resolution is that they aim to reduce the incidence of disagreements and claims becoming disputes.

## What is a Dispute Board (DB)?

The earliest reported use of a DB was on the Boundary Dam project in Washington, United States in the 1960's under the nomenclature the 'Technical Joint Consulting Board'.

Although there are different types of DB's, essentially it is the joint appointment by the parties to a construction contract of a panel that may consist of one to five persons to serve as dispute board members from the commencement of a project. The purpose of the board is to have claims, complaints, or general issues brought to its attention as they arise. Where possible a board will work to settle those matters by the use of recommendations or advice. The parties to the construction contract may also confer on the board the powers to make binding decisions. Common features of DB include:

- 1 They are created by the agreement of the parties to the construction contract. The agreement specifies whether the DB will make recommendations and/ or issue binding decisions.
- 2 They are established at the commencement of the project<sup>1</sup> and serve throughout the life of the project.
- 3 Its proceedings are confidential. At any formal or informal hearing, representation by the parties are (or should be) kept to an absolute minimum; no audience, just those persons whose presence is vital to the proceedings.

4 The Board is briefed on the project, visits the site or sites periodically and is kept up-to-date by the representatives of the parties with progress on the project.

5 Although members of the DB may be nominated by the parties, the panel members are independent and impartial.

Typically the DB consists of three members, two with technical expertise relevant to the project and a third member with legal expertise. This balance should ensure that the recommendations and/or decisions are technically sound and legally correct.

The Board meets at the outset of the contract and regularly during the course of the contract. The DB process is designed to help parties resolve their disagreements amicably with the assistance of experienced professionals.

## Types of Dispute Boards

There are three main types of DB's, classified according to the powers conferred on the Board by the parties to the construction contract.

1 Dispute Review Board (DRB): the authority of the DRB is limited to making recommendations for amicable settlement. In some circumstances, the recommendations of the DRB may become binding on the parties, if not challenged within a specified timescale. For instance, under the International Chambers of Commerce (ICC) Dispute Board Rules; a recommendation by a DRB becomes binding and enforceable if a notice of dissatisfaction with the recommendation is not served within 30 days.

2 Dispute Adjudication Board (DAB): these Boards are usually authorised to make interim and binding decisions that must be complied with on receipt of the decision. A decision of the DAB may subsequently be referred to a final tribunal within a specified timescale. The decision becomes final if not challenged within this specified timescale. A DAB may also make non-binding recommendations on the invitation of the parties. An example of this is the FIDIC Red Book, which provides for the establishment of a DAB that issues binding decisions; however the DAB may also offer advice and recommendations on issues referred to it jointly by the parties.

3 Combined Dispute Board (CDB): these Boards have the power to make recommendations and also to make interim and binding decisions. They combine the features of the DRB and DAB.

### Relevant survey statistics →

Half of the disputes people told us about had a value greater than a quarter of a million pounds, whilst 13% had a value greater than £5 million. Seventeen per cent of disputes resulted in work being stopped or suspended. Forty-five per cent of those who entered into dispute in 2012 had at least one on-going...

**“The enormous costs of disputes cannot be overstated; one statistic suggests that in almost 10% of projects, legal costs amount to between 8% and 10% of the total project cost. This does not take into account associated hidden costs”**

### DB's benefits

- Early appointment and regular meetings enable the DB members to become familiar with the project, including technical difficulties and their contractual ramifications. This knowledge of the technical, contractual and physical conditions prevailing in a project at any given period, avoids the expensive task of reconstructing historical events when an issue occurs.
- Claims and potential claims can be dealt with as they occur without the need for it to develop into major disputes some time later.
- During routine meetings, matters of concern and potential disputes can be brought to the attention of the DB and dialogue established between the parties towards resolving issues of concern before they create disputes
- The active involvement of a panel of independent and impartial experts reduces the probability of disputes developing due to personality conflicts between project team members since all issues would be given a professional consideration.
- Improved cashflow by clarifying changes and unforeseen items as soon as possible.

### Dispute Boards and adjudication

The Construction Act 1996 (as amended), introduced a statutory right of adjudication. The Act requires that all construction contracts within its ambit include adjudication procedures with the minimum requirements set out in its section 108. Where such requirements are not incorporated into a construction contract, the relevant Scheme for Construction Contracts would apply as implied terms of the contract. The minimum requirements include the right to refer any dispute to adjudication. Within seven days of the notice of adjudication, the adjudicator must be appointed and the dispute referred to him and the adjudicator should make a decision within 28 days (this can be extended by 14 days if the referring party agrees).

These provisions only apply to the appointment of a DB if the project falls under the meaning of “Construction Operation” as set out in S105 (1) of the Construction Act. It is not advisable to provide for both a DB and a different adjudication procedure in the same contract, as this may result in parallel processes that duplicate each other and add unnecessary costs to the project.

Where a project falls within the meaning of Construction Operation under the Act, it will become necessary for the parties to amend the procedure of the DB to comply with the Act. DB procedural rules published by UK-based professional institutions usually provide for procedures that comply with the Act.

### Conclusion

Experience and statistics indicate that most DB decisions have become binding and final and as such have avoided arbitration or litigation altogether. Even in cases where the DB decision is contractually ‘non-binding’ (as many are), this has not impaired the effectiveness of the decision. It is suggested that this is because DB decisions are admissible in later proceedings; the parties know that a subsequent arbitration or litigation decision may be swayed by the panel’s decision as they have a more detailed knowledge of the project.

The Dispute Resolution Board Foundation (DRBF) has provided the following impressive statistics on DB’s covering over 1000 projects that have used the mechanism since 1975:

- Sixty per cent of projects with a DB had no disputes – meaning all disagreements were resolved before they became disputes.
- 98% of disputes that have been referred to a DB process have resulted in no subsequent litigation or arbitration. This indicates that parties have been satisfied with the decision of the DB.
- The worldwide use of DBs is growing in excess of 15% per year, and at the end of 2006 it was estimated that over 2,000 projects with a total value in excess of \$100 billion had used some form of DB.

A good example of the successful use of a DB is the Ertan Hydroelectric Project in China. This project involved the construction of a concrete dam, creating a reservoir over 90 miles long and construction of an underground powerhouse, valued at over US\$2 billion. The DB established for the project was authorised to issue non-binding recommendations. The Board made periodic visits to the site and heard approximately 40 disagreement/disputes over the course of the project. It successfully resolved all disputes without subsequent referral to other ADR processes or litigation.

The House of Lords (now Supreme Court) decision in *The Channel Tunnel Group Ltd and another v Balfour Beatty Construction Ltd and others* [1993] AC 334, confirmed the validity of this mechanism in the UK. In the same Channel Tunnel project (valued at US\$14 billion), the DB heard 13 disputes with only one subsequently referred to another tribunal. A particular form of DB was used for the London Olympics Games project with success in alleviating all disputes.

At a recent meeting in New York, the World Bank informally made it clear that it was so satisfied with the progress of DB’s that it was eager to receive suggestions as to how the concept could be applied to many other forms of contract in addition to construction<sup>2</sup>.

It has been argued that one of the disadvantages of adopting a DB procedure is that it adds extra costs to the project. Perhaps one way of considering the cost of a DB, is to compare it with the trial preparation costs (discovery of documents, case management, the ‘claims teams’ engaged by both parties) associated with arbitration and litigation – the later being significantly more costly.

In conclusion, a DB provides an effective and efficient means for reducing disputes in construction projects and should be considered as a viable option when preparing an effective dispute management system for a project. ●

### References

1. The FIDIC Yellow Book provides for an ad-hoc DB.
2. Since 1995, the World Bank has made the use of DB’s compulsory in all construction projects financed by it which are valued at \$ 50 million and above.

# Improving collaborative construction contracts

---

Koko Udom  
Head of Contracts and Law,  
NBS



“While the benefit of collaboration is now widely acknowledged in the industry, few projects are actually adopting collaborative working methods... we are also lagging behind the rest of the international community... These findings beg the question: how can we improve collaboration in UK construction industry? ”

Encouraging and improving collaborative working in the UK construction industry has been a recurring theme for over 10 years. While there have been improvements in this time, our most recent survey reinforces the view formed in our 2012 survey which suggests that while the benefit of collaboration is now widely acknowledged in the industry, few projects are actually adopting collaborative working methods.

The EC Harris Global Construction Report 2013 paints a bleaker picture; it identifies the trend that UK construction disputes tend to be ‘attributable to parties taking a less collaborative approach than other markets [countries]! Thus not only are we failing to adopt collaborative working in our projects often enough, we are also lagging behind the rest of the international community in this important area that has historically been championed by the UK construction industry.

These findings beg the question: how can we improve collaboration in UK construction industry?

A recent research project<sup>1</sup> has identified that main contractors point to the nature and conditions of construction contracts used for projects as one of the factors influencing the adoption of collaborative working in construction projects. It is therefore important

as we approach the 20th anniversary of the publication of the Latham Report (which also identified the lack of collaborative behaviour in construction, as one of the main obstacles to performance meeting Client expectations) to look at what still needs to be done to improve collaborative construction contracts in particular and collaborative working in the construction industry as a whole.

## Does Collaboration require contracts?

Many argue that ‘collaborative’ construction contracts are not important in encouraging or improving collaboration. Some hope for the ‘Utopian’ position where construction contracts become obsolete. This was the view supported in the Egan Report, which stated:

“If the relationship between a constructor and employer is soundly based and the parties recognize their mutual interdependence, then formal contract documents should gradually become obsolete.”  
(Rethinking Construction 1998).

This assertion depends on the existence of a continuing relationship where parties are keen to maintain good relations in the light of future upcoming projects. Framework contracts which allow the engagement of selected suppliers/contractors over a period of time provide a practical mechanism for such continuing relationships.

However, while there is evidence of successful collaboration in projects<sup>2</sup> that are not based on tried and tested contractual frameworks, research indicates that often such collaborative working involves parties to a project proactively coming together to resolve problems that arise during the works, with the primary focus on finding areas for compromise. Such collaborative working is usually spontaneous and unplanned. This is not the same as developing and establishing a continuous search for improvement and innovation which dovetails into a well-developed capability for better project execution which is the traditional hallmark of collaborative working.

It is also a legal fact, that, whether parties to a commercial transaction agree to confine themselves to a written contract or not, the law will assume the existence of some form of agreement (created by actions of the parties, accepted trade and customs, oral agreement or operation of the law) and in the event of a disagreement will resolve the dispute in accordance with the terms of such agreement. In the case of *Birse Construction v St David Ltd* (2000), a dispute went through three court cases to determine whether a partnering construction contract existed and what the terms of such a contract were, the parties would have been far better served having a signed agreement. This provides greater clarity

### Relevant survey statistics →

There's no hostility to collaboration, yet only a minority routinely work on collaborative projects. Why is this? Well, the top two reasons people give are the size of the project and the client's wishes. It's striking that only 18% feel that established divisions between professions stand in the way of collaborative working. Construction professionals are willing to work together as projects require.

on the rights and obligations and reduces the probability of a court decision that is not in accordance with the parties understanding of the terms of engagement.

The Egan Report envisaged a gradual movement towards fewer contracts based on "teams of designers, constructors and suppliers [to] work[ing] together... continuously developing the product and the supply chain; eliminating waste in the delivery process; innovating and learning from experience" (Rethinking Construction 1998). The availability of regular workloads that support such multi-project collaboration arrangements is limited. Most construction projects are one off projects with a unique amalgamation of (many) specialised firms with a varied supply chain. Also, the bespoke nature of construction projects means that the project team may need to change from time to time.

Based on these reasons, it is our argument that for the establishment of a clear framework on which collaboration can be organised in a construction project; a well framed collaborative contract would be beneficial.

There are of course criticisms that construction contracts, including those that have been termed collaborative, are rigid and inflexible and institute procedures and features that do not significantly aid collaboration.

If so, these criticisms serve to build the case for further research to develop knowledge on how to improve and create effective contractual mechanisms that provide the framework for collaboration in construction projects.

### What are collaborative construction contracts and how can they be more effective?

Collaborative construction contracts may be described as providing a mechanism for organizations involved in a construction project to work together, to proactively and jointly manage project risks, in order to achieve the common goal of effective project execution. This includes encouraging innovation and continuous improvement during the course of a project or series of projects.

This definition presents some difficulties. The existence of a common goal for organizations involved in a construction project is often debated. This is because construction projects are executed in phases and the supply chain over the years, has become more specialized and at times fragmented. Parties involved in a

project (especially sub-contractors) are engaged at different stages in the process, so they may have no relation with each other or have an overall picture of the project and its interfaces. At the same time, the balance between costs and quality seem to be valued differently depending on which 'side' of the project a party operates from.

Even in the absence of a conflict of goals and objectives, 'real' collaboration and integration between parties from different specialist areas (with their own distinct practices and terminologies as there are in construction), requires significant effort.

These are the complexities that a collaborative construction contract is required to resolve to encourage collaborative working. In this context, an effective contract recognises the peculiarities of the industry and responds to them adequately by providing a framework where the realities of daily operations at the project site are made less adversarial.

Typically collaborative contract clauses are those which encourage team building, joint risk management, value engineering, and periodic assessment using key performance indicators.

### Standard form collaborative contracts

Following the reports of the 90's (Latham 1994; Egan 1998), the choice of standard form contracts with collaborative clauses has improved. In general the following contracts are accepted as containing collaborative clauses:

- 1 NEC 3 suite of contracts
- 2 JCT Constructing Excellence Contract (JCT CE)
- 3 ACE PPC 2000
- 4 CIOB Complex Construction Contract 2013

Also from their 2009 updates onwards, most JCT contracts have contained supplemental provisions, providing tools for collaborative working. JCT also published a partnering charter in both binding and non-binding versions.

### It's not all about 'Good Faith'

Collaborative construction contracts are wrongly assumed to be synonymous with the rather nebulous concept of 'Good Faith'. While Good Faith provisions are a common feature in standard form construction contracts that contain collaborative clauses, the effect of such provisions are debatable. Elsewhere in this report Victoria Peckett examines the concept of Good Faith in contracts and suggests that the courts

Koko Udom LLB, LLM

Koko is a solicitor with expertise in construction law and energy law. Prior to his appointment with RIBA Enterprises, he advised on various construction contracts and projects, dealt with a variety of construction disputes and also lectured construction law at postgraduate level. He leads the contract and law team that provides guidance on legal and contractual issues in construction including maintaining the suite of 42 contracts that support NBS technical content; the team also produces the content for the NBS Contract Administrator.

are leaning towards a limited interpretation of such provisions.

There is the possibility of new legal precedence flowing from the more tightly drafted 'Good Faith' clauses such as those included in JCT CE, which provides that any failure to observe the 'overriding principle' (working together in good faith and in spirit of mutual trust and respect) should be taken into account in the determination of any dispute arising from the contract. Meanwhile, a plethora of research evidence points to the need for contract clauses that go beyond Good Faith and provide the parties with the framework to proactively manage risks together, innovate and improve on their contribution during a project.

### Paying attention to what works (improving collaborative construction contracts)

Fortunately, the academic community has devoted considerable time in studying the working of collaborative contracts in construction projects, adding the results of this research to the findings of our survey, some areas for improvement become apparent.

1. Improve the clauses on innovation: an analysis of project case studies indicate that innovative working (usually leading to savings on costs and improvement on project outcomes) is not a regular occurrence in construction projects. Even when it does occur, it would

be difficult to attribute it to a well set out system that encourages and provides the framework for innovation, although this is one of the hallmarks of a collaborative project. A review of standard form construction contracts with collaborative clauses provides an explanation for this. The task of proposing innovations and the cost of investigating their viability are often assigned to the contractor (this clause may not be extended to sub-contractors). This usually comes, with a provision that if cost savings are achieved, due to such innovations, it would be shared by the parties. This provides no real incentive or mechanism for a contractor or sub-contractor to devote resources to investigating innovative solutions.

The starting point which may encourage innovation could be engaging contractors and specialist sub-contractors earlier in the construction process to have them input their suggestions to the design team. A framework of collaborative working, encouraging the joint investigation of possible innovative solutions, can improve the processes and reduce waste. This could dovetail to a framework for joint examination of failures during the project to ensure continuous improvement.

2. Improve the early warning clauses and risks management clauses: early warning clauses coupled with early claims resolutions and better risk management are one of the improvements that construction contracts with collaborative clauses have introduced to the construction process. However, some of the early warning clauses are now observed as an exception. It seems accepted that strict adherence to them will generate an unmanageable volume of paperwork. This has to be resolved. The risk management exercise also appear to be devoted to risk identification and risk shifting which in turn promotes the culture of claims.

The start point could be to provide for a flexible and comprehensive process of risk identification particularised to the project before works commences. This framework currently available in some contracts, allow for project risks to be shared appropriately with the input of all relevant parties. This could subsequently be fed into the early warning process which would be devoted to risks that have not been identified or risks which occurrence requires amendment to the pre-agreed risk management process.

3 Make the contract simple and suitable for small projects: one of the recurring themes of our survey is that collaboration was not suitable

because of the size of the project. This is because collaborative clauses are complex or viewed as complex. The benefits of collaboration are evident irrespective of scale. The challenge is to draft clauses that complement the more straight forward processes in simple projects and are suitable at that level of contracting. The repetition of collaborative clauses from major construction contracts in shorter forms is not helpful. Emphasis should be on easy to use tools that could encourage collaborative working in small projects.

4 Ensure that all project participants have signed up to collaborate: While this may seem self-evident, especially since the idea of interlocking collaborative construction contracts was identified in the Latham report, it is not being sufficiently implemented on collaborative projects. This problem is not superficial, consider these quotations<sup>3</sup>:

“Ensure that all project participants have signed up to collaborate: While this may seem self-evident... it is not being sufficiently implemented on collaborative projects. This problem is not superficial”

“I mean obviously if you get a Quantity Surveyor, what’s he employed to do? He’s employed to make sure that your bill is fair. How’s he going to do that? If you submit a bill... for a thousand quid, he’ll cut it down to 900 quid. So what do you do, you have to submit a bill for eleven hundred pounds so he can turn you down to a thousand pounds.”

“Once you get to the middle tier of the management, the operational tier of the management, they just revert to type and screw you into the ground. Because most of the time they’re measured on profit. Their bonus is measured on profitability. Their success within the business, their standing within the business, is based largely on profitability ... Unless they can make some money out of you [the subcontractor], then they go somewhere else.”

In consideration of these, along with recent reports that some major national contractors have instituted onerous payment terms on sub-contractors, the facade of collaborative working appears to start to fade.

It is important for Clients, aiming to have collaborative working in their projects, to ensure that consultants and sub-contractors on the project are signed up to collaborative working.

It should be mandatory and verifiable that all significant parties in the supply chain are procured using collaborative contracts with progressive terms.

### Conclusion

Ensuring real collaborative working in construction projects requires significant resource investment from the Client; however, this should be well compensated by better project outcomes.

Beyond contractual provisions, there remains a need to develop and improve on soft skills, such as organizing effective meetings and project leadership of Client representative and project managers.

Our survey reveals that Building Information Modelling (BIM) is perceived as requiring collaboration. As we move towards a more extensive adoption of BIM in projects, it is imperative that we improve on our record of collaborative working and in turn improve the contracts that deliver such arrangements. ●

---

### References

1. Akintan, O and Morledge R, ‘Improving the collaboration between main contractors, subcontractors within traditional construction procurement’, *Journal of Construction Engineering* 2013.
2. Bishop D et al, ‘Collaborative working in the British construction industry’ *Learning as Work Research Paper*, Number 13, January 2008.
3. Ibid.

**riba  
book  
shops.  
com**

RIBA Bookshops – the comprehensive  
contracts and book specialist

- Construction contracts
- Contract administration and guidance
- Forms of appointment
- Legal publications
- Building Regulations
- Arbitration and dispute avoidance

Fast delivery online:

**ribabookshops.com**

Advice and enquiries:

**+44 (0)191 244 5557**

Browse in store:

**RIBA Portland Place  
and The Building  
Centre Bookshop**

**Your specialist  
for all contracts,  
contract administration,  
guidance and  
legal publications**

RIBA  **Bookshops**



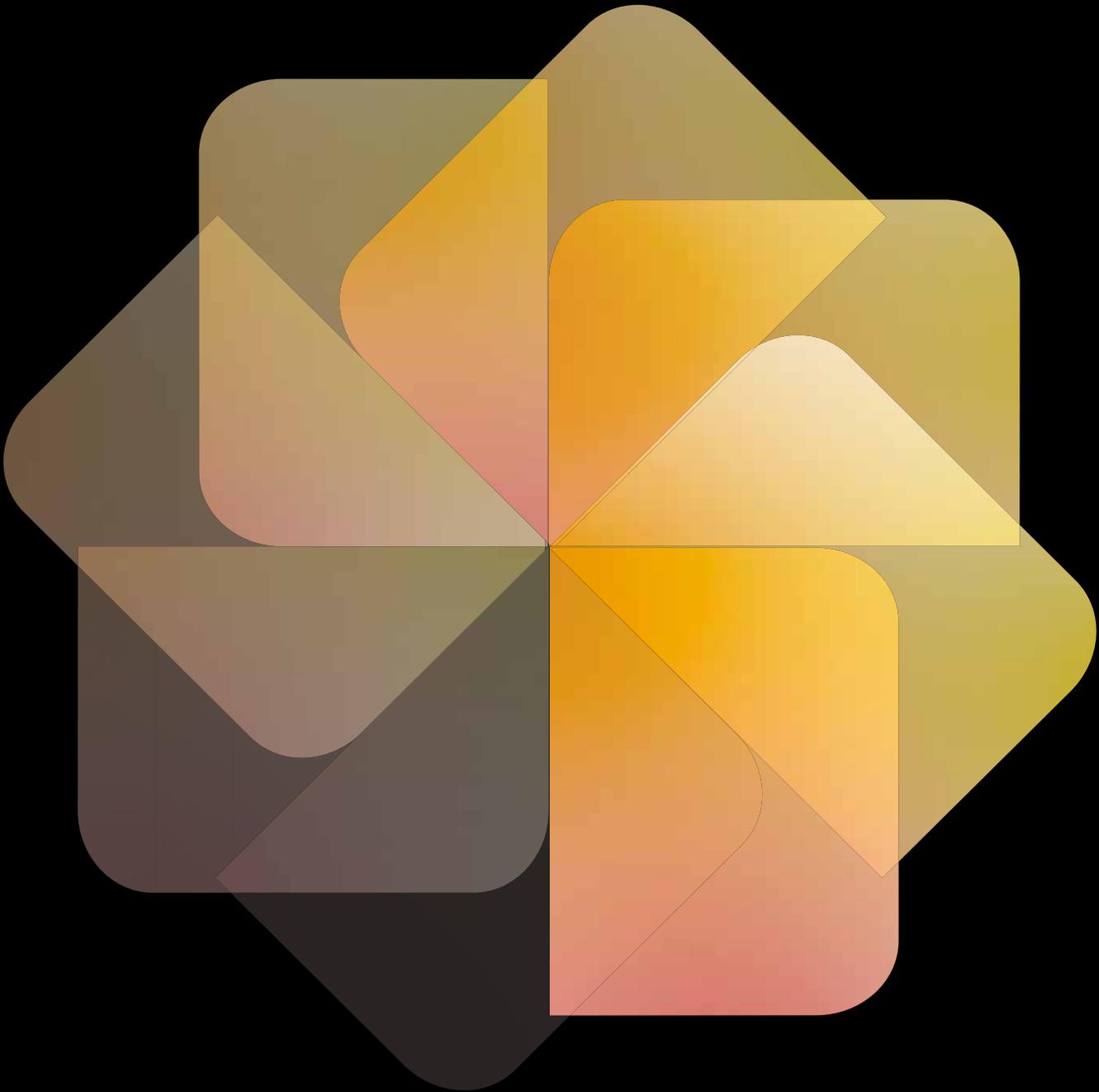


---

Notes

A series of horizontal dashed lines for taking notes.

# NBS Contract Administrator



NBS Contract Administrator, saving you  
time and money.

Electronic versions of the RIBA Contract Administration forms enable you to spend less time filling in forms, track costs throughout the project and access a vast amount of guidance to ensure you are limiting your risk.

For more details, call us on 0845 456 9594  
or visit [www.theNBS.com/NBSContractAdministrator](http://www.theNBS.com/NBSContractAdministrator)

Read more about Contracts and Law and register to receive our regular email updates at [www.theNBS.com/topics/contractslaw/](http://www.theNBS.com/topics/contractslaw/)  
You can also follow us on Twitter @theNBS